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WORKPLACE DISCRIMINATION AND VISUAL IMPAIRMENT: AN ANALYSIS OF EEOC CHARGES AND RESOLUTIONS

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WORKPLACE DISCRIMINATION AND VISUAL IMPAIRMENT:
AN ANALYSIS OF EEOC CHARGES AND RESOLUTIONS

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

By

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Acknowledgement

This dissertation is dedicated to my grandparents Alvin York and Jeanette Callahan. For as long as I can remember my Grandpa encouraged me to continue my education and pursue a doctoral degree. During phone conversations he would always ask if I’d applied to graduate school after telling me how great the weather was and how cheap the gas prices were in Florida where he lived. Observing my Grandma struggle with the functional impact of low vision in her later years of life, I knew I wanted to research this underserved population. Her tenacity to maintain her independence both in the home and the community with failing vision was the driving force behind my desire to choose Virginia Commonwealth University (VCU).

Dr. Al Copolillo (Department of Occupational Therapy) at VCU was instrumental in making this all achievable. Serving as my academic advisor and dissertation committee chair, he welcomed and supported my research interests regarding low vision from the beginning. I consider myself fortunate to have had the opportunity to work with such a great academic leader and mentor.

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Abstract

WORKPLACE DISCRIMINATION AND VISUAL IMPAIRMENT: AN ANALYSIS OF EEOC CHARGES AND RESOLUTIONS

By Jane Callan McNeil, MOT, OTR/L

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2015

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Workplace discrimination for individuals with visual impairments in the U.S. is an ongoing issue dating before the founding of the EEOC and the enactment of the ADA. Despite laws enacted to protect against unequal treatment in the workplace, the EEOC continues to receive submissions of formal discrimination charges from individuals with visual impairments.

The workplace is experiencing changes with increasing amounts of older adults, women, minorities, and the use of technology and the Internet. By examining characteristics of the discrimination charges and the resulting outcomes, the knowledge gained can describe the current situation and the historical progression of workplace discrimination for individuals with visual impairments. The purpose of this cross-sectional study is to understand through
descriptive, non-parametric, and logistical regression analyses of secondary data, meaningful associations regarding workplace discrimination and Americans with visual impairments.

Study results showed that charging party characteristics of age, gender, and race were found to be predictive of types of discrimination charges and resolutions outcomes. Respondent characteristics of employer region of location, size, and industry were also found to be predictive of types of discrimination charges and resolution outcomes. Differences were revealed between discrimination charges before and after the enactment of the ADAAA, yet not between resolution outcomes before and after the enactment of the ADAAA. Additionally, discrimination charges and resolution outcomes were determined to be associated with one another. Implications for employees, employers, and professionals who work with individuals with visual impairments are addressed and recommendations for further research are provided.
Chapter 1: Introduction

Statement of the Problem

Visual impairment is a term used to describe any kind of reduction in vision or vision loss, including total blindness. In 2012, the National Health Interview Survey, a major data collection survey from the National Center for Health Statistics, estimated around 15 million or 17% of American adults aged 18-64 reported self disclosed vision loss (Blackwell, Lucas, & Clarke, 2014). Although there is a multitude of causes of visual impairments, studies indicate that vision loss is primarily an age related phenomenon (Chappell & Cooke, 2010; Lin et al, 2004; Schneck, Lott, Haegerstrom-Portnoy, & Brabyn, 2012). The prevalence of a visual impairment is greatest among individuals 50 years of age and older, and dramatically increases after the age of 70 (Stephens et al., 2013). In addition, the rate of visual impairments double in individuals aged 80 years and over when compared to individuals 70-79 years of age (Dillon, Gu, Hoffman, & Ko, 2010). Although vision loss is considered one of the major disabilities associated with aging (Boerner & Wang, 2010; Crews & Campbell, 2004), and aging has traditionally been associated with unemployment (Cahill, Giandrea, & Quinn, 2006; Neumark, 2009), there is still a substantial number of individuals who, while aging and approaching retirement, are still working (Kampfe, Wadsworth, Mamboleo, & Schonbrun, 2008).

The U.S. Bureau of Labor Statistics estimated that in 2014 approximately 10% more individuals over the age of 65 were in the labor force compared to 30 years ago (Bureau of Labor Statistics, 2013). The Bureau also estimated that the number of civilian workers 55 years and
older is expected to increase by 29% during the period from 2012- 2022 compared to 2% of
individuals aged 25-54 (Bureau of Labor Statistics, 2013). The growing trend of Americans
delaying retirement and continuing to work into older age suggests more employees with visual
impairments will want or need employment than previously occurred in the U.S. (Strobel, Fossa,
Arthanat & Brace, 2006). The U.S. workforce should expect and prepare for more individuals
with visual impairments than in the past.

Americans with visual impairments have a history of difficulty with unemployment and
underemployment in the U.S. workplace (Goertz, van Lierop, Houkes, & Nijhuis, 2010; Kelly,
2013; Wang, Barron, & Hebl, 2010). Qualified individuals have employment rights for fair
treatment in the workplace. Employer treatment and decisions should be based on an individual’s
merit instead of the existence or consequence of a visual disability or impairment. Unfavorable
employer treatment of a qualified individual because of visual impairment is disability
discrimination. Prohibited discriminatory acts can include unfair treatment, harassment, denial of
reasonable accommodations, retaliation, and improper questions or disclosure of personal
information (www.eeoc.gov). Employment disability discrimination for individuals with visual
impairments is a multifaceted problem that will likely increase as the workforce grows and
numbers of older individuals who are acquiring visual impairments rise.

**Background for the Study**

This study joins other research initiatives to provide evidence-based answers to questions
regarding workplace discrimination for individuals with disabilities. The agency responsible for
enforcing federal laws to prohibit employment discrimination is the U.S. Equal Employment
Opportunity Commission (EEOC). Because the EEOC is a law enforcement agency, it does not
have a budget to organize and complete research (Conway, 2009). Subsequently, in 2003, the
EEOC embarked upon a cooperative agreement with Virginia Commonwealth University for research and educational purposes. The result was the establishment of the National EEOC Americans with Disabilities Act (ADA) Research Project (McMahon & Shaw, 2005).

This project involves many researchers from across the country and has resulted in over 65 published studies at the time of this writing. As part of this initiative, the EEOC has given Virginia Commonwealth University access to its secure database through an Interagency Personnel Agreement and a Confidentiality Agreement (McKenna, 2005). This contract allows Virginia Commonwealth University access to the Integrated Mission System (IMS) database, which stores valuable material about U.S. employment and disability. Dr. Brian McMahon, a principle researcher of the National EEOC ADA Research Project from Virginia Commonwealth University holds ultimate responsibility for permitting access to this dataset.

The IMS database contains information about the demographic characteristics of individuals who submitted an allegation of discrimination, also called a discrimination charge. It also contains the type of alleged discrimination the charge was thought to have violated. Information about the employer including the type of employment industry, employer size, region of operation location where the allegation was submitted, and the outcomes of the EEOC investigations are also in the IMS database.

**Need for the Study**

Although there have been previous analyses of the various components of the EEOC IMS dataset, there have been no studies analyzing visual impairment discrimination charges and resolution outcomes in the manner proposed by this study. In addition, there have not been any analyses of visual impairment discrimination charges and resolution outcomes since the
enactment of the Americans with Disabilities Act Amendments Act (ADAAA), thereby warranting evaluation of this component of the EEOC dataset.

Even following the enactment of the Americans with Disabilities Act (ADA) in 1992, discrimination charges and resolution outcomes from individuals with visual impairments have only been marginally studied. After the first year the ADA was enacted, a research study by McMahon, Shaw, & Jaet, (1995) examined discrimination charges. Premature examination of this dataset likely precluded an important learning period for both employees and employers to gain an understanding of the complexities of the ADA and its influence on employment.

Years later another study specifically examined resolution outcomes of visual impairment discrimination charges through 2002 (Unger, Rumrill, & Hennessey, 2005). Discovering patterns and trends of resolution outcomes are beneficial for employees with visual impairments, employers, and professionals involved with the employment process. However, excluding analysis of the discrimination charges themselves creates gaps in our knowledge and understanding. Discrimination charges indicate where and in what aspect perceived workplace discrimination occurred. Without discrimination charges, a complete delineation of the discrimination process from filing a charge until resolution is not possible.

Another additional study involving the EEOC IMS database regarding individuals with visual impairments looked exclusively at one type of discrimination charge, reasonable accommodations (Pawluk, Hurley, & Chan, 2008). Relevant information was obtained about employees and employers regarding allegations of discrimination based on reasonable accommodations. However, there remain at least 41 other defined employment right violations still to be investigated.
The workplace has seen changes since the enactment of Title I of the ADA on July 26, 1990 and the ADAAA on September 25, 2008. This includes increasing amounts of older adults, women, minorities, technology, and use of the Internet in the workplace (www.eeoc.gov). By examining EEOC discrimination charges and resolution outcomes from individuals with visual impairments, new results will describe both the current situation and the historical progression warranting this proposed study.

**Purpose of the Study**

This research study will contribute new knowledge about workplace discrimination and Americans with visual impairments. The purpose of this study is to identify meaningful associations regarding workplace discrimination and Americans with visual impairments to provide evidence-based results for this longstanding problem. It is expected that results of this study will assist rehabilitation and vocational rehabilitation service providers, job placement agencies, and Job Accommodation Network employees to function more effectively as informed client advocates by providing a more specific understanding of workplace discrimination barriers for individuals with visual impairments. With this increased knowledge, professionals who work with this population could facilitate development of strategies for both employees and employers based on study outcomes.

Golub (2006) suggested the strategy of obtaining ‘mutual accommodations’ between employees and employers for successful work experiences for individuals with visual impairments. She emphasized that both parties have fundamental responsibilities to acknowledge and respect each other’s differences and both must take actions to improve successful outcomes (Golub, 2006).
Specifically, recommended actions to obtain mutual accommodation for employees with a visual impairment include being comfortable with their disability, insisting on the same standards as everyone else, accepting different perspectives from their own, being an ambassador for visual impairments, demonstrating good work etiquette, and having a positive attitude (Golub, 2006). Correspondingly, recommendations for employers include implementing core organizational values that unfold from the top down to augment impact, providing the tools needed for job performance which may include providing accessibility and accommodations, and then expecting the same performances from all employees (Golub, 2006). Additionally, remembering that words and actions both matter, and acknowledging, respecting, and valuing differences are also recommendations employers should observe (Golub, 2006). Although not a foolproof method to success in the workplace, mutual accommodations would allow employees to foster their own achievements and their employer to facilitate the experience. Reasonably, following these recommendations could lead employees and employers to share responsibility for successful employment in a mutually beneficial employee-employer relationship (McDonnell, Crudden, & Zhou, 2013).

An example of successful employment for an individual with visual impairments in mutually beneficial employee-employer relationships is from the Orlando District of the Florida Division of Blind Services (Simpson & Rogers, 2002). The initiation of Project VIEW (Visually Impaired Experienced Workers) was for expansion of vocational rehabilitation (VR) services to increase employment of individuals with visual impairments aged 55 and older. Eligible study participants were interested in working and demonstrated self-confidence and readiness for employment. The VR counselors for the project had training in aging and vision loss, and networked with employers to promote their older consumers’ dependability, experience, work
skills, and work ethic (Simpson & Rogers, 2002). This employment approach was successful with an average of 16 job placements each year of the three-year project, and employers actively recruited older workers post project (Simpson & Rogers, 2002).

The identification and promotion of unique qualities of older individuals with visual impairments resulted in successful employment with Project VIEW. For others, differing approaches to address workplace discrimination would be expected depending on the varying aspects of the workplace. Individuals, both employees and employers, bring unique emotions, roles, skills, attitudes, performances, and cultures to the workplace. Therefore, factors that contribute to a successful work experience in one setting may not in another.

For individuals with visual impairments, the process of experiencing trials and errors with communication, assistive technology, and reasonable accommodations would be expected prior to obtaining workplace success. Other strategies include seeking out others who have experienced similar situations (e.g., a blog or support group), Internet browsing of credible organizations such as the Job Accommodation Network or American Foundation for the Blind, or experimenting on one’s own with various techniques suggested for workplace success. The ability to recognize useful strategies and the tenacity to overcome disabling influences may also require outside assistance from a trained specialist.

Professionals, such as occupational therapists, are skilled in observing situations and environments, identifying issues, and creating realistic solutions to promote optimum functioning. Results from the study will indicate the unique areas of workplace discrimination that can then be specifically targeted for individuals with visual impairments. Through role-playing and group therapy sessions with occupational therapists, individuals can gain knowledge,
skills, and confidence to meet the demands of a dynamic workplace. By empowering themselves, employees and employers will be better prepared to overcome encountered workplace problems.

Both employees and employers have a responsibility to know their employment rights, and study outcomes will reveal where concerns with compliance are regarding laws enacted to prohibit discrimination. For example, if constructive discharge, forcing an employee to quit or resign because of the employer’s discriminatory restrictions, constraints, or intolerable working conditions (McMahon & Shaw, 2005), is found to be most prevalent for individuals with visual impairments, then specific education and training programs could be developed to minimize the risk of constructive discharge once employment has been obtained.

In the long term, results from this study will provide a better understanding of employment discrimination practices for both the public and private sector and offer a clearer perspective on where to focus attention to decrease and eliminate employment discrimination toward people with vision impairments. In particular, it will help to focus efforts around education about workplace discrimination and allocate resources for reducing and eliminating it. Qualified individuals with visual impairments deserve fairness in the workplace. They also would likely be interested in discrimination information that addresses their particular disability for making educated decisions about employment.

To expect improvement for future employment of individuals with visual impairments, focus must be on evidence-based results regarding current obstacles and discriminatory practices limiting successful employment. In an effort to provide evidence-based results, the utilization of a theoretical foundation will guide this study.
Introduction to the Theoretical Framework

The Model of Human Occupation (MOHO), a theory commonly applied within occupational therapy, provides reasoning for understanding humans' occupational behaviors. Within this model, the explanation of occupational behavior is a combination of an individual’s volition, habituation, and performance capacity through interaction with the environment (Crepeau, Cohn, & Schell, 2003). Every individual has unique volitional thoughts and feelings stemming from a biological origin (Kielhofner, 2008). One’s age, gender, and race are biological factors that can be analyzed for commonalities regarding corresponding behaviors.

The roles that individuals possess are a significant contributor to their habituation allowing for identity and personal causation with everyday living (Kielhofner, 2008). Lack of desired role performance can lead to occupational dysfunction and negatively influence other areas of life. Additionally, performance capacity is an individuals’ physical and mental abilities needed for occupational performance of desired actions. Disabilities such as a visual impairment can hinder this interrelated component influencing occupational behaviors. Lastly, environmental demands and constraints also influence occupational behaviors. The physical contexts, objects, tasks, and social groups either support or detract from one’s ability to act (Kielhofner, 2008). For individuals with visual impairments, an accommodating environment may be necessary for successful completion of occupations (Strobel et al., 2006).

Throughout the course and stages of life, individuals undergo occupational changes as volitions, habituations, performance capacities, and the environment change. These changes during adulthood and the impacts of these changes on one’s ability to adapt are unique to the individual. Adulthood is the longest period of life often consumed with productive work. In the U.S., employment fulfills a fundamental human desire to interact with society (Kielhofner,
Therefore, society places a high value and interest on employment during adulthood (Ekbladh, Thorell, & Haglund, 2008). However, even in a society whose laws support individuals with disabilities, the attitudes and behaviors toward these individuals are often negative and biased (Kielhofner, 2008). As the U.S. strives to empower individuals with disabilities, societal and legislative contexts also influence behaviors of individuals including employees and employers.

Workplace discrimination for individuals with visual impairments in the U.S. is an ongoing issue. Submitting a discrimination charge to the EEOC, whether as a first or last resort, is the individual’s attempt to remedy occupational dysfunction in the workplace. The MOHO is a reasonable framework to help explain the relationship between the types of discrimination charges filed by individuals with visual impairments and the outcomes of these charges. The EEOC regulates discrimination charges filed under the ADA and ADAAA.

**Overview of EEOC Process**

The ADA and ADAAA does not protect every individual who has a medical condition. It is the responsibility of the individuals or the entity submitting on behalf of the individual to interpret the law and its definition of disability, and submit discrimination charges once meeting the criteria for filing. Each perceived discrimination incident requires a separate charge.

There is a limited amount of time to file a charge with the EEOC regarding workplace discrimination. In general, one has 180 calendar days from the day the discrimination took place to file a charge. However, when state or local agencies also enforce the discriminatory action where the discrimination took place, the time to file a charge extends to 300 calendar days (www.eeoc.gov). For example, the Virginia Human Rights Act forbids employment discrimination based on a disability in the state of Virginia (Workplace Fairness, 2006).
Additionally, the Division of Human Rights, which enforces the Virginia Human Rights Act, has a ‘work-sharing agreement’ with the EEOC that allows collaboration between the two agencies to process discrimination charges in which they both administrate (Attorney General of Virginia, 2014). These work-sharing agreements between agencies are utilized to prevent duplication of effort in processing discrimination charges. Charges filed with either the EEOC or a Fair Employment Practice Agency (such as the Division of Human Rights in Virginia) are automatically filed with the other agency thereby protecting individuals under both federal and state or local laws (www.eeoc.gov). Increased time to file a discrimination charge is allowable under these specific circumstances.

Discrimination charges submitted to the EEOC must include a brief description of the alleged event or experience that led to a belief of employment rights violation and how the individual was discriminated against. The EEOC then determines which type of discrimination the allegation fits. The EEOC recognizes 42 types of employment rights violations (discrimination charges). Examples include involuntary termination, reasonable accommodations, benefits, demotion, intimidation, and unfavorable reference.

There are two options for filing workplace discrimination charges, either in person at one of the 53 field offices or by a letter through the mail. An individual, organization, or agency may file a charge on behalf of another individual. The required information to submit a discrimination charge includes:

- Name, address, and telephone number
- The name, address, and telephone number of the employer (or employment agency or union) the charge is being filed against
- The number of employees employed there (if known)
• A short description of the events believed to be discriminatory
• The date when the event(s) took place
• Belief about why one was discriminated against
• Signature

The EEOC has an obligation to address each discrimination charge submitted. Within 10 days of receiving a charge, the EEOC sends a notice to both the employee and employer acknowledging the case (www.eeoc.gov). Cases that are promptly dismissed include when a charge is submitted after the designated time restrictions, the EEOC has sufficient reason to believe discrimination will not be able to be determined, or the EEOC lacks authoritative jurisdiction. Other cases go to mediation, in which an EEOC mediator attempts to assist the employee and employer to reach a mutual agreement without determining who is right or wrong with the case. In instances where both parties do not agree to mediation or mediation does not resolve the problem, the EEOC will further investigate the details provided in the discrimination charge.

An EEOC investigation can include visiting and interviewing the employee, employer, and witnesses, as well as gathering supporting evidence and documents. In instances where the employer refuses to cooperate with an EEOC investigation, the EEOC can obtain a subpoena for gathering necessary documents and gaining access to facilities (www.eeoc.gov). Following an investigation, if the EEOC has not determined a violation of the law occurred, the employee receives a Notice-of-Right-to-Sue letter indicating permission to file a lawsuit. It is required that a discrimination charge is first filed with the EEOC before a lawsuit can be filed in a court of law (McMahon et al., 2008).
In cases where the EEOC has determined a violation of the law occurred, the EEOC attempts to return the individual who has been discriminated against to as close to the same position as he/she would have held had the discrimination never occurred. Obtaining voluntary settlements with the employer, which can include placement in a job, payback of wages, benefits, lawyer and court fees, are pursuable actions of the EEOC, as well as encouraging the employer to take steps to prevent discrimination in the future (www.eeoc.gov). If a settlement is not possible, the EEOC legal staff determines if the EEOC will file a lawsuit or if a Notice-of-Right-to-Sue letter to the employee is more appropriate with the case.

From the submitted discrimination charges, the EEOC distinguishes 14 different outcomes, called ‘resolution outcomes’, divided into two categories. Resolutions can favor the individual submitting the charge, called merit resolutions, indicating that the EEOC has determined discrimination occurred. Conversely, resolutions can favor the employer, indicating the charge submitted by the individual failed to support a violation of the law (non-merit resolutions). Examples of merit resolutions include negotiated settlements, withdrawal of the charge by the employee upon receipt of benefits, successful conciliation, and unsuccessful conciliation. Unsuccessful conciliation is a merit resolution because even though efforts to conciliate the charge are unsuccessful, the EEOC still determined discrimination occurred. Examples of non-merit resolutions include various types of administration closures for reasons such as failure to locate the individual submitting the charge, or the individual not responding to EEOC communications, as well as when the EEOC has determined there was no reasonable cause to believe that discrimination occurred based upon evidence obtained in its investigation.
Combined Components of the EEOC and MOHO

The confidential information about workplace discrimination experiences for individuals with visual impairments provided to the EEOC from discrimination charges is valuable. Analyzing these de-identified individual and employer factors, discrimination charges, and resolution outcomes provides information otherwise unknown about workplace discrimination. Additionally, the MOHO provides rationale for behaviors identified in the workplace as well as the influence of environmental demands and constraints. By linking information afforded by the EEOC with concepts from the MOHO, it is possible to determine unique correlations regarding discrimination for individuals with visual impairments.

Assuming conflict in the workplace is not the same for all individuals with visual impairments; it is important to discern where there are differences and if patterns exist within these differences. The factors of age, gender, and race may be able to predict various types of discrimination charges based solely on these inherent individual characteristics. Employer characteristics such as location of operation, size, or industry may offer the same predictive results. Furthermore, types of discrimination charges will suggest where specific occupational dysfunction occurred within the workplace. For example, not obtaining desired benefits could be an issue of volition; demotion or discharge from a desired position or role could be an issue of habituation; and restriction of an employee with a disability to a certain type of job could be an issue regarding performance capacity. Other discrimination charges may be environmental issues such as lack of reasonable accommodations or maintaining segregated facilities on the basis of a disability.

The resolution outcomes from discrimination charges are the legal determinants if there has been a violation of the law. As with individual and employer characteristics, resolution
outcomes may also predict distinct correlations regarding workplace discrimination for individuals with visual impairments. Societal changes combined with major legislative changes such as the ADAAA suggests questions regarding specific perceived employment rights violations and outcomes. Workplace discrimination against individuals with visual impairments continues to be an issue. Understanding the various components influencing occupational behaviors and the continual contribution of society and legislative contexts raises the following questions and hypotheses.

**Research Questions and Hypotheses**

The following research questions will guide this study. A corresponding hypothesis accompanies each question.

- **Research Question 1.** Does age, gender, or race predict types of discrimination charges filed with the EEOC regarding a visual impairment?
  
  - **Hypothesis 1.** Age, gender, and race will predict different types of discrimination charges filed with the EEOC regarding a visual impairment.

- **Research Question 2.** Does an employer’s location of operation, size, or industry predict types of discrimination charges filed with the EEOC regarding a visual impairment?
  
  - **Hypothesis 2.** An employer’s location of operation, size, and industry will predict different types of discrimination charges filed with the EEOC regarding a visual impairment.

- **Research Question 3.** Does age, gender, or race predict types of EEOC resolution outcomes regarding a visual impairment?
  
  - **Hypothesis 3.** Age, gender, and race will predict different types of EEOC resolution outcomes regarding a visual impairment.
• Research Question 4. Does an employer’s location of operation, size, or industry predict types of EEOC resolution outcomes regarding a visual impairment?

• Hypothesis 4. An employer’s location of operation, size, and industry will predict different types of EEOC resolution outcomes regarding a visual impairment.

• Research Question 5. Are there differences between discrimination charges filed with the EEOC before and after the enactment of the ADAAA regarding a visual impairment?

• Hypothesis 5. There are differences in discrimination charges filed with the EEOC regarding a visual impairment before and after the ADAAA.

• Research Question 6. Are there differences between outcome resolutions before and after the enactment of the ADAAA regarding a visual impairment?

• Hypothesis 6. There are differences in EEOC outcome resolutions regarding a visual impairment before and after the ADAAA.

• Research Question 7. Are there associations between types of discrimination charges and EEOC resolution outcomes regarding a visual impairment?

• Hypothesis 7. There are associations between types of discrimination charges and EEOC resolution outcomes regarding a visual impairment.

Analytical Approaches

To illustrate the study sample, descriptive comparisons of all variables including frequencies and proportions were presented. Additionally, trend analyses by year demonstrated changes over time of resolution outcomes determined by the EEOC. Multinomial and binary logistic regressions were used to analyze research questions 1-4. Logistic regressions predict outcome variables using the best linear combination of the independent variables. Multinomial logistic regression is a regression in which the dependent variable has more than two categories
whereas a binary logistic regression has exactly two categories. These statistical analyses were appropriate to use, as both the independent and dependent variables are categorical, and the research questions want to predict group membership among the variables (Tabachnick & Fidell, 2013).

Regarding research questions 5, 6, and 7, a comparative component involving Pearson chi-square analyses that tests for strength of relationships between two categorical variables was performed. Major differences in the comparisons that are significant (p < .05) were highlighted. The independence of the variables and large sample size met the assumptions of the chi-square test allowing for associations between variables (Field, 2009). Post hoc analyses included Bonferroni corrections to control type I errors.

**Chapter Summary and Overview of Remaining Chapters**

This chapter identified the background and need for examining the EEOC IMS database specifically regarding individuals with visual impairments and their experiences with workplace discrimination. The anticipated implications of the results demonstrate the significance of this proposed study. In addition, this chapter introduced the theoretical and analytical components as well as the EEOC process.

The remaining chapters provide a detailed review of the literature, the supporting theoretical framework, the statistical methods proposed for analyzing the relationships between the variables, the results of these analyses, and the conclusions drawn. In particular, chapter 2 examines and reviews the significant literature relative to employment and workplace discrimination for individuals with visual impairments. The MOHO will provide general support to this proposed study as to where and why individuals with visual impairments are struggling to
obtain occupational adaptation in the workplace. Chapter 2 concludes with a knowledge gap section and how this proposed study is intended to fill those gaps.

In Chapter 3, the research design and statistical methods are proposed. Included are the data sources, study sample, variables, measurements, data analyses, and potential problems with proposed solutions. Chapter 4 displays the results to the research questions with associated hypotheses as well as descriptive and trend analyses of the data. In Chapter 5 the study findings are discussed and the implications of these findings for employees, employers, and professionals. Chapter 5 also includes recommendations for future research and limitations to this study. The report ends with a list of citations and relevant documents in the appendices.
Chapter 2: Literature Review

Overview

To understand the need for the study and its importance, this chapter begins by delineating the history and incidence of employment for individuals with visual impairments. Background information on the Americans with Disabilities Act of 1990 (ADA) and the ADA Amendments Act of 2008 (ADAAA) is provided as well as the history and role of the Equal Employment Opportunity Commission (EEOC). Current employment and discrimination for individuals with visual impairments will be addressed followed by the theoretical model used to guide this study. Lastly, a summary of the gaps in our knowledge will conclude this chapter.

Historical Trends for Employment

The employment rate for individuals with visual impairments has fluctuated since World War II with federal legislation, government opportunities, corporate downsizing, and changing workplace attitudes toward individuals with disabilities. During World War II, large numbers of deployed men required companies to seek out and hire individuals otherwise not sought after, and as a result many individuals with visual impairments were able to find work on assembly lines and in factories (Johnson, 1998). However, with the return of veterans and initiatives for their hiring, individuals with visual impairments were laid off or retained in low paying, unskilled work (Johnson, 1998).

To avoid an economic downturn after the war, Congress passed the Employment Act of 1946. The general goals of this act were full employment, full production, and stable prices,
although an outright guarantee of employment to all Americans did not survive in the compromise bill (Scitovszky, 1946). Nevertheless, unemployment remained at relatively low rates for about 20 years following the enactment of the Employment Act of 1946 (Santoni, 1986).

In the initial Civil Rights Act of 1964 it was proposed that individuals with disabilities become a protected class along with racial and ethnic minorities in terms of education, use of public facilities, and employment. However, when the legislation was passed individuals with disabilities were not included; yet disability rights became a national issue for the first time (Johnson, 1998). This heightened the general public and employer awareness about employing individuals with disabilities.

Section 504 of the Rehabilitation Act of 1973 extended protection of the Civil Rights Act of 1964 to federal workers with disabilities as well as prohibited agencies or organizations receiving federal funds from discriminating against qualified individuals because of disabilities (Weiss, 1997). This act also required employers with federal contracts to establish Affirmative Action plans giving preference in hiring, retention, and promotion to individuals with disabilities. The preferential treatment provisions of the Rehabilitation Act of 1973 paved the way for the anti-discrimination laws of the Americans with Disabilities Act (ADA) of 1990 (Johnson, 1998).

**Americans with Disabilities Act of 1990**

The Americans with Disabilities Act (ADA), a combination and extension of the Civil Rights Act of 1964 and the Rehabilitation Act of 1973, was signed into law in 1990. Title I of the ADA, which addresses employment, extended the rights afforded by individuals with disabilities by expanding coverage to all employers with 15 or more employees and to both state and local
government entities (Weiss, 1997). Becoming effective in 1992, Title I of the ADA “prohibits private employers, state and local governments, employment agencies and labor unions from discriminating against qualified individuals with disabilities in job application procedures, hiring, firing, advancement, compensation, job training, and other terms, conditions, and privileges of employment” (U.S. Equal Employment Opportunity Commission, n.d., para. 1). This law’s purpose was to guarantee equal opportunities in employment by enabling individuals with disabilities to perform essential job functions with reasonable accommodations, and to ensure non-discrimination in benefits and privileges of employment (Gamble, Dowler, & Hirsh, 2004).

The ADA does not protect every individual who has a medical condition. It defines disability with respect to the individual who must meet one of three components: a physical or mental impairment that substantially limits one or more major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment (ADA of 1990). The ADA defined ‘substantially limits’ as “prevents or severely restricts the individual,” and loosely defined ‘major life activity’ as an activity “of central importance to most people’s daily lives” (Thiel, 2010). An individual who meets the criteria for a disability is then evaluated as to whether he/she can perform essential job functions with reasonable accommodations.

Although praised by many as the most significant civil rights legislation since the Civil Rights Act of 1964, critics argued that there was limited evidence that the ADA increased numbers of individuals with disabilities in the workplace (Blanck, 1996). In addition, Supreme Court decisions involving the ADA demonstrated an increasingly narrowed interpretation of key provisions resulting in limiting the scope and coverage of the law (Vierling, 2009). As a result, an increasing number of individuals with disabilities were found by the courts to not be disabled, including some with severe impairments (Petrila, 2009).
In 1999, the U.S. Supreme Court ruled disabilities had to be assessed under their corrected state to be determined a disability. In a well-known court case, Sutton v. United Air Lines, Inc., 527 U.S. 471 (1999), twin sisters Karen Sutton and Kimberly Hinton, brought a lawsuit against United Air Lines, Inc. under ADA stating that the airlines failed to hire them as commercial airline pilots because their uncorrected vision did not meet the airline’s regulations (Petrila, 2009). The sisters, both having severe myopia (nearsightedness), met the age, education, experience, and Federal Aviation Administration (FAA) certification qualifications; however, they did not meet the airline’s minimum vision requirement of uncorrected visual acuity of 20/100 or better (Sutton v. United Air Lines, Inc., 527 U.S. 471 [1999]). With eyeglasses their vision was correctable (20/20 or better) and both sisters were able to function normally in their daily lives.

The sisters were subsequently not hired and filed a lawsuit against United Air Lines, Inc. stating that their uncorrected vision met the definition of a disability because it substantially limited the major life activity of seeing. They claimed that United Air Lines, Inc. was in violation of the ADA because they had a disability within the definition, therefore the airlines should have allowed them a reasonable accommodation of wearing eyeglasses while flying in order to perform essential job functions (Petrila, 2009). The U.S. Supreme Court, by a 7-2 vote, ruled against the sisters indicating that an impairment had to be considered in its corrected state when determining if the disability substantially limited a major life activity. The eyeglasses correcting the sisters’ vision therefore eliminated the ‘substantially limiting’ component of the major life activity of seeing (Sutton v. United Air Lines, Inc., 527 U.S. 471 [1999]).

The debated issue was whether the sisters with uncorrected vision of 20/200 or worse should be considered disabled under the ADA when their corrected vision was normal (20/20 or
better). The court’s ruling was an indication that the ADA’s coverage was limited to those whose impairments were not controlled or mitigated (Massengill, 2004). Sutton v. United Air Lines, Inc., 527 U.S. 471 (1999) set the stage for similar decisions in which the courts ruled against individuals with impairments that were not ‘substantially limiting’ in their controlled state. This included individuals with hearing impairments, epilepsy, heart conditions, cerebral palsy (Massengill, 2004), asthma, diabetes, and some mental illnesses such as depression (Petrila, 2009). Medications, assistive devices, corrective measures, medical supplies, and other auxiliary aids that controlled disabilities instead of removing them, were now preventing some individuals from demonstrating their impairment ‘substantially limited’ major life activities. The ruling that impairments had to be considered in their corrected state made it more difficult for individuals to establish that their impairments met the requirements of a disability (Petrila, 2009).

Another relevant court case that had a significant impact on the interpretation of the ADA was Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002). In this case Toyota employee Ella Williams claimed she was denied reasonable accommodations for her carpal tunnel syndrome and other related impairments while working for the company. A District Court ruled that her impairments did not ‘substantially limit’ any of her ‘major life activities’ at the time of her alleged complaint (Smith & Allen, 2011).

An appeals court overturned this judgment, ruling that William’s inability to perform specific manual tasks required by her job constituted a limitation in a ‘major life activity’. However, the U.S. Supreme Court disagreed, finding the Court of Appeals had placed too much emphasis on her job disability, and should have taken into account evidence of William’s ability to do personal tasks and household chores, constituting the types of activities most people do in their daily lives (Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184...
(2002]). It ruled that the appeals court had erred in finding Williams to be disabled. The narrow
and strict interpretation of these terms required individuals to demonstrate their impairment
prevented or severely restricted them from doing activities that are considered essential to most
people’s daily lives.

Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002) set the standard for similar
rulings with interpretations of ‘substantially limiting’ and ‘major life activities’ for a condition to
be covered by the ADA. The judicial restrictions on the qualifications of individuals with
disabilities covered under the ADA enabled employers to prevail in 90-95% of court cases
(Vierling, 2009). Disability advocates expressed concern that Americans with disabilities
appeared to be less protected in the workplace than expected under Title I of the ADA. This
raised concerns in Congress that the original intent of the ADA was not being upheld.

Congress determined that the ruling of the Supreme Court in Sutton v. United Air Lines,
Inc., 527 U.S. 471 (1999) limited the wide-ranging protection intended to be provided by the
ADA, thereby excluding many individuals it was intended to safeguard (ADA Amendments Act
of 2008). Furthermore, it determined the interpretation of the term ‘substantially limits’ in the
Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002) case resulted in a
narrower definition of limitation than was intended by Congress (ADA Amendments Act of
2008).

**ADA Amendments Act of 2008**

Congress acknowledged that as a result of Supreme Court and subsequently lower court
rulings, individuals with a wide range of considerably limiting impairments were not found to be
disabled under the ADA (Smith & Allen, 2011). Therefore, to restore the intended purposes and
protections of the ADA, Congress proposed the ADA Amendments Act of 2008 (ADAAA). One purpose was to provide a more ‘clear and comprehensive national mandate for the elimination of discrimination’ (ADA Amendments Act of 2008) by reestablishing the intended ADA’s wide range coverage of protection.

The ADAAA also was developed to eliminate the requirement that impairments must be considered together with any controlling or mitigating measures as was the case in Sutton v. United Air Lines, Inc., 527 U.S. 471 (1999). By eliminating this requirement, individuals such as the Sutton sisters with a legitimate disability, in their case visual impairment, would be protected under the ADAAA. Also, for impairments to be eligible for protection, they now could not be minor and transitory conditions, lasting 6 months or less. Another intent of Congress was to eliminate the strict standards set by Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184 (2002) in the interpretation of ‘substantially limits’ and ‘major life activity’, thereby enabling more individuals to achieve coverage under the ADAAA (ADA Amendments Act of 2008).

The ADAAA retained the original definition of disability from the ADA, but clarified the ‘regarded as’ component. An individual is now covered under the ADAAA based on actual or perceived impairments, whether or not these impairments limit or are perceived to limit a major life activity (Parry & Allbright, 2008). The term ‘substantially limits’ was also clarified and the definition of ‘major life activity’ was expanded. Although there is not a specific ADAAA definition of ‘substantially limits’ the law states that:

1) An impairment that substantially limits one major life activity need not limit other major life activities in order to be considered a disability (Sec. 12102, 4C).
2) An impairment that is episodic or in remission is a disability if it would substantially limit a major life activity when active (Sec. 12102, 4D).
3) The determination of whether an impairment substantially limits a major life activity shall be made without regard to the ameliorative effects of mitigating...
measures such as- Medication, medical supplies, equipment, or appliances, low-vision devices (which do not include ordinary eyeglasses or contact lenses), prosthetics including limbs and devices, hearing aids and cochlear implants or other implantable hearing devices, mobility devices, or oxygen therapy equipment and supplies; (Sec. 12102, 4E). (http://www.ada.gov/pubs/adastatute08.htm)

Additionally, ‘major life activities’ was expanded into two detailed non-exhaustive lists of examples of ‘general’ major life activities (e.g., breathing, thinking, reading, bending) and major bodily functions (e.g., immune, neurological, digestive, bowel; Thiel, 2010) to expand the scope of protection. In contrast to the ADA, the ADAAA was designed to have less emphasis on the evaluation of whether an individual is qualified for coverage, and therefore more emphasis on whether or not an employer had unlawfully discriminated against that individual (Vierling, 2009).

Lastly, the ADAAA granted the Equal Employment Opportunity Commission (EEOC), the Attorney General, and the Secretary of Transportation authority to regulate the rules for administering the law (Thiel, 2010). Prior to this no government agency was designated to regulate the ADA. Although these federal agencies may interpret language of the ADAAA differently, Congress intended the amended Act to be broadly interpreted to cover individuals with disabilities against workplace discrimination. The EEOC is charged with responsibility for enforcing federal laws prohibiting employment discrimination not only for individuals with disabilities, but also on the basis of race, color, national origin, religion, sex, age, or genetic information (www.eeoc.gov).

**Equal Employment Opportunity Commission**

The U.S. Equal Employment Opportunity Commission (EEOC) is an agency of the U.S. Government that enforces the federal employment discrimination laws. Created as part of the Civil Rights Act of 1964, the EEOC addresses discrimination in voting, public accommodation,
education, and employment (www.eeoc.gov). Initially, the EEOC lacked enforcement abilities and focused on defining equal employment, influencing laws, and educating the public. The Equal Employment Opportunity Act of 1972 gave the EEOC litigation authority to file lawsuits against nongovernmental agencies. The objectives of the EEOC are to reduce employment discrimination through law enforcement, remediate discriminatory practices, secure meaningful relief for victims of discrimination, prevent further discrimination through education and outreach, and empower the public on how to exercise their right to employment free from discrimination (Rumrill & Scheff, 1997).

Employees who are qualified for an employment position and believe they have been discriminated against can file complaints with the EEOC. Before a lawsuit can be filed in a Civil Court, it is required that a discrimination ‘charge’ be filed with the EEOC (McMahon et al., 2008). The EEOC investigates discrimination charges based on an individual's race, color, national origin, religion, sex, age, disability or genetic information, as well as retaliation for reporting, participating in, and/or opposing a discriminatory practice (www.eeoc.gov). When Congress expanded EEOC’s authority with the passage of ADA of 1990, the Older Workers Benefit Protection Act of 1990, and the Civil Rights Act of 1991, the EEOC saw the largest increase in claims filed in its history (www.eeoc.gov). With the passage of the ADAAA, the EEOC again saw a large spike in discrimination charges related to disabilities, including visual impairments.

**Visual Impairment and Employment**

Individuals with visual impairments can successfully perform a wide variety of job functions and be productive employees despite the challenges and barriers to be overcome (Gamble et al., 2004). It has been well documented that working age individuals with visual
impairments have lagged behind in workforce participation when compared to their non-visual impairments have lagged behind in workforce participation when compared to their non-visually impaired counterparts (Cavanaugh, & Rogers, 2002; Goertz et al., 2010; Golub, 2006; Kelly, 2013; O'Day, 1999). A major national data collection survey conducted by the U.S. Census Bureau, estimated that 37% of non-institutionalized individuals aged 18-64 with a visual impairment were employed in 2012 (Erickson, Lee, & von Schrader, 2014). This compares to a 70% employment rate for non-institutionalized individuals aged 18-64 without a visual impairment (Erickson et al., 2014).

Key success factors identified in previous studies of employment for individuals with visual impairments include (a) knowledge and understanding of accommodations and assistive technology (Unger et al., 2005), (b) opportunities for on the job training or other work experiences with an employer (McDonnall et al., 2013), and (c) co-worker involvement (Goertz et al., 2010). Rehabilitation professionals can also work with employers to develop strategies for accommodating workers with visual impairments, help them understand and meet their legal obligations under the ADA, and jointly resolve disability related issues (Rumrill & Scheff, 1997).

Another approach for visually impaired individuals seeking employment opportunities is to utilize state vocational rehabilitation agencies. All U.S. states and some U.S. territories offer vocational services such as assessments, counseling and guidance, post-secondary education, job searches, job placement, job coaching and supported employment for qualified individuals (www.disability.gov). Utilizing vocational rehabilitation services has been shown as an effective strategy for employment of individuals with visual impairments (Simpson & Rogers, 2002), although completing a vocational rehabilitation program does not necessarily assure paid
employment. Various individual characteristics and demographic factors also have a major impact on employment rates.

Studies have shown the demographic factors of age, gender, and race are associated with workforce participation rates for individuals with visual impairments (Cavanaugh & Rogers, 2002; Darensbourg, 2013; Giesen & Ford, 1986; Kirchner, Schmeidler, & Todorov, 1999; Rak, 2013; Riffkin, 2014; Taheri-Araghi & Hendren, 1994). Although, varying study results preclude the ability to predict the employability of any individual.

When considering age, one study concluded that individuals with severe visual impairments ages 18-54 were over 5 times more likely to be employed than those aged 55-69 (Kirchner et al., 1999). Similar results were found with other U.S. studies of employment rates for visually impaired individuals of various ages. Individuals aged 30-40 were the most likely to be employed in one study whose age ranges were from 15-86 with eight 10-year intervals (Taheri-Araghi & Hendren, 1994). More recently, individuals less than age 37 were found to be 3 times more likely to be employed than older individuals aged 37-50 or 51-65 (Darensbourg, 2013). Of note, individuals in both of those studies were recipients of vocational rehabilitation services prior to the study being conducted.

Likewise, with vocational rehabilitation studies, an older study found that individuals with visual impairments aged 55-64 were more likely to be employed than those over the age of 65 (Cavanaugh & Rogers, 2002). Additionally, another recent study indicated an older average age (mean age 47) was more likely to be employed three months after vocational rehabilitation than their younger counterparts (mean age 40) (Rak, 2013). However, the mean ages of both employed and unemployed groups were still well below the average U.S. age for retirement (between 59-60) during the time of the study (Riffkin, 2014).
The above results imply that younger aged individuals with visual impairments are more likely to be employed than their older colleagues. Although varying study age groups and statistical measures prevent predicting an exact age or interval of individuals with visual impairments most likely to be employed.

Regarding gender, being male has been positively associated with higher employment rates for individuals with visual impairments in multiple research studies (Cavanaugh & Rogers, 2002; Kirchner et al., 1999; Taheri-Araghi & Hendren, 1994), including prior to the ADA (Giesen & Ford, 1986). In data obtained from 2006, males were twice as likely as females to be gainfully employed (Darensbourg, 2013). However, from 2008-2011 being female was found to be positively associated with employment in a study of vocational rehabilitation consumers (Rak, 2013). In this study, unpaid family homemakers were counted as successful employment outcomes, resulting in a larger percentage of employed females than males.

Studies have defined successful employment differently. The Cavanaugh & Rogers (2002) and Kirchner et al. (1999) studies only included competitive employment in their definition. However, Rak (2013) and Taheri-Araghi and Hendren (1994) used a combination of competitive employment, sheltered or supported employment, and unpaid homemakers to define successful employment. Because there are fundamental differences of each subcategory of employment, treating all the subcategories as one group diminishes the value and comparability of the research results.

Race also has been identified in certain studies as having an impact on the employment rate for individuals with visual impairments. Being white or ‘having origins in any of the original peoples of Europe, the Middle East, or North Africa’ (www.census.gov) has been positively associated with employment status (Kirchner et al., 1999; Rak, 2013; Taheri-Araghi & Hendren,
However, race has not been a predictor of employment status in other studies (Cavanaugh, & Rogers, 2002; Darensbourg, 2013). Although not shown as a predictor of employment, another study indicated a higher percentage of employed white individuals with visual impairments compared to other races (Bell, 2010).

Besides visual impairment, the demographic factors of age, gender, and race can be additional obstacles to gainful employment. Employers also face hardships related to employment of visually impaired individuals in a competitive market. Failure to provide appropriate workplace supports or accommodations required by the ADA can be considered a workplace barrier (Unger et al., 2005). Limited expectations, stereotypes, and misunderstandings are also common workplace barriers to successful employment for individuals with visual impairments (O'Day, 1999). Workplace barriers may prevent individuals with visual impairments from performing functions they could otherwise complete and also could be considered discrimination from the perspective of the employee.

Employees or potential employees who perceive they have been discriminated against because of their disability can file formal charges with the EEOC. The occurrence of perceived employment discrimination because of a visual disability by individuals claiming a visual impairment is evidenced by 575 discrimination charges filed with the EEOC in 2013 (www.eeoc.gov).

Visual Impairment and Employment Discrimination

Employment discrimination charges filed with the EEOC do not necessarily indicate discrimination has occurred, only that an employee perceived discrimination. However, multiple studies regarding employment discrimination for individuals with visual impairments indicate that discrimination exists, despite the passage of the ADA (Chan, McMahon, Cheing, Rosenthal,
& Bezyak, 2005; McMahon et al., 2008; Rumrill & Scheff, 1997; Unger et al., 2005). Outcome resolutions of each submitted discrimination charge indicates whether or not the EEOC has determined discrimination has occurred. EEOC discrimination charges and outcome resolutions for individuals with visual impairments have been previously examined in a limited fashion.

An initial study of EEOC discrimination charges for the first calendar year following the enactment of the ADA that included individuals with visual impairments was published in 1995 (McMahon et al., 1995). Although the EEOC recognizes many types of discrimination charges, this study divided them into three broad categories (job acquisition, job retention, and job satisfaction) to facilitate interpretation of results. Job acquisition included allegations of refusal to hire or re-hire; job retention included allegations of unlawful discharge, layoff, suspension, discipline, or failure to provide accommodations; and job satisfaction included allegations of unlawful wages, benefits, promotions, harassments, and all others (McMahon et al., 1995). Study results indicated that the category of charges constituting the highest percentage of complaints (27%) among individuals with visual impairments were job retention, or specifically involuntary termination or discharge (McMahon et al., 1995). The next highest percentage of complaints (17%) involved job satisfaction, or specifically employers’ refusal to provide reasonable accommodations (McMahon et al., 1995).

A subsequent study looked specifically at outcome resolutions of visual impairment charges of the EEOC dataset from 1993-2002. This study found that the majority of charges by individuals with visual impairments were non-merit resolutions (Unger et al., 2005). A non-merit resolution is an outcome that does not favor the charging party and instead favors the employer. Specifically, charges were either dismissed by the EEOC because of no cause finding (52%), or were closed for administrative reasons (14%; Unger et al., 2005). A resolution of no cause
finding indicates that an EEOC investigation failed to support alleged violations of the ADA. Administrative closures occur in instances when the employee cannot be located, is non-responsive, uncooperative, or other similar issues.

Correspondingly, merit outcomes indicate the EEOC has determined discrimination occurred. These outcomes favor the individual submitting the charge by validating a discrimination allegation. Examples of merit outcomes include negotiated settlements, withdrawal with benefits, successful conciliation, and unsuccessful conciliation. Although not as common as non-merit outcomes, merit outcomes indicate employment discrimination is present in the workplace despite laws enacted for its elimination.

The resolution outcomes determined by the EEOC in the above study raise the question of whether a majority of individuals with visual impairments have the ability to acknowledge and address perceived discrimination versus actual discrimination (Unger et al., 2005). The overwhelming number of no cause finding outcome resolutions suggests this. Also, high frequency of charges closed for administration reasons also suggests individuals with visual impairments may not possess the knowledge, skills, and resources to complete the entire process of submitting discrimination charges.

An additional study examined EEOC resolutions of reasonable accommodation discrimination charges submitted by individuals with visual impairments from 1992-2005 (Pawluk et al., 2008). Reasonable accommodations were likely chosen because at the time it was the 2nd most common type of allegations filed under the ADA. Additionally, the technological growth away from braille to portable reading and auditory output devices provides individuals with visual impairments greater parity with their non-Visually disabled peers.
Appropriate use of assistive technology is a reasonable accommodation if it allows the individual to complete essential job functions (Strobel et al., 2006). Employers are required by the ADA to provide reasonable accommodations to qualified individuals with disabilities who are employees or applicants for employment unless doing so would cause undue hardship (U.S. Equal Employment Opportunity Commission, n.d., para. 5).

Study results suggested that individuals with visual impairments were more likely to have a merit resolution for an allegation of reasonable accommodation discrimination when compared to the other five most common visual impairment discrimination charges (Pawluk et al., 2008). These included hiring, discharge, constructive discharge, disability harassment/intimidation, and terms/conditions of employment. Twenty-seven percent of allegations of reasonable accommodations by individuals with visual impairments were resolved with merit compared to 23% for the other five most common visual impairment discrimination charges. A possible explanation for this higher merit rate is that allegations of reasonable accommodation are more explicit than other issues, thus making it easier to determine a meritorious charge (Pawluk et al., 2008).

Additionally, age (but not gender or race) was found to be a significant factor in the resolution of reasonable accommodation allegations. Individuals aged 16-54 achieved merit resolutions 27% of the time, while individuals aged 65 and older or whose ages were unknown had a 34% merit resolutions rate (Pawluk et al., 2008). There was a significant decrease in the merit resolution rate for individuals between the ages of 55-64 (19%), explained by increased rates of allegations of discrimination for this age group, likely resulting in lower percentages of meritorious outcomes (Pawluk et al., 2008). Another possible explanation described individuals at this age as reaching an ‘accommodation ceiling’ or reaching a point in their careers that
essential job functions cannot be modified or excluded, thereby resulting in no accommodation solutions (Pawluk et al., 2008).

Although it is believed that fewer individuals were employed aged 65 and older than 55-64 or 16-54, significantly more charges are filed per employee at these ages (Pawluk et al., 2008). The high merit rate for ages 65 and older is explained by speculations that these individuals were entering a new life stage and likely taking on a new or second job after retirement (Pawluk et al., 2008). These new positions are thought to be lower or entry-level positions that may be easier to provide reasonable accommodations, as the ‘accommodation ceiling’ has not been reached. Older individuals also may be familiar with reasonable accommodation solutions experienced earlier in their careers, so if employers are not providing these accommodations it does not go unnoticed. For individuals with visual impairments reasonable accommodations appear to be an ongoing concern during their entire careers.

The accommodations study also investigated employment industries and their correlation with merit outcomes in the 16-54 age group. For industries involving utilities; information; real estate and leasing; professional, scientific and technical services; and health care and social assistance, the merit resolution rate (18%) was below the 27% average for reasonable accommodations for individuals with visual impairments (Pawluk et al., 2008). This suggests that employers in these industries understand accommodation needs better than other industries, and their employees tend to be fairly well educated and more likely to know and utilize accommodation solutions.

On the other hand, industries involving agriculture; mining; construction; wholesale; arts, entertainment and recreation; and public administration had a higher merit rate (38%) than the 27% average for reasonable accommodations for individuals with visual impairments (Pawluk et
al., 2008). This suggests these industries, which can be considered less ‘office based’ than others, struggle with understanding or providing reasonable accommodations for individuals with visual impairments. Knowing the types of industries that tend to understand and provide reasonable accommodations will enable agencies and organizations dedicated to individuals with visual impairments to focus their attention at responding to discrimination regarding reasonable accommodations.

To date, no other published studies have been located that address by industry the outcome of ADA workplace discrimination charges submitted to the EEOC by individuals with visual impairments. To better understand employment discrimination for individuals with visual impairments, utilizing a theoretical model, as a framework, will provide support as to where and why perceived and actual discrimination are occurring in the workplace.

**Theoretical Perspective**

The Model of Human Occupation (MOHO), developed in the 1980s by Dr. Gary Kielhofner, provides a framework for understanding how human “occupations” (daily activities that give meaning to individuals) are motivated, organized, and performed. MOHO is intended for individuals experiencing problems in their “occupational” life and may be used to assess an individual’s self-sufficiency and environmental limitations to obtaining independence (Braveman & Suarez-Balcazar, 2009).

Within MOHO, humans are comprised of three components: volition, habituation, and performance capacity. Volition refers to the thoughts and feelings about doing things, which includes issues of mastery, enjoyment, satisfaction, and valuation (Crepeau et al., 2003). Habituation organizes behaviors into habits, roles, and routines, while performance capacity refers to the physical and mental abilities needed for skilled occupational performance (Crepeau
et al., 2003). The levels of mastery to obtain occupational adaptations are determined by many factors interacting with the environment. These include an individual’s participation, performance, and skills based on personal occupational identity and competence.

An individual’s participation refers to engagement in an occupational task, while performance is the act of going through the actions to complete it. The purposeful actions (i.e. goal directed movements) that make up the performances are the individual’s skills. These skills are observable and goal oriented. An individual’s participation, performance, and skills help create her/his occupational identity and competence.

Occupational identity and competence are interrelated influences of occupational adaptation. The conscious awareness of oneself based on occupational participation is occupational identity, and occupational competence is the extent to which one maintains occupational participation (Phelan & Kinsella, 2009). Over time, the dynamic interactions of personal factors construct positive or negative occupational identities and competencies thereby creating or hindering occupational adaptation. Occupational adaptation is the ability to overcome disabling influences on occupational functioning. Problems encountered in any of the aforementioned factors, including the environment, may all contribute to disengagement from occupations. Figure 1 is a visual representation of the process of occupational adaptation.

The MOHO is a framework to understand the interrelated factors that contribute to occupational dysfunction. Although traditionally this framework is utilized by occupational therapists with their clients, it can give insight into what factors are creating dysfunction and what strategies or modifications could support changes for increasing independence with occupational adaptation (Crepeau et al., 2003).
Occupational therapists use components of MOHO for assessments, to generate treatment goals, during treatment planning, and during client-centered therapy (Lee, Taylor, Kielhofner, & Fisher, 2008). It’s use has been documented with compliance regarding home exercise programs, individuals with HIV/AIDS, chronic fatigue syndrome, acute mental illness, adult functioning in long-term care, and vocational interventions. In addition, it has been heavily researched and documented how often, in what capacity, and by who utilizes the components of MOHO in their daily occupational therapy practices (Lee et al., 2008; Lee et al., 2012; Lee, Kielhofner, & Taylor, 2009).

Organizations, vocational rehabilitation, and therapy services are designed to create access to resources for people with disabilities by building competence and increasing personal capabilities to promote confidence and autonomy (Braveman & Suarez-Balcazar, 2009). However, an individual’s ability to make use of available resources is a function of the relation between individual characteristics and the environmental contexts (Braveman & Suarez-Balcazar, 2009), which is the premise of the MOHO.

Attaining employment is the culmination of skills, self-efficacy, and motivation to apply for and obtain a job where qualified. The ability to retain employment requires compatibility between personal and employer characteristics as well as an accommodating workplace. Employment satisfaction encompasses personal feelings of fulfillment, mastery, and happiness with all aspects of employment. Employment attainment, retention, and satisfaction incorporate the components of the MOHO, influenced by the environmental contexts to create or hinder occupational adaptation.

Occupational adaptation occurs when one’s abilities, motivation, and confidence match the support systems, accessibility features, and resources in the environment. When personal and
environmental characteristics are a mismatch, the potential to adapt (occupational adaptation) diminishes. Applying the MOHO framework to employment for an individual with a disability implies examining the employee and the workplace to determine characteristics that support and detract from workplace success (Kielhofner et al., 1999).

Researching and reporting on discriminatory experiences in the workplace regarding individuals with visual impairments will provide further understanding of workplace practices. Although secondary reasons for filing allegations of workplace discrimination are not afforded by the EEOC research database, speculations can be drawn based on MOHO. The MOHO framework will provide general support to this proposed study as to where and why individuals with visual impairments are struggling to obtain occupational adaptation in the workplace.

Results from previous research suggest an individual’s demographics including age, gender, and race may be factors of hindrance to occupational adaptation for individuals with visual impairments. Also, the employer’s demographics including employer region of operation location, size, and industry may also indicate similar results. Furthermore, workplace barriers as indicated by types of discrimination charges submitted would suggest where breakdown exists in the occupational adaptation process. This model will serve as a basis for identifying contributors to occupational dysfunction in the workplace for individuals with visual impairments.

Gaps in Knowledge

Limited studies have been completed regarding workplace discrimination for individuals with visual impairments opening the door for more definitive research. Despite demographic factors indicating association with employment for individuals with visual impairments, there is a lack of available evidence associating demographic factors with employment discrimination for individuals with visual impairments. To date, no studies have predicted characteristics of
individuals with visual impairments based on EEOC discrimination charges and resolution outcomes.

In addition, employer characteristics including employer industry, size, and region of operation location have not been exclusively examined for individuals with visual impairments. Only one published study by Pawluk et al., (2008) has been located that addressed any employers’ characteristics and association with workplace discrimination charges by individuals with visual impairments. This study examined only the types of industry for one discrimination charge (reasonable accommodations) leaving a gap in our understanding of employer’s impact on workplace discrimination for individuals with visual impairments. The predictive characteristics of employers of individuals with visual impairments based on discrimination charges and resolution outcomes are unknown.

Furthermore, the association between types of discrimination charges and EEOC resolution outcomes is also unknown, as this has not been examined to date. Additionally, there have been no analyses or comparisons of visual impairment charges and outcome resolutions since the enactment of the ADAAA. The only study to completely examine discrimination charges occurred after the first year the ADA was enacted more than two decades ago. It is unknown how progressive changes in the workplace have influenced discrimination charges from individuals with visual impairments.

Lastly, under the ADA, a majority of discrimination resolutions from charges by individuals with visual impairments were deemed non-meritorious thereby determining discrimination against the employee had not occurred (Unger et al., 2005). Although discrimination charges from individuals with visual impairments continue to be filed with the
EEOC, the rate and patterns of meritorious versus non-meritorious resolutions is unknown under the ADAAA.

As demonstrated, there are gaps in our present knowledge regarding individuals with visual impairments and workplace discrimination. This proposed study is intended to fill those gaps by intimately examining factors afforded by the EEOC database exclusively regarding individuals with visual impairments.

Chapter Summary

Research has shown that workplace discrimination for individuals with visual impairments in the U.S. is an ongoing issue dating before the founding of the EEOC and the enactment of the ADA. This chapter provided key information on the history of employment for individuals with visual impairments, the ADA, the ADAAA, the EEOC, as well as current employment and workplace discrimination concerns for individuals with visual impairments. The correlative literature and theoretical model provided a supportive background and the gap in knowledge section completed this chapter further delineating the need for the proposed study.
Chapter 3: Research Methods

Overview

This chapter outlines the methodology for the proposed research study. Included is the reasoning behind both the research design and the analytical plan for the corresponding research questions and hypotheses. Additionally, Chapter 3 includes the data sources, study sample, variables, measurements, data analysis, and potential problems with proposed solutions.

Research Design

The proposed study was a descriptive, quantitative, non-experimental, cross-sectional, retrospective database analysis. This was an appropriate research design because the quantified data was collected at one point in time and there was no manipulation of the independent variables (Polit & Beck, 2012). The study was retrospective, as EEOC investigators had compiled the applicable data into the Integrated Mission System (IMS) database before initiation of this proposal. As with other retrospective studies, the previously collected data was analyzed in a new manner to answer the novel research questions proposed for this study. The unit of study for this research proposal was discrimination charges. Individuals could file multiple charges or allegations with the EEOC for discriminatory experiences, therefore results and conclusions were based on discrimination charges and the specific characteristics that accompanied each charge.
Data Sources

Data obtained for this study was from the IMS database. As part of an EEOC research initiative, Virginia Commonwealth University has access to this secured database through an Interagency Personnel Agreement and a Confidentiality Agreement (McKenna, 2005). Brian McMahon, Ph.D., C.R.C., N.C.C., C.C.M., at Virginia Commonwealth University, is a principle researcher of the National EEOC ADA Research Project and holds ultimate responsibility for permitting utilization of the dataset. He provided the de-identified data to the primary researcher on May 11, 2015 in a Microsoft Access file.

The IMS database consists only of resolved discrimination charges filed with the EEOC and does not include charges still pending resolution. As a result, the dataset does not reflect the entire number of active discrimination charges at the commencement of the study. The de-identified data extracted from the IMS database directly pertained to the research questions and was stored on an external hard drive in a safe and secure location within the primary researcher’s permanent residence.

Sampling

Only employment discrimination allegations brought under the ADA or ADAAA were included in the sample. Therefore, allegations of discrimination filed under other federal employment statutes such as the Civil Rights Act, Equal Pay Act, Age Discrimination in Employment Act, Rehabilitation Act, or the Family and Medical Leave Act were not included.

The specific guidelines for submitting discrimination charges with the EEOC for ADA and ADAAA violations allows for natural inclusion of charges into the sample as well as excluding charges that do not fit the criteria. Discrimination charges excluded from the sample were any whose resolutions are determined by agencies other than the EEOC such as state fair
employment practices agencies (FEPA) and the Office of Federal Contract Compliance Programs (McMahon, Edwards, Rumrill, & Hursh, 2005). Additionally, no open investigations, retaliation claims, claims referred to litigation, or claims that contain errors were included in compliance with the Interagency Personnel Agreement (McMahon et al., 2005).

The collected data came from U.S. states, territories, and anywhere an American employee who is employed by a U.S. company was located including overseas (www.eeoc.gov). There were 11,482 discrimination charges directly related to visual impairments filed under the ADA and ADAAA that were received between July 26, 1992 and December 31, 2011 (National EEOC ADA Research Project, 2011a), the study’s timeframe. Therefore, sample size arrived at was not necessarily chosen and instead was determined once the objectives were established and charges were excluded that did not fit the conditions of interest.

**Measurement of Variables**

This study examined data pertaining to the EEOC disability code of ‘BLINDVIS’ (vision impairment). The EEOC defines a visual impairment as a condition covering varying degrees of visual loss that may include blindness. Blindness is defined as “visual acuity of not better than 20/200 in the best eye with correction” (www.eeoc.gov).

The study design included a number of variables characterizing the individual, the employer, the types of discrimination, and the EEOC’s conclusions. The EEOC recognizes the individual or the employee or group who filed an allegation of discrimination as the ‘charging party’. The employer or the entity that the allegation of discrimination is filed against is recognized as the ‘respondent’. Characteristics of the charging party and respondent served as the independent variables, and the discrimination charges and EEOC’s conclusions called ‘resolution outcomes’ served as the dependent variables.
The characteristics of the charging party included ‘age’ (16-88 and unknown) ‘gender’ (male, female, or unknown), and ‘race’ (African American, Asian, Hispanic / Mexican, Native American / Alaskan Native, ‘Other Race’, White, or unknown). These are nominal measures with the exception of age being a continuous measure.

The characteristics of the respondent included employer ‘location’ divided into regions based on U.S. census designations (Northeast, Midwest, South, West, U.S. territories, and Non-U.S. territories), ‘size’ groups based on number of workers (15-100, 101-200, 201-500, 501+, and unknown), and ‘industry’. Each specific employer ‘industry’ was labeled based on the North American Industry Classification System (NAICS) from 2002 codes (Agriculture, Forestry, Fishing, Hunting; Mining; Utilities; Construction; Manufacturing; Wholesale trades; Retail trades; Transportation & Warehousing; Information; Finance & Insurance; Real estate, Rental, & Leasing; Professional, Scientific, and Technical; Management of Companies & Enterprises; Administration, Support, Waste Management, & Remediation Services; Educational Services; Health Care and Social Assistance; Arts, Entertainment, & Recreation; Accommodation & Food Services; Other Services (except Public Administration); Public Administration; and Unknown). These are standard codes used by Federal agencies for classifying business establishments for statistical purposes of collecting, analyzing, and publishing information (www.census.gov). Employer ‘location’ and ‘industry’ were nominal measures and employer ‘size’ was an ordinal measure of nominal categorization. Table 1 displays the independent variables including their name, definitions, and specific categorical groups.

The dependent variables of discrimination charges and resolution outcomes were both nominal measures. At the time of the study, the EEOC recognized 42 various types of employment rights violations (types of discrimination charges) categorized by the EEOC into
Table 1.

*Categorical Independent Variables derived from the EEOC Database*

<table>
<thead>
<tr>
<th>Name</th>
<th>Definition</th>
<th>Measurement</th>
<th>Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Chronological age in years from birth to date of charge</td>
<td>Continuous</td>
<td>16-88</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>Gender</td>
<td>One’s personal sense of being either female or male</td>
<td>Categorical</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominal</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>Race</td>
<td>One’s personal sense of their own race</td>
<td>Categorical</td>
<td>African American</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominal</td>
<td>Hispanic / Mexican</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asian</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Race</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Native American</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>/ Alaskan Native</td>
</tr>
<tr>
<td>Location</td>
<td>Physical region where the employer is located based on region</td>
<td>Categorical</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominal</td>
<td>Midwest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>South</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>West</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>U.S. territory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-U.S. territory</td>
</tr>
<tr>
<td>Size</td>
<td>Amount of individuals who are employed with the employer</td>
<td>Categorical</td>
<td>15-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ordinal</td>
<td>101-200</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>201-500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>501+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>Industry</td>
<td>The type of industry of the specific employer ‘industry’ is labeled based on the North American Industry Classification System (NAICS) from 2002 codes</td>
<td>Categorical</td>
<td>Finance &amp; Insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominal</td>
<td>Public administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Real estate, Rental, &amp; Leasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Educational Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transportation &amp; Warehousing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Health Care and Social Assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Arts, Entertainment, &amp; Recreation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accommodation &amp; Food Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professional, Scientific, &amp; Technical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agriculture, Forestry, Fishing, &amp; Hunting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Services (except Public Administration)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Administration, Support, Waste Management, &amp; Remediation Services</td>
</tr>
</tbody>
</table>

*Note. Age, Gender, Location, Size, and Industry are at the time of the alleged discrimination*
categorical issue codes. To provide a more meaningful interpretation of the results, the categorical issue codes were further grouped into broad themes, as was done with previous research utilizing the EEOC dataset (McMahon et al., 1995). These four themes represented distinct components of employment including job acquisition, job satisfaction, job retention, and ‘other discrimination’.

Job acquisition included allegations of discrimination with advertising, apprenticeship, exclusion/segregated unions, hiring, prohibited medical inquiry, recall, references unfavorable, referral, reinstatement, and training. Types of discrimination charges regarding job satisfaction included assignment, benefits, benefits of insurance, benefits of pension, demotion, harassment, discipline, intimidation, job classification, maternity, promotion, reasonable accommodation, segregated facilities, segregated union locals, seniority, terms/conditions of employment, and wages. The job retention category included charges of constructive discharge, discharge, discipline, early retirement incentive, involuntary retirement, layoff, severance pay, suspension, tenure, and waive ADEA suit rights. Lastly, the ‘other discrimination’ category included posting notices, qualification standards, record keeping violation, testing, union representation, and issues that did not fit under any other defined code. (See Appendix A for categories, EEOC issue codes, types, and definitions of each discrimination charge). Table 2 displays the dependent variable of discrimination charges. Included in the table are the specific categorical groups by types of discrimination charges from the EEOC IMS database.

The other dependent variable, resolution outcomes or EEOC closure codes, were categorized based on the outcome of the EEOC investigation to determine whether discrimination actually occurred. Resolutions outcomes either favored the charging party
submitting the charge (merit) indicating that the EEOC has concluded discrimination occurred, or favored the respondent (non-merit) indicating the charge failed to support a violation.

Both merit and non-merit resolutions were further divided into 14 subcategories. There were four merit resolution closure codes that included: withdrawn with benefits by the charging party; settled with benefits to the charging party; successful conciliation; and conciliation failures. The remaining 10 non-merit resolutions closure codes included no cause finding and administrative closures due to: processing problems; respondent bankruptcy; charging party cannot be located; charging party being non-responsive; charging party being uncooperative; charging party failed to accept full relief; charging party withdraws the allegation without
settlement or benefits; outcome of related litigation; and EEOC lacking jurisdiction. All administration closures were considered non-merit resolutions thereby favoring the respondent because the EEOC determined there was not sufficient reasonable cause to believe discrimination occurred. For this study, the resolution outcomes (or EEOC closure codes) were treated as a dichotomous variable of either merit or non-merit to enhance meaning to the interpretation of the results. (See Appendix B for categories, EEOC closure codes, types, and definitions of each resolution outcome). Table 3 displays the second dependent variable of resolution outcomes. Included in the table are the specific categorical groups by the types of resolution outcomes from the EEOC IMS database.

Table 3.

Dependent Variable: Types of Resolution Outcomes by Categorical Group

<table>
<thead>
<tr>
<th>Type of Resolution Outcome</th>
<th>Merit Resolutions</th>
<th>Non Merit Resolutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Withdrawn with benefits by the charging party</td>
<td>No cause finding</td>
</tr>
<tr>
<td></td>
<td>Settled with benefits to the charging party</td>
<td>Administrative closures:</td>
</tr>
<tr>
<td></td>
<td>Successful conciliation</td>
<td>Processing problems</td>
</tr>
<tr>
<td></td>
<td>Conciliation failures</td>
<td>Respondent bankruptcy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charging party cannot be located</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charging party being non-responsive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charging party being uncooperative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charging party failed to accept full relief</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charging party withdraws the allegation without settlement or benefits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EEOC lacking jurisdiction</td>
</tr>
</tbody>
</table>

Data Analysis

To describe the study sample, descriptive analyses of frequencies and proportions were completed for all variables. This was to illustrate the distribution of counts for each variable within the designated categories. Also, resolution outcomes were displayed in a trend analysis.
This illustrated the changes of EEOC resolution outcomes year-by-year leading up to, and after, the ADAAA. Additionally, comparative analyses were completed to clean and prepare the data prior to testing each individual hypothesis. Each hypothesis was tested using a multivariate statistical method producing values of the test statistic that was interpreted for results and conclusions. All data analyses were performed using IBM Statistical Package for the Social Sciences (SPSS) version 21.

**Proposed Analyses for Research Questions 1 & 2.** A multinomial logistic regression was utilized to predict the outcomes or dependent variable by a linear combination of the predictor or independent variables for research questions 1 & 2.

- Research Question 1: Does age, gender, or race predict types of discrimination charges filed with the EEOC regarding a visual impairment?
- Research Question 2: Does an employer’s location of operation, size, or industry predict types of discrimination charges filed with the EEOC regarding a visual impairment?

Multinomial logistic regression was an appropriate method for these two similar research questions because group membership (types of discrimination charges) could be predicted by charging party and respondent factors. Specifically, there was one categorical dependent variable, discrimination charges, one continuous independent variable, charging party age, and five categorical independent variables (charging party gender and race for research question 1, and respondent location, size, and industry for research question 2). The 42 types of discrimination charges were divided into four distinct employment themes of job acquisition, job satisfaction, job retention, and ‘other discrimination’. Table 4 displays the specific research question, variable type, and variable name.
Table 4.

**Categorical Variables for Multinomial Logistic Regression**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variable Type</th>
<th>Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1</td>
<td>IV</td>
<td>Age, Gender, Race</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Discrimination Charges</td>
</tr>
<tr>
<td>RQ2</td>
<td>IV</td>
<td>Location, Size, Industry</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Discrimination Charges</td>
</tr>
</tbody>
</table>

*Note. RQ = Research Question; IV = Independent Variable; DV = Dependent Variable*

**Proposed Analyses for Research Questions 3 & 4.** A binary logistic regression was utilized to predict the outcomes or dependent variable by a linear combination of the predictor or independent variables for research questions 3 & 4.

- **Research Question 3:** Does age, gender, or race predict types of EEOC resolution outcomes regarding a visual impairment?
- **Research Question 4:** Does an employer’s location of operation, size, or industry predict types of EEOC resolution outcomes regarding a visual impairment?

Binary logistic regression was an appropriate method for these two similar research questions because group membership (types of resolution outcomes) could be predicted by charging party or respondent factors. Specifically, there was one dichotomous categorical dependent variable (resolution outcome), one continuous independent variable (charging party age), and five categorical independent variables (charging party gender and race for research question 3, and respondent location, size, and industry for research question 4). Table 5 displays variable type and variable name for research questions 3 and 4.

Assumptions for using logistic regression are that the independent variables do not need to be normal, linear, or have equal variances (Tabachnick & Fidell, 2013). However, the number
Table 5.

*Categorical Variables for Binary Logistic Regression*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variable Type</th>
<th>Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ3</td>
<td>IV</td>
<td>Age, Gender, Race</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Resolution Outcomes</td>
</tr>
<tr>
<td>RQ4</td>
<td>IV</td>
<td>Location, Size, Industry</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Resolution Outcomes</td>
</tr>
</tbody>
</table>

*Note. RQ = Research Question; IV = Independent Variable; DV = Dependent Variable*

of cases in the cells must be greater than the number of independent variables (Tabachnick & Fidell, 2013). It was highly anticipated that the sample would meet those assumptions due to the very large sample size.

**Proposed Analyses for Research Questions 5 & 6.** A Pearson Chi-Square analysis was utilized to determine group differences among discrimination charges and resolutions outcomes for research questions 5 & 6.

- Research Question 5: Are there differences between discrimination charges filed with the EEOC before and after the enactment of the ADAAA regarding a visual impairment?
- Research Question 6: Are there differences between outcome resolutions before and after the enactment of the ADAAA regarding a visual impairment?

This was an appropriate method for these two research questions because the objective was to determine if differences existed between the two time-period groups. In addition, the one categorical dependent variable and one categorical independent variable for each research question met the test criteria (Tabachnick & Fidell, 2013). The independent variables were divided into two time-period groups. The variable name ‘ADA’ represented the first time-period of July 26, 1992 - December 31, 2008 and was dummy coded ‘0’ for analysis purposes. This
time period was the first effective date of the ADA until the last effective date of the ADA. The variable named ‘ADAAA’ represented January 1, 2009 - December 31, 2011 and was dummy coded ‘1’ for analysis purposes. This time period was the first effective date of the ADAAA until the most recent and available de-identified data at the time of the study. The two time-period groups allowed additional comparisons to be drawn highlighting changes of the dataset after the enactment of the ADAAA. Table 6 displays the variable type and variable name for research questions 5 and 6.

Table 6.

*Categorical Variables for Pearson Chi-Square Analyses*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variable Type</th>
<th>Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ5</td>
<td>IV</td>
<td>ADA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADAAA</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Discrimination Charges</td>
</tr>
<tr>
<td>RQ6</td>
<td>IV</td>
<td>ADA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADAAA</td>
</tr>
<tr>
<td></td>
<td>DV</td>
<td>Resolution Outcomes</td>
</tr>
</tbody>
</table>

*Note. RQ = Research Question; IV = Independent Variable; DV = Dependent Variable*

**Proposed Analyses for Research Question 7.** Lastly, chi-square analyses were utilized to determine associations among discrimination charges and resolutions outcomes for research question 7.

- Research Question 7. Are there associations between types of discrimination charges and EEOC resolution outcomes regarding a visual impairment?

This was an appropriate analysis for this research question because the chi-square is used to test whether two categorical variables are associated (Field, 2009). Types of discrimination charges and resolution outcomes were both categorical variables and could be cross-classified in a 2 x 4 contingency table. Table 7 displays an example of a contingency table with the variables of interest, discrimination charges, and resolution outcomes.
Table 7.

Contingency Table of Discrimination Charges and Resolution Outcomes

<table>
<thead>
<tr>
<th>Discrimination Charges</th>
<th>Resolution Outcomes</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merit</td>
<td>Non Merit</td>
<td>Total</td>
</tr>
<tr>
<td>Job Acquisition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Retention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Discrimination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For research questions 5, 6, & 7, the independence of the variables and very large sample size met the assumptions of the Pearson Chi-Square analysis (Field, 2009). Major differences in the comparisons of discrimination charges and outcome resolutions that were significant (p < .05) were highlighted. This alpha level was chosen for multiple reasons. Tabachnick & Fidell (2013) recommended this intermediate cutoff to balance Type I and Type II errors for logistic regression analyses because the results are in terms of probability of a particular outcome. Additionally, p < .05 had been utilized in several previous studies with large datasets from the EEOC IMS database (Arango-Lasprilla, Ketchum, Hurley, Getachew, & Gary, 2014; Armstrong, McMahon, West, & Lewis, 2005; Pawluk, et al., 2008; Rumrill, Roessler, Unger, & Vierstra, 2004). Post hoc analyses including Bonferroni corrections followed.

Potential Problem and Proposed Solution

It was proposed that a log-linear analysis approach be used if charging party and/or respondent characteristics had frequency counts less than five. This model approach is an extension of the Pearson Chi-Square analysis that can be utilized when there are more than two categorical variables and there are at least five times the numbers of cases as cells in the design (Field, 2009; Tabachnick & Fidell, 2013). This assumption was met with the large sample size of 11,482 discrimination charges.
Chapter Summary

This chapter described the proposed research design of a descriptive, quantitative, non-experimental, cross-sectional, retrospective database analysis. Details about the data source, sampling, and measurement of variables followed. Furthermore, there was an explanation of the proposed data analysis for each research question including tables depicting the specific variables. This chapter concluded with a potential data problem and a proposed solution.
Chapter 4: Results

Overview

This chapter contains the results of the data analysis following the plan outlined in Chapter 3. First, the results of descriptive analyses are presented for the independent and dependent variables. Next, the findings for each research question are provided including results for regression and chi-squared analyses. Lastly, trend analyses of resolution outcomes by year are presented followed by a chapter summary.

Descriptive Analysis

There were 11,482 discrimination charges with resolution outcomes from individuals with visual impairments from July 26, 1992 to December 31, 2011. Five of six predictor variables from the dataset were classified into categorical data as described in Chapter 3. The classification groups were pre-established prior to receiving the data. The variable of charging party age was maintained as a continuous measure.

For the dependent variable of discrimination charges there were five types of discrimination charges not included in this dataset. These included discrimination charges claiming issues with apprenticeship, segregated facilities, record-keeping violations, segregated union locals, and maternity. (See Appendix A for categories, EEOC issue codes, types, and definitions of each discrimination charge). All 14 types of resolution outcomes recognized by the EEOC were included in the dataset and categorized into merit or non-merit resolutions as
described in Chapter 3. (See Appendix B for categories, EEOC closure codes, types, and definitions of resolution outcomes).

**Discrimination Charges and Resolution Outcomes.** Descriptive frequencies of the discrimination charges by issue category and resolution outcomes by outcome category are displayed in Table 8.

Table 8. *Discrimination Charges and Resolutions Ranked by Frequency*

<table>
<thead>
<tr>
<th>Discrimination Charges by Category</th>
<th>N</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>5489</td>
<td>47.8%</td>
</tr>
<tr>
<td>Job Retention</td>
<td>4104</td>
<td>35.7%</td>
</tr>
<tr>
<td>Job Acquisition</td>
<td>1611</td>
<td>14.0%</td>
</tr>
<tr>
<td>Other Discrimination</td>
<td>278</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resolution Outcome by Category</th>
<th>N</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Merit</td>
<td>8388</td>
<td>73.1%</td>
</tr>
<tr>
<td>Merit</td>
<td>3094</td>
<td>26.9%</td>
</tr>
</tbody>
</table>

The majority of the filed discrimination charges from individuals with visual impairments were job satisfaction issues followed by job retention, job acquisition, and lastly ‘other discrimination’ workplace related issues. From the job satisfaction category, reasonable accommodation was the most frequent issue (19.8%) followed by terms/conditions of employment (8.8%), and harassment (7.5%). From the job retention category, discharge was the most frequent discrimination issue (25.7%), followed by discipline (3.6%) then constructive discharge (2.7%). Hiring (11.0%) was the most common job acquisition issue followed by training (1.0%) and reinstatement (.7%). The discrimination issue of ‘other’ (1.6%) was the most
frequent discrimination issue from the ‘other discrimination’ category encompassing issues that did not fit under any other EEOC defined codes.

Resolution outcomes were categorized into either merit or non-merit outcomes. Close to three-fourths (73.1%) of the resolution outcomes were non-meritorious, meaning the outcome did not favor the charging party and instead favored the respondent. More specifically, non-merit resolutions included 63.7% of no charge findings, i.e. full EEOC investigations that failed to support alleged violations, and 9.4% of administration closures. Meritorious resolutions, outcomes that favored the charging party by validating a discrimination allegation, included 10.9% of discrimination charges that were settled with benefits to the charging party, 6.4% of charges the EEOC determined discrimination had occurred but the respondent had not accepted the resolution (conciliation failure), and the charging party withdrew 6.2% of the charges after receiving benefits. The last 3.4% of the meritorious charges were successful conciliation in which the EEOC determined discrimination occurred and the respondent accepted the resolution.

**Charging Party and Respondent Characteristics.** The descriptive frequencies of the charging party and respondent characteristics are described in Table 9. Each characteristic was grouped by category utilized for data analysis. Charging party age, gender, and race as well as respondent size and industry all had missing data categorized as ‘unknown’. The largest percentages of unknown characteristics came from respondent industry (22.2%) and charging party race (12.0%).

**Discrimination Charges and Resolutions by Charging Party Age.** More specifically, the range of charging party ages was from 16 - 88 years with a mean age of 45.08 and standard deviation of 11.72. Approximately 10% of the ages were missing or unknown.
Table 9.

Discrimination Charges Ranked by Frequency

<table>
<thead>
<tr>
<th>Charging Party</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>Size</th>
<th>Location</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16-88</td>
<td>90.1%</td>
<td>Male</td>
<td>6470</td>
<td>South</td>
<td>Other Services</td>
</tr>
<tr>
<td>Unknown</td>
<td>10347</td>
<td>9.9%</td>
<td>Female</td>
<td>4589</td>
<td>Midwest</td>
<td>Accommodation &amp; Food Services</td>
</tr>
<tr>
<td>Unknown</td>
<td>1135</td>
<td>9.9%</td>
<td>Unknown</td>
<td>153</td>
<td>West</td>
<td>Professional, Scientific, &amp; Technical</td>
</tr>
<tr>
<td></td>
<td>5043</td>
<td>43.9%</td>
<td>Unknown</td>
<td>761</td>
<td>Northeast</td>
<td>Utilities</td>
</tr>
<tr>
<td>Unknown</td>
<td>1176</td>
<td>10.2%</td>
<td>Unknown</td>
<td>761</td>
<td>U.S. Territory</td>
<td>Real Estate, Rental, &amp; Leasing</td>
</tr>
<tr>
<td></td>
<td>2549</td>
<td>22.2%</td>
<td>Unknown</td>
<td>761</td>
<td>Non U.S. Territory</td>
<td>Agriculture, Forestry, Fishing, &amp; Hunting</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1332</td>
<td>11.6%</td>
<td>Manufacturing</td>
<td>1332</td>
<td>South</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1181</td>
<td>10.3%</td>
<td>Public Administration</td>
<td>1181</td>
<td>Midwest</td>
<td>Public Administration</td>
</tr>
<tr>
<td>Healthcare &amp; Social Assistance</td>
<td>985</td>
<td>8.6%</td>
<td>Healthcare &amp; Social Assistance</td>
<td>985</td>
<td>West</td>
<td>Healthcare &amp; Social Assistance</td>
</tr>
<tr>
<td>Retail Trades</td>
<td>937</td>
<td>8.2%</td>
<td>Retail Trades</td>
<td>937</td>
<td>Northeast</td>
<td>Retail Trades</td>
</tr>
<tr>
<td>Educational Services</td>
<td>870</td>
<td>7.6%</td>
<td>Educational Services</td>
<td>870</td>
<td>U.S. Territory</td>
<td>Educational Services</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>516</td>
<td>4.5%</td>
<td>Transportation &amp; Warehousing</td>
<td>516</td>
<td>Non U.S. Territory</td>
<td>Transportation &amp; Warehousing</td>
</tr>
<tr>
<td>Information</td>
<td>488</td>
<td>4.3%</td>
<td>Information</td>
<td>488</td>
<td>South</td>
<td>Information</td>
</tr>
<tr>
<td>Administrative, Support, Waste</td>
<td>480</td>
<td>4.2%</td>
<td>Administrative, Support, Waste</td>
<td>480</td>
<td>Midwest</td>
<td>Administrative, Support, Waste</td>
</tr>
<tr>
<td>Management, &amp; Remediation Services</td>
<td>395</td>
<td>3.4%</td>
<td>Management, &amp; Remediation Services</td>
<td>395</td>
<td>West</td>
<td>Management, &amp; Remediation Services</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>395</td>
<td>3.4%</td>
<td>Finance &amp; Insurance</td>
<td>395</td>
<td>Northeast</td>
<td>Finance &amp; Insurance</td>
</tr>
</tbody>
</table>
**Discrimination Charges and Resolutions by Charging Party Gender.** Almost 60% of the discrimination charges were from males with a small percentage of unknown gender charges (1.3%). The frequency ranking of discrimination charges by category was identical for both males and females, the order being job satisfaction, followed by job retention, job acquisition, and lastly the ‘other discrimination’ category. Close to one-half of the female discrimination issues were with job satisfaction (52.2%) compared to 44.9% for the males. Additionally, approximately 10% of the discrimination charges from females were job acquisition (9.8%) charges compared to 17% for the males. The job retention and the ‘other’ category were both similar for females and males at approximately 35% and 2% respectively. Regarding resolutions outcomes by gender, 60.5% of merit resolution outcomes were from males compared to 38.4% for females. The additional resolutions (1.2%) were from discrimination charges of unknown gender.

**Discrimination Charges and Resolutions by Charging Party Race.** Relative to all other race categories, Native Americans / Alaskan Natives had the highest percentage of job acquisition discrimination charges (21.4%). Those who identified as Hispanic / Mexican had the highest percentage of job satisfaction (54.8%) charges compared to the other race categories as well as those who identified as Asian with job retention (37.7%) issues. Discrimination charges from individuals who identified as African American or White had similar percentages of issues; approximately 47% with job satisfaction, 36% with job retention, and 14% with job acquisition. The ‘other discrimination’ category was approximately 2% for each race category with the exception of Asian that was approximately 8%. Regarding resolution outcomes, merit resolutions were most common for the ‘Other Race’ category (30.6%), followed by Native Americans /
Alaskan Natives (28.6%), White (28.2%), Hispanic / Mexican (26.2%), Asian (25.3%), and African American (24.5%).

**Discrimination Charges and Resolutions by Respondent Size.** Regarding the number of workers of the employer, otherwise known as the respondent size, almost 40% of the employers had greater than 501 employees at the time of the discrimination charge. As might be expected, this group (501+) also had the highest percentage of each discrimination charge by category when compared to the other respondent size groups. There was a small range across the employer size categories of job acquisition charges (.7%) followed by ‘other discrimination’ charges (.9%), job satisfaction charges (10%), and lastly job retention charges (11.7%). Specifically, non-merit resolutions occurred most frequently from respondents with 101-200 employees (77%), followed by 201-500 (73.6%), 15-100 (73.1%), and least frequently in respondents with 501+ employees (71.7%).

**Discrimination Charges and Resolutions by Respondent Location.** Almost 40% of the discrimination charges were from the South compared to the other respondent locations by region. Additionally, the South had the highest frequency of discrimination charges for each allegation. Of the regions involving the 50 U.S. states the range of job acquisition charges was 13.1% from the Northeast to 15.1% from the West. Regarding job satisfaction charges the range of frequency was from 46.9% of the Midwest to 51.5% from the West. Job retention issues ranged 31.5% from the West to 38% from the South and the ‘other discrimination’ issues ranged from 1.8% from both the Northeast and the West to 2.9% from the Midwest. The U.S. territories and non-U.S. territories made up less than 1% of the total discrimination charges. Non-merit resolutions occurred most frequently from respondents from U.S. territories (79.5%), followed
by the South (76.2%), the Midwest (70.8%), and the same frequencies for both the Northeast and West (70% each).

**Discrimination Charges and Resolutions by Respondent Industry.** Approximately 20% of the respondent’s type of industry was unknown, constituting the majority of each discrimination issue category. With the unknown industries disregarded, 16% of the job acquisition and 11.3% of the job satisfaction charges came from the public administration industry, the highest frequencies among the 20 various industry categories. The highest frequency of discrimination charges for job retention came from the manufacturing (12.6%) industry, and health care and social assistance (10.8%) industry was the highest frequency of ‘other discrimination’ charges. Non-merit resolutions occurred most frequently from the mining industry (80.4%) with real estate, rental, and leasing (78.1%) close behind.

The twenty distinct types of industries were further classified and recoded into a dichotomous variable for the analyses. Industries were either labeled ‘service’ or ‘product’ based on their primary purpose from definitions appearing in the North American Industry Classification System (NAICS) codes from 2002 (U. S. Census Bureau, 2013). Table 10 depicts the re-classification of each industry including the total count and percentage.

Additional comparative analyses were completed to clean and prepare the data to address each individual research question. The results of these pre-analyses and hypothesis testing are presented.

**Results of Research Question 1**

- Does age, gender, or race predict types of discrimination charges filed with the EEOC regarding a visual impairment?
Table 10.

Reclassification of Respondent Industry into Dichotomous Variable

<table>
<thead>
<tr>
<th>Service Industry</th>
<th>N</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>6266</td>
<td>70.1%</td>
</tr>
<tr>
<td>Administrative, Support, Waste Management, and Remediation Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific, and Technical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate, Rental, and Leasing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Industry</td>
<td>2667</td>
<td>29.9%</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Trades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale Trades</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multinomial logistic regression was used to explore whether types of discrimination charges filed with the EEOC regarding a visual impairment could be predicted, based upon a function of the contextual variables from the charging parties. The types of discrimination charges were categorized by distinct components of employment including job acquisition, job satisfaction, job retention, or ‘other discrimination’. The charging party variables included age (as a continuous variable), gender and race (as categorical variables).

First, cases with unknown or missing data from the categories of age, gender, or race were removed from the analysis. This resulted in 9,213 selected cases that were included in the analysis or 80.2% of the total cases. Next, to meet the assumptions of adequacy of expected cell
frequencies, cross tabulations were performed for the categorical predictor variables with the outcome variables to ensure that no more than 20% of the cells had frequencies less than five (Tabachnick & Fidell, 2013). This assumption was met as only two cells (8.3%) had an expected cell frequency of less than five. Furthermore, each case was considered independent of one another as each case represented a separate discrimination charge.

A model building strategy was used to find the best fitting model for predicting discrimination charges based on charging party characteristics. A backward stepwise analysis was performed with the chi-square for removal based on the likelihood ratio test (POUT = 0.10). At step one the three-way interaction between age, gender, and race was removed, as it did not contribute significantly to the model ($\chi^2 (15, N = 9213) = 9.040, p = .875$). Next, the two-way interaction between gender and race was removed ($\chi^2 (15, N = 9213) = 18.826, p = .222$), followed by the removal of the two-way interaction between gender and age ($\chi^2 (3, N = 9213) = 7.069, p = .070$). What remained was a statistically significant model containing the two-way interaction between race and age as well as the main effects of each independent variable ($\chi^2 (36, N = 9213) = 287.519, p = .000$). In other words, all predictor variables independently contributed significantly to the model for prediction of discrimination charges and there was also a significant interaction between age and race.

The interaction between age and race ($\chi^2 (15, N = 9213) = 45.149, p = .000$) was significant in addition to the main effects of age, gender ($\chi^2 (3, N = 9213) = 106.691, p = .000$), and race ($\chi^2 (15, N = 9213) = 41.742, p = .000$). This final model predicted discrimination charges better than no model, however the goodness of fit statistics of Pearson ($\chi^2 (1455, N = 9213) = 1780.518, p = .000$) and deviance ($\chi^2 (1455, N = 9213) = 1573.579, p = .016$) indicated significant results. Significant results for the goodness of fit statistics suggest that although the
final model was significant, the predicted values from the model may be significantly different than the observed values (Field, 2009).

A plausible explanation for this result comes from the charging party characteristic of age. Age was measured as a continuous variable with a range from 16 - 88 years, thereby constituting a large number of cells (715) with zero frequencies. For example, there was one observed job retention charge from a 21-year-old Asian male. The predicted number of charges from Asian males who were aged 21 was less than 1% for each discrimination charge category (job acquisition = .539, job satisfaction = .122, job retention = .204 and ‘other discrimination’ = .136). Consequently, the goodness of fit statistics were likely inflated due to the low predicted frequencies in many of the cells.

Table 11 depicts the coefficients from each of the discrimination charge categories compared with job satisfaction. Job satisfaction was used as the reference category because it contained almost one-half of all the discrimination charges (47.8%). Likewise, the highest frequency coefficient was used as the base category for comparisons. Specifically this included males for gender and White for race. The predictor variables and coefficients that had a statistically significant contribution to predicting the model were reported as well as the magnitude of the association.

Coefficients Predicting Job Acquisition vs. Job Satisfaction. Numerous two-way interactions between the charging party age and race coefficients predicted whether the discrimination charge was from job acquisition as compared to job satisfaction. The two-way interaction between age and Asian (b = -.144, Wald $\chi^2 (1) = 14.244, p = .000$); age and Hispanic/Mexican (b = -.035 Wald $\chi^2 (1) = 10.169, p = .001$); age and ‘Other Race’ (b = -.061, Wald $\chi^2 (1) = 18.162, p = .000$); and age and White (b = -.025, Wald $\chi^2 (1) = 50.538, p = .000$) were all
Table 11.

*Charging Party Age, Gender, and Race as Predictors of Discrimination Charges*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td><strong>Job Acquisition vs. Job Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * African American</td>
<td>-.004</td>
<td>(.007)</td>
<td>.418</td>
<td>1</td>
<td>.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Asian</td>
<td>-.144</td>
<td>(.038)</td>
<td>14.244</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Hispanic / Mexican</td>
<td>-.035</td>
<td>(.011)</td>
<td>10.169</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Nat. American / Alaskan Nat.</td>
<td>-.023</td>
<td>(.031)</td>
<td>.550</td>
<td>1</td>
<td>.458</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Other Race</td>
<td>-.061</td>
<td>(.014)</td>
<td>18.162</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * White</td>
<td>-.025</td>
<td>(.003)</td>
<td>50.538</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.701</td>
<td>(.070)</td>
<td>99.717</td>
<td>1</td>
<td>.000</td>
<td>.496</td>
<td>.432</td>
</tr>
<tr>
<td>African American</td>
<td>-.818</td>
<td>(.334)</td>
<td>5.978</td>
<td>1</td>
<td>.014</td>
<td>.441</td>
<td>.229</td>
</tr>
<tr>
<td>Asian</td>
<td>4.401</td>
<td>(1.460)</td>
<td>9.087</td>
<td>1</td>
<td>.003</td>
<td>81.561</td>
<td>4.663</td>
</tr>
<tr>
<td>Hispanic / Mexican</td>
<td>-.103</td>
<td>(.495)</td>
<td>.043</td>
<td>1</td>
<td>.835</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American / Alaskan Native</td>
<td>.663</td>
<td>(1.443)</td>
<td>.211</td>
<td>1</td>
<td>.646</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Race</td>
<td>1.324</td>
<td>(.596)</td>
<td>4.939</td>
<td>1</td>
<td>.026</td>
<td>3.760</td>
<td>1.169</td>
</tr>
</tbody>
</table>
Table 11. Continued

<table>
<thead>
<tr>
<th>Job Retention vs. Job Satisfaction</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age * African American</td>
<td>-.001</td>
<td>(.005)</td>
<td>.023</td>
<td>1</td>
<td>.880</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Asian</td>
<td>-.026</td>
<td>(.019)</td>
<td>2.038</td>
<td>1</td>
<td>.153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Hispanic / Mexican</td>
<td>.004</td>
<td>(.007)</td>
<td>.413</td>
<td>1</td>
<td>.520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Nat. American / Alaskan Nat.</td>
<td>-.042</td>
<td>(.028)</td>
<td>2.269</td>
<td>1</td>
<td>.132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age * Other Race</td>
<td>.000</td>
<td>(.009)</td>
<td>.001</td>
<td>1</td>
<td>.979</td>
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<td></td>
</tr>
<tr>
<td>Age * White</td>
<td>.002</td>
<td>(.002)</td>
<td>.563</td>
<td>1</td>
<td>.453</td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.189</td>
<td>(.047)</td>
<td>16.004</td>
<td>1</td>
<td>.000</td>
<td>.828</td>
<td>.755 to .908</td>
</tr>
<tr>
<td>African American</td>
<td>.136</td>
<td>(.248)</td>
<td>.301</td>
<td>1</td>
<td>.583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1.368</td>
<td>(.927)</td>
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<td>1</td>
<td>.140</td>
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<td>Hispanic / Mexican</td>
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<td>1.162</td>
<td>1</td>
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<td></td>
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<tr>
<td>Native American / Alaskan Native</td>
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<td>.084</td>
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<tr>
<td>Other Race</td>
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<td>(.417)</td>
<td>.009</td>
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<td>.926</td>
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Table 11. Continued

<table>
<thead>
<tr>
<th>Other Discrimination vs. Job Satisfaction</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio 95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age * African American</td>
<td>.025</td>
<td>(.013)</td>
<td>3.629</td>
<td>1</td>
<td>.057</td>
<td>Lower 85.053  5.156  1402.950</td>
</tr>
<tr>
<td>Age * Asian</td>
<td>-.074</td>
<td>(.031)</td>
<td>5.613</td>
<td>1</td>
<td>.018</td>
<td></td>
</tr>
<tr>
<td>Age * Hispanic / Mexican</td>
<td>.021</td>
<td>(.025)</td>
<td>.698</td>
<td>1</td>
<td>.404</td>
<td></td>
</tr>
<tr>
<td>Age * Nat. American / Alaskan Nat.</td>
<td>-.128</td>
<td>(.123)</td>
<td>1.075</td>
<td>1</td>
<td>.300</td>
<td></td>
</tr>
<tr>
<td>Age * Other Race</td>
<td>.007</td>
<td>(.026)</td>
<td>.078</td>
<td>1</td>
<td>.781</td>
<td></td>
</tr>
<tr>
<td>Age * White</td>
<td>-.004</td>
<td>(.007)</td>
<td>.282</td>
<td>1</td>
<td>.595</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.085</td>
<td>(.137)</td>
<td>.384</td>
<td>1</td>
<td>.536</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>-1.030</td>
<td>.704)</td>
<td>2.141</td>
<td>1</td>
<td>.143</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>4.443</td>
<td>(1.430)</td>
<td>9.652</td>
<td>1</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>Hispanic / Mexican</td>
<td>-1.663</td>
<td>(1.250)</td>
<td>1.772</td>
<td>1</td>
<td>.183</td>
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</tr>
<tr>
<td>Native American / Alaskan Native</td>
<td>4.583</td>
<td>(4.495)</td>
<td>1.040</td>
<td>1</td>
<td>.308</td>
<td></td>
</tr>
<tr>
<td>Other Race</td>
<td>-.560</td>
<td>(1.278)</td>
<td>.192</td>
<td>1</td>
<td>.661</td>
<td></td>
</tr>
</tbody>
</table>

Note: The reference categories were job satisfaction for discrimination charges, males for gender, and White for race. Nat. = Native.
significant predictors of whether the charges were from job acquisition compared to job satisfaction. These two-way interactions indicated that when age and individuals who identified as either Asian, Hispanic / Mexican, ‘Other Race’, or White were combined; the coefficients significantly predicted whether the discrimination charge was from job acquisition compared to job satisfaction.

The gender of the individual submitting the discrimination charge significantly predicted whether it was a job acquisition or a job satisfaction charge (b = -0.701, Wald $\chi^2 (1) = 99.717$, p = .000). The odds ratio indicated that as gender changed from male to female, the change in odds of job acquisition charges compared to job satisfaction charges was 0.496. In other words, the odds of a male submitting job acquisition charges compared to job satisfaction charges were 2.02 times more than for a woman.

Whether the discrimination charge was from an individual who identified as African American compared to an individual who identified as White, significantly predicted whether it was a job acquisition or job satisfaction discrimination charge (b = -0.818, Wald $\chi^2 (1) = 5.978$, p = .014). The odds ratio indicated that charges were less likely to be from job acquisition than job satisfaction when race was identified as African American (Exp(B) = 0.441) compared to race identified as White.

Discrimination charges from individuals who identified as Asian compared to individuals who identified as White, significantly predicted whether it was a job acquisition or job satisfaction discrimination charge (b = 4.401, Wald $\chi^2 (1) = 9.087$, p = .003). The odds ratio indicated that charges had an 81.561 to 1 greater chance in discrimination charges being job acquisition than job satisfaction when race was identified as Asian compared to race identified as White. However, the 95% confidence interval (CI) for the odds ratio was very large (4.663,
This very large CI range can be indicative of the small sample size of cases from individuals who identified as Asian (146) when compared to the overall population of 11,482, and therefore limits the interpretive significance due to the imprecise estimator of the odds ratio.

Whether the discrimination charge was from an individual who identified as ‘Other Race’ compared to an individual who identified as White, significantly predicted whether it was a job acquisition or job satisfaction discrimination charge ($b = 1.324$, Wald $\chi^2 (1) = 4.939$, $p = .026$). The odds ratio indicated that charges had a 3.760 to 1 greater chance in discrimination charges being job acquisition than job satisfaction when race was identified as ‘Other Race’ compared to race identified as White. However, the 95% CI for the odds ratio was relatively large (1.169, 12.091). A CI range that is large can be detected with smaller sample sizes, as was seen with individuals who identified as “Other Race” (627) when compared to the overall population of 11,482. This finding limits the interpretative significance of the odds ratio because of the imprecise estimator of the confidence interval.

**Coefficients Predicting Job Retention vs. Job Satisfaction.** The gender of the individual submitting the discrimination charge significantly predicted whether it was job retention or a job satisfaction charge ($b = -.189$, Wald $\chi^2 (1) = 16.004$, $p = .000$). The odds ratio indicated that as gender changed from male to female, the change in odds of job retention charges compared to job satisfaction charges was .828. In other words, the odds of a male submitting job retention charges compared to job satisfaction charges were 1.21 times more than for a woman.

**Coefficients Predicting ‘Other Discrimination’ vs. Job Satisfaction.** The two-way interaction between charging party age and Asian race significantly predicted whether the discrimination charge was from the ‘other discrimination’ or a job satisfaction charge ($b = -.074,$
Wald $\chi^2 (1) = 5.613, p = .018$). Additionally, whether the discrimination charge was from an individual whose race was Asian as compared to White, significantly predicted whether it was an ‘other discrimination’ or a job satisfaction charge ($b = 4.443$, Wald $\chi^2 (1) = 9.652, p = .002$).

The odds ratio indicated that there was an 85.053 to 1 greater chance of ‘other discrimination’ charges than job satisfaction charges when the race was identified as Asian compared to White. However, the 95% CI for the odds ratio was very large (5.156, 1402.950). This very large CI range can be indicative of the small sample size of cases from individuals who identified as Asian (1.3%) when compared to the overall population of 11,482, and therefore limits the interpretive significance due to the imprecise estimator of the odds ratio.

Based on these results, hypothesis 1 - that age, gender, and race would predict different types of discrimination charges filed with the EEOC regarding a visual impairment was accepted.

**Results of Research Question 2**

- Does an employer’s location of operation, size, or industry predict types of discrimination charges filed with the EEOC regarding a visual impairment?

Multinomial logistic regression was used to explore whether types of discrimination charges filed with the EEOC regarding a visual impairment could be predicted, based upon a function of the contextual variables from the respondents. The types of discrimination charges were categorized by distinct components of employment including job acquisition, job satisfaction, job retention, or ‘other discrimination’. The respondent variables included the employer’s location of operation, size, and industry.

First, cases with unknown or missing data from the categories of respondent location, size, and industry were removed from the analysis. Next, to meet the assumptions of adequacy of
expected cell frequencies, cross tabulations were performed for all categorical predictor variables with the outcome variables to ensure that no more than 20% of the cells had frequencies less than five (Tabachnick & Fidell, 2013). Respondent region of location had 5 cells (20.8%) with expected cell counts less than five in the U.S. and non-U.S. territory categories. Therefore, the respondent regions of locations of ‘U.S.’ and ‘non-U.S. territories’ were removed from the analyses. This resulted in 8432 selected cases that were included in the analysis or 73.4% of the total cases. The remaining cases had six cells (4.7%) with observed frequencies of zero, still meeting the assumptions of no more than 20% less than five. Furthermore, each case was considered independent of one another as each case represented a separate discrimination charge.

A model building strategy was used to find the best fitting model for predicting discrimination charges based on respondent characteristics. A backward stepwise analysis was performed with the chi-square for removal based on the likelihood ratio test (POUT = 0.10). At step one, the four interactions among the variables were all removed. This included the three way interaction between location, size, and industry ($\chi^2 (27, N = 8432) = 25.151, p = .566$); the two-way interaction between location and size ($\chi^2 (27, N = 8432) = 29.359, p = .344$); the two-way interaction between location and industry ($\chi^2 (9, N = 8432) = 7.777, p = .557$); and the two-way interaction between size and industry ($\chi^2 (9, N = 8432) = 2.910, p = .968$). The statistically significant final model ($\chi^2 (21, N = 8432) = 150.097, p = .000$) included the main effects of each of the predictor variables. In other words, respondent size ($\chi^2 (9, N = 8432) = 86.069, p = .000$), respondent location ($\chi^2 (9, N = 8432) = 27.582, p = .001$), and respondent industry ($\chi^2 (3, N = 8432) = 25.686, p = .000$), were independently significant contributors to the final model.

The goodness of fit statistics of Pearson ($\chi^2 (72, N = 8432) = 62.681, p = .775$) and deviance ($\chi^2 (72, N = 8432) = 65.197, p = .702$) indicated non-significant results. This indicates
the final model was a good fit as the predicted values were not significantly different from the observed values. Table 12 depicts the coefficients from each of the discrimination charge categories compared with job satisfaction.

Job satisfaction was used as the reference category because it contained almost one-half of all the discrimination charges (47.8%). Likewise, the highest frequency coefficient was used as the base category for comparisons. Specifically this included respondent size of 501+, respondent location of the south, and respondent industry of service. The predictor variables and coefficients that had a statistically significant contribution to predicting the model were reported as well as the magnitude of the association.

**Coefficients Predicting Job Acquisition vs. Job Satisfaction.** Coefficients of respondent size and industry were significant predictors of job acquisition charges when compared with job satisfaction charges. A respondent size of 15 - 100 significantly predicted whether it was a job acquisition or job satisfaction discrimination charge (b = .293, Wald $\chi^2 (1) = 14.338$, p = .000). The odds ratio indicated that there was a 1.341 to 1 greater chance of job acquisition charges than job satisfaction charges when the respondent size was 15-100 employees than when it was 501+.

The type of industry the discrimination charge was associated with also significantly predicted whether it was a job acquisition or job satisfaction charge (b = -.147, Wald $\chi^2 (1) = 3.842$, p = .050). The odds ratio indicated that, as industry changed from product to service, the change in odds of job acquisition compared to job satisfaction was .863. In other words, the odds of a service industry discrimination charge being from job acquisition compared to job satisfaction were 1.19 times more than for product industry.
Table 12.

Respondent Location, Size, and Industry as Predictors of Discrimination Charges

<table>
<thead>
<tr>
<th>Job Acquisition vs. Job Satisfaction</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-100</td>
<td>.293</td>
<td>(.077)</td>
<td>14.338</td>
<td>1</td>
<td>.000</td>
<td>1.341</td>
<td>1.152, 1.561</td>
</tr>
<tr>
<td>101-200</td>
<td>.082</td>
<td>(.114)</td>
<td>.519</td>
<td>1</td>
<td>.471</td>
<td>.519</td>
<td>.1, 2.17</td>
</tr>
<tr>
<td>201-500</td>
<td>.026</td>
<td>(.109)</td>
<td>.057</td>
<td>1</td>
<td>.811</td>
<td>.057</td>
<td>.001, 1.97</td>
</tr>
<tr>
<td>Northeast</td>
<td>-.183</td>
<td>(.115)</td>
<td>2.537</td>
<td>1</td>
<td>.111</td>
<td>2.537</td>
<td>.1, 25.00</td>
</tr>
<tr>
<td>Midwest</td>
<td>.064</td>
<td>(.082)</td>
<td>.617</td>
<td>1</td>
<td>.432</td>
<td>.617</td>
<td>.1, 7.70</td>
</tr>
<tr>
<td>West</td>
<td>.029</td>
<td>(.090)</td>
<td>.106</td>
<td>1</td>
<td>.745</td>
<td>.106</td>
<td>.1, 10.69</td>
</tr>
<tr>
<td>Product Industry</td>
<td>-.147</td>
<td>(.075)</td>
<td>3.842</td>
<td>1</td>
<td>.050</td>
<td>.384</td>
<td>.0, 3.842</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Retention vs. Job Satisfaction</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-100</td>
<td>.487</td>
<td>(.057)</td>
<td>72.151</td>
<td>1</td>
<td>.000</td>
<td>1.628</td>
<td>1.455, 1.821</td>
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<tr>
<td>101-200</td>
<td>.392</td>
<td>(.080)</td>
<td>24.096</td>
<td>1</td>
<td>.000</td>
<td>1.480</td>
<td>1.266, 1.732</td>
</tr>
<tr>
<td>201-500</td>
<td>.158</td>
<td>(.079)</td>
<td>3.963</td>
<td>1</td>
<td>.047</td>
<td>1.171</td>
<td>1.002, 1.368</td>
</tr>
<tr>
<td>Northeast</td>
<td>-.143</td>
<td>(.082)</td>
<td>3.056</td>
<td>1</td>
<td>.080</td>
<td>.305</td>
<td>.0, 3.056</td>
</tr>
<tr>
<td>Region</td>
<td>B</td>
<td>(SE)</td>
<td>Wald</td>
<td>df</td>
<td>p</td>
<td>Odds Ratio</td>
<td>95% Confidence Interval for Odds Ratio</td>
</tr>
<tr>
<td>------------------------</td>
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<td>-------</td>
<td>----</td>
<td>--------</td>
<td>------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Midwest</td>
<td>-.066</td>
<td>(.061)</td>
<td>1.176</td>
<td>1</td>
<td>.258</td>
<td>1.176</td>
<td>.810 .709 .927</td>
</tr>
<tr>
<td>West</td>
<td>-.210</td>
<td>(.069)</td>
<td>9.415</td>
<td>1</td>
<td>.002</td>
<td>.9.415</td>
<td>.810 .709 .927</td>
</tr>
<tr>
<td>Product Industry</td>
<td>.192</td>
<td>(.053)</td>
<td>13.224</td>
<td>1</td>
<td>.000</td>
<td>1.211</td>
<td>1.092 1.343</td>
</tr>
<tr>
<td>Other Discrimination vs. Job Satisfaction</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-100</td>
<td>.231</td>
<td>(.165)</td>
<td>1.957</td>
<td>1</td>
<td>.162</td>
<td>.231</td>
<td>.162</td>
</tr>
<tr>
<td>101-200</td>
<td>-.167</td>
<td>(2.68)</td>
<td>.388</td>
<td>1</td>
<td>.534</td>
<td>.167</td>
<td>.534</td>
</tr>
<tr>
<td>201-500</td>
<td>-.278</td>
<td>(.261)</td>
<td>1.136</td>
<td>1</td>
<td>.286</td>
<td>.278</td>
<td>.286</td>
</tr>
<tr>
<td>Northeast</td>
<td>-.561</td>
<td>(.283)</td>
<td>3.942</td>
<td>1</td>
<td>.047</td>
<td>.561</td>
<td>.571 .328 .993</td>
</tr>
<tr>
<td>Midwest</td>
<td>.136</td>
<td>(.167)</td>
<td>.662</td>
<td>1</td>
<td>.416</td>
<td>.136</td>
<td>.416</td>
</tr>
<tr>
<td>West</td>
<td>-.597</td>
<td>(.233)</td>
<td>6.564</td>
<td>1</td>
<td>.010</td>
<td>.597</td>
<td>.551 .349 .869</td>
</tr>
<tr>
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<td>(.165)</td>
<td>.955</td>
<td>1</td>
<td>.329</td>
<td>.161</td>
<td>.329</td>
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</table>

*Note:* Reference categories were job satisfaction for discrimination issue, 501+ for respondent size, south for respondent location and service for respondent industry.


**Coefficients Predicting Job Retention vs. Job Satisfaction.** Coefficients of respondent location, size, and industry were all significant predictors of job retention charges in comparison with job satisfaction charges. When compared with the respondent size of 501+, all other respondent sizes were significant predictors of whether the charge was job retention or a job satisfaction charge. Specifically, respondent size 15-100 (b = .487, Wald $\chi^2 (1) = 72.151, p = .000$), respondent size 101-200 (b = .392, Wald $\chi^2 (1) = 24.096, p = .000$), and respondent size 201-500 (b = .158, Wald $\chi^2 (1) = 3.963, p = .047$) were all significant compared with respondent size 501+. The odds ratios all indicated that there was an increase in odds of a discrimination charge being from job retention compared to job satisfaction when respondent size was not 501+.

In detail, there was a 62.8% increase in odds when respondent size was 15-100 compared to 501+, a 48% increase in odds when respondent size was 101-200 compared to 501+, and a 17.1% increase in odds when respondent size was 201-500 compared to 501+.

Charges regarding respondents located in the West (b = -.210, Wald $\chi^2 (1) = 9.415, p = .002$) when compared to the South, significantly predicted whether the charge was from job retention or job satisfaction. The odds ratio indicated that there was a .810 to 1 or 19% lesser chance of job retention charges than job satisfaction charges when the respondent region of location was the West compared to the South. Additionally, the type of industry the discrimination charge was associated with also significantly predicted whether it was a job retention or job satisfaction charge (b = .192, Wald $\chi^2 (1) = 13.224, p = .000$). The odds ratio indicated as industry changed from product to service, the change in odds of job retention compared to job satisfaction was 1.211. Therefore, there was a 21.1% increase in odds of discrimination charges being from job retention compared to another job issue category when industry was identified as product related.
Coefficients Predicting ‘Other Discrimination’ vs. Job Satisfaction. Coefficients from region of respondent location were significant predictors of ‘other discrimination’ charges when compared with job satisfaction charges. Discrimination charges regarding respondents in the Northeast (b = -.561, Wald $\chi^2$ (1) = 3.942, p = .047) and the West (b = -.597, Wald $\chi^2$ (1) = 6.564, p = .010) when compared with the South, significantly predicted ‘other discrimination’ versus job satisfaction charges. The odds ratio indicated there was a .571 to 1 lesser chance of ‘other discrimination’ charges than job satisfaction charges when the respondent region of location was the Northeast compared to the South. Additionally, the odds ratio indicated that there was a .551 to 1 or 44.9% lesser chance of ‘other discrimination’ charges than job satisfaction charges when the respondent region of location was the West compared to the South.

Based on these results, with all three predictors being in the analysis, hypothesis 2- that an employer’s location of operation, size, and industry would predict different types of discrimination charges filed with the EEOC regarding a visual impairment was accepted.

Results of Research Question 3

- Does age, gender, or race predict types of EEOC resolution outcomes regarding a visual impairment?

Binary logistic regression analysis was used to explore whether EEOC merit resolutions for visual impairment discrimination charges could be predicted, based upon a function of the contextual variables from the charging parties. Merit resolutions were predicted in this analysis because merit resolutions favor the charging party stating that discrimination occurred.

Cases with unknown or missing data from the categories of age, gender, or race were removed from the analysis. This resulted in 9213 selected cases that were included in the analysis or 80.2% of the total cases. Age was treated as a continuous variable with a range from
16-88 and a mean of 45. To meet the assumptions of adequacy of expected cell frequencies, cross-tabulations were performed for the categorical predictor variables with the outcome variables to ensure that no more than 20% of the cells had frequencies less than five (Tabachnick & Fidell, 2013). This assumption was met as all cross-tabulations were greater than five; therefore enhancing the predictor’s power. Additionally, each case was considered independent of one another as each case represented a resolution outcome from a separate discrimination charge.

A model building strategy was used to find the best fitting model for predicting resolutions outcomes based on charging party characteristics. A test of the full model with all three predictors and all possible interactions against a constant only model was statistically significant indicating that the predictors as a set, distinguished between merit and non-merit resolutions of discrimination charges ($\chi^2 (23, N = 9213) = 84.082, p = .000$). The Hosmer & Lemeshow’s test, used to determine the goodness of fit of the logistic regression model chosen, showed a non-significant result, indicating that the model was a good fit ($\chi^2 (8, N = 9213) = 5.184, p = .738$). Classification was unevenly balanced, with 0.1% of the merit resolutions and 100.0% of the non-merit resolutions correctly predicted, for an overall success rate of 72.8%.

According to the Wald criterion, the three-way interaction between ages, gender, and race was significant (Wald = 15.853, $df = 1, p = .007$). In other words, the interaction of the predictors of age, gender, and race when combined had a significant contribution to the regression model. Consequently, all individual and paired combinations of predictor variables contributed to the model in a significant way. The reference groups for comparisons were chosen based on the largest number of cases for each variable. Table 13 shows the regression coefficients, Wald
Table 13.

Variables in the Final Model of Charging Party Predictors

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.011</td>
<td>(.003)</td>
<td>11.907</td>
<td>1</td>
<td>.001</td>
<td>.989</td>
</tr>
<tr>
<td>Gender</td>
<td>-.311</td>
<td>(.236)</td>
<td>1.738</td>
<td>1</td>
<td>.187</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td>4.264</td>
<td>5</td>
<td>.512</td>
<td></td>
</tr>
<tr>
<td>Age * Gender</td>
<td>.007</td>
<td>(.005)</td>
<td>1.854</td>
<td>1</td>
<td>.173</td>
<td></td>
</tr>
<tr>
<td>Age * Race</td>
<td></td>
<td></td>
<td>3.620</td>
<td>5</td>
<td>.605</td>
<td></td>
</tr>
<tr>
<td>Gender * Race</td>
<td></td>
<td></td>
<td>9.773</td>
<td>5</td>
<td>.082</td>
<td></td>
</tr>
<tr>
<td>Age * Gender * Race</td>
<td></td>
<td></td>
<td>15.853</td>
<td>5</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.450</td>
<td>(.146)</td>
<td>9.485</td>
<td>1</td>
<td>.002</td>
<td>.637</td>
</tr>
</tbody>
</table>

*Note: The reference groups were male for gender and White for race.*

statistics, and odds ratios for each of the three predictors and interactions of the charging party predictors.

When explored further, the coefficients for the statistically significant variable interactions were charging party age, African American, and female (Wald = 7.208, df = 1, p = .007). The odds ratio indicated that merit resolutions were less likely to occur from charges identified as African American females (Exp(B) = .969) compared to White males (the reference groups). In other words, the odds of obtaining a merit resolution decreased by 3.1% from charges filed by African American females compared to charges filed by White males.

Based on these results, hypothesis 3- that age, gender, and race would predict different types of EEOC resolution outcomes regarding a visual impairment was accepted.
Results of Research Question 4

- Does an employer’s location of operation, size, or industry predict types of EEOC resolution outcomes regarding a visual impairment?

Binary logistic regression analysis was used to explore whether EEOC non-merit resolutions from visual impairment discrimination charges could be predicted, based upon a function of the contextual variables from the respondent. Non-merit resolutions were predicted in this analysis because non-merit resolutions favor the respondent stating that discrimination did not occur.

Cases with unknown or missing data from the categories of respondent industry or size were removed from the analysis. Cross-tabulations were evaluated for expected cell frequencies for all pairs of predictor and outcome variables. To meet the assumptions of expected cell frequencies of all cases being > 1 for logistic regression (Tabachnick & Fidell, 2013), the respondent region of location of ‘U.S.’ and ‘non-U.S. territories’ were also removed from the analyses as seven of their expected cases were < 1. This resulted in 8432 selected cases that were included in the analysis or 73.4% of the total cases. Additionally, the respondent industries were classified into two separate groups, service and product as described earlier. Each case was considered independent of one another as each case represented a resolution outcome from a separate discrimination charge.

Using a model building strategy to find the best fitting model for predicting resolutions outcomes based on respondent characteristics, a test of the full model against a constant only model was statistically significant indicating that the predictors as a set, distinguished between merit and non-merit resolutions of discrimination charges ($\chi^2 (31, N = 8432) = 103.653, p = .000$). The Hosmer & Lemeshow’s test, used to determine the goodness of fit of the logistic
regression model chosen, showed a non-significant result, indicating that the model was a good fit ($\chi^2 (8, N = 8342) = .000, p = 1.000$). Classification was unevenly balanced, with 100.0% of the non-merit resolutions and 0.0% of the merit resolutions correctly predicted, for an overall success rate of 72.6%. Table 14 shows the regression coefficients, Wald statistics, and odds ratios for each of the three predictors and interactions of the respondent predictors.

Table 14.

Variables in the Final Model of Respondent Predictors

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>5.396</td>
<td></td>
<td>3</td>
<td>.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>21.072</td>
<td></td>
<td>3</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>-.193</td>
<td>(.122)</td>
<td>2.503</td>
<td>1</td>
<td>.114</td>
<td></td>
</tr>
<tr>
<td>Industry * Size</td>
<td>.296</td>
<td></td>
<td>3</td>
<td>.961</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location * Size</td>
<td>15.683</td>
<td></td>
<td>9</td>
<td>.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry * Location</td>
<td>1.038</td>
<td></td>
<td>3</td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry * Location * Size</td>
<td>12.862</td>
<td></td>
<td>9</td>
<td>.169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.176</td>
<td>(.069)</td>
<td>286.160</td>
<td>1</td>
<td>.000</td>
<td>3.240</td>
</tr>
</tbody>
</table>

*Note:* The reference groups were respondent size of 501+, respondent location of the South, and respondent industry of service.

According to the Wald criterion, only respondent region of location was a significant contributor to the final model (Wald = 21.072, df = 3, p = .000). In other words, respondent size and industry were not significant contributors either individually or through interactions to the final model. The reference groups were chosen based on the largest number of cases for each variable.
When explored further, the coefficients for the statistically significant variable of respondent location were all significant. Table 15 shows the regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for the coefficients of respondent location.

Table 15.

Coefficients in the Final Model of Respondent Region of Location

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>B</th>
<th>(SE)</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Northeast</td>
<td>-.356</td>
<td>(.132)</td>
<td>7.300</td>
<td>1</td>
<td>.007</td>
<td>.701</td>
<td>.541</td>
</tr>
<tr>
<td>Midwest</td>
<td>-.288</td>
<td>(.109)</td>
<td>4.349</td>
<td>1</td>
<td>.037</td>
<td>.796</td>
<td>.643</td>
</tr>
<tr>
<td>West</td>
<td>-.471</td>
<td>(.107)</td>
<td>19.473</td>
<td>1</td>
<td>.000</td>
<td>.624</td>
<td>.506</td>
</tr>
</tbody>
</table>

Note: The reference group for respondent industry was the South.

The odds ratios indicated that non-merit resolutions were less likely to occur from charges from the Midwest, Northeast, and West (Exp(B) < 1) compared to the South. The odds of obtaining a non-merit resolution decrease by approximately 20% for changes submitted in the Midwest compared to the South, by approximately 30% for charges submitted in the Northeast compared to the South, and by approximately 38% for charges submitted in the West compared to the South. Stated differently, when compared to the South, all other regions of location have lower odds for a non-merit resolution.

Although, only the individual coefficient of respondent location was significant, all the other predictors and interactions were in the model and therefore their contributions cannot be discounted. Based on those results, hypothesis 4- that an employer’s location of operation, size,
and industry would predict different types of EEOC resolution outcomes regarding a visual impairment- was accepted.

**Results of Research Question 5**

- Are there differences between discrimination charges filed with the EEOC before and after the enactment of the ADAAA regarding a visual impairment?

To determine associations between discrimination charges before and after the enactment of the ADAAA, dummy coding was used to illustrate the two distinct time periods. The first time-period (dummy coded ‘0’) represented all discrimination charges that were filed under the laws of the ADA (July 26, 1992 - December 31, 2008). The second time-period (dummy coded ‘1’) represented all discrimination charges that were filed under the laws of the ADAAA (January 1, 2009 - December 31, 2011).

Overall, 82.8% of the discrimination charges were filed under the ADA time period. Job acquisition discrimination charges filed under the ADA accounted for 91.6% of the total job acquisition charges filed. This was followed by 82.7% ‘other discrimination’ charges, 81.7% job satisfaction charges, 80.8% job retention charges. The overall odds of a discrimination charge being filed under the ADA versus the ADAAA was 4.8 as there were almost five times as many ADA than ADAAA discrimination charges filed. A 4 x 2 contingency table of the categories of discrimination charges by the two time periods is displayed in Table 16.

The Pearson chi-square test of independence was performed to examine the relationship between categories of discrimination charges before and after the enactment of the ADAAA. The assumption for chi-square that all expected frequencies should be greater than 5 was met (Field, 2009) with the minimum expected cell count of 47.84. There was a significant association
Table 16.

Contingency Table of Discrimination Charges by Time Period

<table>
<thead>
<tr>
<th>Discrimination Charges</th>
<th>Time Period</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADA</td>
<td>ADAAA</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Job Acquisition</td>
<td>15.5%</td>
<td>6.9%</td>
<td>1611</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>47.2%</td>
<td>50.8%</td>
<td>5489</td>
<td></td>
</tr>
<tr>
<td>Job Retention</td>
<td>34.9%</td>
<td>39.9%</td>
<td>4104</td>
<td></td>
</tr>
<tr>
<td>Other Discrimination</td>
<td>2.4%</td>
<td>2.4%</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9506</td>
<td>1976</td>
<td><strong>11482</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note. ADA includes discrimination charges filed under the ADA from July 26, 1992 - December 31, 2008. ADAAA includes discrimination charges filed under the ADAAA from January 1, 2009 - December 31, 2011.

between the categories of discrimination charges and whether the charge was filed before or after the ADAAA ($\chi^2 (3, N = 11482) = 102.98, p < .001$).

This was further validated by Cramer’s V statistic (.095) of a small effect size but still statistically significant ($p < .001$) indicating that a value of the test statistic was unlikely to have happened by chance. Therefore, the strength of the relationship between discrimination charges and the two separate time periods was significant.

Post hoc tests were performed with a Bonferroni correction using an alpha level of .05. The adjusted p-value used for significance was $p < .0125$ as there were four comparisons.

Specifically, significance was found with job acquisition discrimination charges, ($\chi^2 (1, N = 11482) = 101.10, p < .0125$), job retention discrimination charges, ($\chi^2 (1, N = 11482) = 18.21, p < .0125$) and job satisfaction discrimination charges ($\chi^2 (1, N = 11482) = 8.35, p < .0125$). These results are indicated in Table 17.
Table 17.

Independent Comparisons of Discrimination Charges versus Time Periods

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$ Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Acquisition vs. Time Period</td>
<td>101.10</td>
<td>.0000</td>
</tr>
<tr>
<td>Job Satisfaction vs. Time Period</td>
<td>8.35</td>
<td>.0039</td>
</tr>
<tr>
<td>Job Retention vs. Time Period</td>
<td>18.21</td>
<td>.0000</td>
</tr>
<tr>
<td>Other Discrimination vs. Time Period</td>
<td>0.00</td>
<td>.9801</td>
</tr>
</tbody>
</table>

The results indicated significant differences between job acquisition discrimination charges before and after the ADAAA, job retention discrimination charges before and after the ADAAA, and job satisfaction discrimination charges before and after the ADAAA. Additionally, there were not significant differences between ‘other discrimination’ issues before and after the ADAAA.

Based on those results, hypothesis 5 – that there are differences in discrimination charges filed with the EEOC regarding a visual impairment before and after the ADAAA was accepted.

Results of Research Question 6

- Are there differences between outcome resolutions before and after the enactment of the ADAAA regarding a visual impairment?

To determine associations of outcome resolutions before and after the enactment of the ADAAA, dummy coding was used to illustrate the two distinct time periods. The first time-period (dummy coded ‘0’) represented all discrimination charges and subsequently resolution outcomes that were filed and processed under the laws of the ADA (July 26, 1992 - December 31, 2008). The second time-period (dummy coded ‘1’) represented all discrimination charges and
subsequently resolution outcomes that were filed and processed under the laws of the ADAAA (January 1, 2009 - December 31, 2011).

Overall, 82.7% of the merit resolutions and 82.8% of the non-merit resolutions were filed under the ADA time period. Additionally, the odds of a non-merit resolution of discrimination charges filed under either the ADA or the ADAAA are the same (2.7). A 2 x 2 contingency table of the resolution outcomes by time period is displayed in Table 18.

Table 18.

Contingency Table of Resolution Outcomes by Time Period

<table>
<thead>
<tr>
<th>Resolution Outcomes</th>
<th>ADA</th>
<th>ADAAA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merit</td>
<td>26.9%</td>
<td>2558</td>
<td>3094</td>
</tr>
<tr>
<td>Non Merit</td>
<td>73.1%</td>
<td>6948</td>
<td>8388</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9506</td>
<td>1976</td>
<td>11482</td>
</tr>
</tbody>
</table>

*Note.* ADA includes outcomes resolutions filed from discrimination charges under the ADA from July 26, 1992 - December 31, 2008. ADAAA includes outcome resolutions filed from discrimination charges under the ADAAA from January 1, 2009 - December 31, 2011.

The Pearson chi-square analysis was used to test whether resolution outcomes before and after the enactment of the ADAAA were associated. The assumption for chi-square that all expected frequencies should be greater than 5 was met (Field, 2009) with the minimum expected cell count of 532.5. There was not a significant association between the two time periods (pre and post ADAAA) and whether or not the resolution outcomes were merit or non-merit ($\chi^2 (1, N = 11482) = .039, p = .845$). This result was further validated by a non-significant Phi’s statistic ($\phi = .002, p = .845$), another statistical measure to test association between categorical variables.
Based on these results, hypothesis 6—there are differences in EEOC outcome resolutions regarding a visual impairment before and after the ADAAA was rejected. There was no evidence to reject the null hypothesis that there were no differences in EEOC outcome resolutions before and after the ADAAA. In order words, there were not statistically significant differences in EEOC outcomes resolutions regarding a visual impairment before and after the ADAAA.

**Results of Research Question 7**

- Are there associations between types of discrimination charges and EEOC resolution outcomes regarding a visual impairment?

   Overall, 73.1% of the discrimination charges filed resulted in non-merit outcomes. More specifically, non-merit resolutions accounted for 76.6% of the job retention charges, 73.7% of ‘other discrimination’ charges, 72% of job satisfaction charges, and 67.7% of job acquisition charges. The overall odds of non-merit resolutions versus merit resolutions were 2.7 as there were almost double non-merit resolutions than merit resolutions. A 4 x 2 contingency table of discrimination charge categories by resolution outcome categories is depicted in Table 19.

   The Pearson chi-square analysis was used to test whether the categorical variables of discrimination charges and resolution outcomes were associated. The assumption for chi-square that all expected frequencies should be greater than 5 was met (Field, 2009) with the minimum expected cell count of 74.91. There was a significant association between the types of discrimination charges and whether or not the resolution outcomes were merit or non-merit ($\chi^2$ (3, N = 11482) = 52.712, p = .000).

   This was further validated by Cramer’s V statistic (.068) of a small effect size but still statistically significant ($p < .001$) indicating that a value of the test statistic was unlikely to have
Table 19.

*Contingency Table of Discrimination Charges by Resolution Outcomes*

<table>
<thead>
<tr>
<th>Discrimination Charges</th>
<th>Resolution Outcomes</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business</td>
<td>Merit</td>
<td>Non Merit</td>
<td>Total</td>
</tr>
<tr>
<td>Job Acquisition</td>
<td>16.8%</td>
<td>521</td>
<td>13.0%</td>
<td>1090</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>49.7%</td>
<td>1538</td>
<td>47.1%</td>
<td>3951</td>
</tr>
<tr>
<td>Job Retention</td>
<td>31.1%</td>
<td>962</td>
<td>37.5%</td>
<td>3142</td>
</tr>
<tr>
<td>Other Discrimination</td>
<td>2.4%</td>
<td>73</td>
<td>2.4%</td>
<td>205</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3094</td>
<td>8388</td>
<td></td>
<td><strong>11482</strong></td>
</tr>
</tbody>
</table>

happened by chance, and therefore the strength of the relationship between discrimination charges and resolution outcomes is significant.

Post hoc tests were performed with a Bonferroni correction using an alpha level of \( p = .05 \). The adjusted \( p \)-value used for significance was \( p < .0125 \) as there were four comparisons. Specifically, significance was found with resolutions outcomes from job acquisition discrimination charges, \( (\chi^2) (1, N = 11482) = 27.69 \ p < .0125 \), and with resolution outcomes from job retention discrimination charges, \( (\chi^2) (1, N = 11482) = 39.88, \ p < .0125 \). These results are indicated in Table 20.

There were statistically significant differences between job acquisition discrimination charges versus resolution outcomes as well as job retention discrimination charges versus resolution outcomes. Additionally, there were not significant differences between job satisfaction discrimination charges versus resolution outcomes or ‘other discrimination’ charges versus resolution outcomes.
Table 20.

*Independent Comparisons of Discrimination Charges versus Resolution Outcomes*

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$ Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Acquisition vs. Resolution Outcomes</td>
<td>27.69</td>
<td>.0000</td>
</tr>
<tr>
<td>Job Satisfaction vs. Resolution Outcomes</td>
<td>6.15</td>
<td>.0131</td>
</tr>
<tr>
<td>Job Retention vs. Resolution Outcomes</td>
<td>39.88</td>
<td>.0000</td>
</tr>
<tr>
<td>Other Discrimination vs. Resolution Outcomes</td>
<td>0.07</td>
<td>.7933</td>
</tr>
</tbody>
</table>

Based on those results, hypothesis 7 – that there were associations between types of discrimination charges and EEOC resolution outcomes regarding a visual impairment was accepted.

**Trend Analysis**

A trend analysis was performed to determine changes over time of resolution outcomes determined by the EEOC. Figure 2 is a line graph representing a trend analysis of resolution outcomes by closure year. In other words, the outcomes of discrimination charges, either merit or non-merit, are displayed according to the year the charge was resolved. Included in this figure are all the resolution outcomes that fell under the laws governing the ADA from July 26, 1992 - December 31, 2011. Charges filed before December 31, 2008 fall under the laws governing the ADA and not the ADAAA as is the case of charges submitted on or after January 1, 2009. Specifically, 717 discrimination charges were filed under the ADA but resolved after the ADAAA was enacted.

Figure 2 reveals several patterns within the dataset. Initially, both ADA merit and non-merit resolutions increased in number from 1992 through about 2002 with a few peaks and
Figure 2: ADA Trend Analysis of Resolution Outcomes by Closure Year. ADA includes outcome resolutions from discrimination charges filed under the ADA from July 26, 1992 - December 31, 2008.
valleys within that time period. After 2002, both ADA merit and non-merit resolutions decreased through about 2008 where the lines appear to be approaching one another. The negative rate of change of merit and non-merit resolutions from 2002-2008 was approximately 22 and 67 resolutions per year respectively. In other words, the number of merit resolutions decreased approximately 57% from 2002 to 2008 and non-merit resolutions decreased approximately 72% from 2002 to 2008. In 2009, there was another smaller spike in resolutions outcomes for both ADA merit and non-merit resolutions before tapering off by 2011.

Figure 3 is a line graph representing a trend analysis of ADAAA resolution outcomes by closure year. Included in this figure are all the resolution outcomes that fell under the laws governing the ADAAA from January 1, 2009 – December 31, 2011. Charges filed before December 31, 2011 that were not resolved by that date were not included in this analysis as that data was not available at the time of this writing. In 2009, there were 272 total resolution outcomes from discrimination charges filed under the ADAAA compared to 936 total resolution outcomes in 2011. The positive rate of change of total resolution outcomes from 2009 – 2011 was 332 per year. Stated differently, there was an approximate 244% increase in total resolution outcomes from discrimination charges filed from 2009-2011.

ADAAA merit and non-merit resolution outcomes increase by year as depicted in Figure 3. The rate of change is greater for the ADAAA non-merit resolutions (257 per year) compared to a rate of change of the ADAAA merit resolutions (75 per year). In other words, non-merit resolutions increased by approximately 286% from 2009 to 2011 and merit resolutions increased by approximately 163% for the same time period. The range between merit and non-merit resolutions was largest in 2011, showing a continued discrepancy between merit and non-merit resolutions for individuals with visual impairments.
Figure 3. ADAAA Trend Analysis of Resolution Outcomes by Closure Year. ADAAA includes outcome resolutions from discrimination charges filed under the ADAAA from January 1, 2009 - December 31, 2011.
Chapter Summary

This chapter included descriptive analyses of the predictor and dependent variables followed by the process and preparation of data cleaning. The results of the logistic regression and chi-square analyses were presented with their associated research questions and hypotheses. The trend analysis completed this chapter further describing and illustrating the dataset.
Chapter 5: Discussion

Overview

This chapter summarizes the major findings of this study, including the results of the hypothesis testing. The implications of these findings will be discussed for employees, employers, and professionals who work with individuals with visual impairments. Recommendations for future research and study limitations conclude this chapter.

The purpose of this study was to provide new knowledge about workplace discrimination regarding Americans with visual impairments. Seven research questions addressed the following concerns:

• Whether charging party characteristics of age, gender, and race were predictive of types of discrimination charges and/or resolutions outcomes
• Whether respondent characteristics of employer region of location, size, or industry were predictive of types of discrimination charges and/or resolution outcomes
• Whether discrimination charges and/or resolution outcomes differed before and after the enactment of the ADAAA
• Whether discrimination charges and resolutions outcomes were associated

Results of Hypothesis Testing

The seven hypotheses accompanying each research question and the actual results are displayed in Table 21. Six hypotheses were supported and one was rejected.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Actual Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1  Age, gender, and race will predict different types of discrimination</td>
<td>SUPPORTED Age, gender, and race predicted different types of discrimination</td>
</tr>
<tr>
<td>charges.</td>
<td>charges.</td>
</tr>
<tr>
<td>H2  An employer’s location of operation, size, and industry will predict</td>
<td>SUPPORTED Employer’s location, size, and industry predicted different types of</td>
</tr>
<tr>
<td>different types of discrimination charges.</td>
<td>discrimination charges.</td>
</tr>
<tr>
<td>H3  Age, gender, and race will predict different types of EEOC resolution</td>
<td>SUPPORTED Age, gender, and race predicted different types of EEOC resolution</td>
</tr>
<tr>
<td>outcomes.</td>
<td>outcomes.</td>
</tr>
<tr>
<td>H4  An employer’s location of operation, size, and industry will predict</td>
<td>SUPPORTED Employer’s location, size, and industry predicted different types of</td>
</tr>
<tr>
<td>different types of EEOC resolution outcomes.</td>
<td>EEOC resolution outcomes.</td>
</tr>
<tr>
<td>H5  There are differences in discrimination charges before and after the</td>
<td>SUPPORTED There were differences in discrimination charges before and after the A</td>
</tr>
<tr>
<td>ADAAA.</td>
<td>DAAA.</td>
</tr>
<tr>
<td>H6  There are differences in EEOC outcome resolutions before and after the</td>
<td>REJECTED There were NO differences in EEOC outcome resolutions before and after</td>
</tr>
<tr>
<td>ADAAA.</td>
<td>the ADAAA.</td>
</tr>
<tr>
<td>H7  There are associations between types of discrimination charges and</td>
<td>SUPPORTED Types of discrimination charges and resolution outcomes were associated.</td>
</tr>
<tr>
<td>resolution outcomes.</td>
<td></td>
</tr>
</tbody>
</table>
Discussion of Findings

**Charging Party Characteristics Predicting Discrimination Charges.** The charging party characteristics of age, gender, and race were statistically significant predictors of types of discrimination charges from individuals with visual impairments as evidenced by the results from research question 1. More specifically, charging party age, gender, and race were all independently significant contributors. Additionally, the interaction effect between charging party age and race was also statistically significant.

**Charging Party Race.** Race categories of Asian, ‘Other Race’, and African American were significant predictors of discrimination charges. When comparing Asians to Whites (the reference category), there was a substantial likelihood that discrimination charges not related to job satisfaction, i.e., job acquisition and ‘other discrimination’ types were filed by Asians. Discrimination charges from Asians made up only 1.3% of the total discrimination charges. Therefore, the odds ratio, used as a measure of association, restricted the predictive value due to the very large confidence interval. However, there was still a profound difference in perceived workplace discrimination between Asians and Whites, the primary issue being related to acquiring jobs and ‘other discrimination’ types of discrimination not related to job satisfaction or job retention.

When comparing charges from individuals who identified as ‘Other Race’ to Whites (the reference category), there was a considerable likelihood that discrimination charges were related to job acquisition and not job satisfaction. Similar to Asians, discrimination charges from individuals who identified as ‘Other Race’ made up a small percentage of the total discrimination charges (5.5%). Therefore, the odds ratio, used as a measure of association, restricted the predictive value due to the large confidence interval. Yet, for individuals who identified as
‘Other Race’, their perceived workplace discrimination was determinately in regards to obtaining a job and not their satisfaction with the job.

Contrary to discrimination charges from Asians and individuals who identified ‘Other Race’, African Americans, when compared to Whites, were less likely to submit job acquisition than job satisfaction discrimination charges. No additional categories of race indicated significant predictive results regarding discrimination charges.

**Charging Party Gender.** Gender was also a significant predictor of discrimination charges. Males were more likely to submit discrimination charges regarding obtaining and retaining a job compared to job satisfaction. Stated differently, females were less likely to submit job acquisition and job retention discrimination charges when compared to job satisfaction. Therefore, it appeared that as a group, females felt more discriminated against regarding issues that would make their jobs more satisfying than did males. However, they were less likely to submit charges about getting and keeping their jobs.

**Charging Party Age.** Although the individual characteristic of age played a significant role in predicting discrimination charges, age was measured as a continuous variable and therefore the influence of specific ages was unascertained. Therefore, no explicit conclusions were drawn about how different ages impacted types of discrimination charges for individuals with visual impairments.

**Charging Party Age & Race Combined.** In combination with charging party age, the races of Asian, Hispanic / Mexican, ‘Other Race’, and White each indicated significance in predicting job acquisition versus job satisfaction charges. The effects of those two-way interactions were able to predict job acquisition charges over job satisfaction charges, yet the exact relationship of the interaction was beyond the scope of this study. Likewise, the interaction
between age and Asian race ‘other discrimination’ types over job satisfaction, yet the relationship between the interactions of age and Asian race were again beyond the scope of this study.

**Respondent Characteristics Predicting Discrimination Charges.** The respondent characteristics of location, size, and industry were statistically significant predictors of types of discrimination charges from individuals with visual impairments as evidenced by the results from research question 2. Furthermore, the odds ratio indicated that the independent variables (location, size, and industry) impacted or had a relationship with the dependent variable (types of discrimination charges). The results of the relationship among location, size, and industry caused changes in the odds of a job satisfaction discrimination charge, the key dependent variable used as the reference category.

**Respondent Location.** In regard to predicting discrimination charges by respondent location, job retention and ‘other discrimination’ charges, when compared to job satisfaction, were fewer in the West than in the South. Additionally, when comparing ‘other discrimination’ to job satisfaction charges, the Northeast predicted fewer ‘other discrimination’ charges than the South. The Midwest was not a significant predictor of discrimination charges and U.S. and non-U.S. territories were not included in the analysis as they contributed to less than 1% of the respondent locations. Overall, when comparing the Northeast, Midwest, and West to the South, it appeared the South was the most predictive of discrimination charges and furthermore had the most overall amount of discrimination charges by region of location.

**Respondent Size.** Respondent size was also a significant predictor of discrimination charges. More specifically, when comparing job acquisition to job satisfaction charges between the 15-100 and 501+ sizes, individuals from the 15-100 size industries were likely to submit job
acquisition discrimination charges. All other respondent sizes (15-100, 101-200, 201-500), when compared to 501+, were likely to submit job retention discrimination charges when compared to job satisfaction charges. From these results, it appeared that job retention and job acquisition were of more concern for employees of small industries than of larger industries. Additionally, job satisfaction was a greater cause for filing a discrimination charge when the industry was larger than 500 employees.

**Respondent Industry.** The type of respondent industry was also a significant predictor of discrimination charges. Individuals whose type of industry was service compared to product were likely to submit job acquisition discrimination charges compared to job satisfaction. Contrariwise, individuals whose type of industry was product compared to service were likely to submit job retention discrimination charges compared to job satisfaction. In other words, product industries were more likely to predict job retention, satisfaction, and ‘other discrimination’ charges while service industries were more likely to predict job acquisition charges. Therefore, it appeared obtaining a job was a greater cause for filing a discrimination charge when the industry was service based than when it was product based.

**Charging Party Characteristics Predicting Resolution Outcomes.** Research question 3 indicated the charging party characteristics of age, gender, and race, when combined, predicted resolution outcomes from discrimination charges. The interactive relationship between age, gender, and race was able to predict merit resolutions, the key dependent variable used as the reference category.

The exact relationship of the interactions between the charging party characteristics was unknown, however a few conclusions were drawn from statistically significant results. African American females significantly predicted fewer merit resolutions than White males. Stated
differently, discrimination charges from White males (the reference category) were more likely to be merit based than from African American females. Other combinations of gender and race did not indicate significance, and were therefore excluded from the discussion.

**Respondent Characteristics Predicting Resolution Outcomes.** The respondent characteristics of location, size, and industry predicted resolution outcomes from discrimination charges as indicated by research question 4. Although all the respondent characteristics and their interactions were in the final model, thus contributing to the statistically significant results, only coefficients from respondent location were subsequently significant. Non-merit resolutions were predicted in this analysis because non-merit resolutions favor the respondent stating that discrimination did not occur.

Specifically, being an industry in the South (the reference category) was more likely to predict non-merit resolutions when compared to each of the other regions of location (Northeast, Midwest, and West) in the analyses. Within those regions, there was little statistical difference in predictability of non-merit resolutions when compared to the South. Additionally, the South had the greatest number of discrimination charges by regions of location.

The filing location of each discrimination charge was identified by the EEOC when the charge was filed; therefore, region of location was the only respondent characteristic that did not have any unknown or missing data. On the other hand, the charging party provided respondent size and industry, which constituted both unknowns and potential guesses (McMahon et al., 2005). Therefore, respondent region of location being the only significant predictor of resolution outcomes was not surprising.

**Discrimination Charges Before and After the ADAAA.** Evidenced by individuals with visual impairments submitting discrimination charges, perceived workplace discrimination was
still a concern post ADAAA. Results from research question 5 revealed associations between categories of discrimination charges and whether the charge was filed before or after the ADAAA. Job acquisition, job satisfaction, and job retention all showed significant associations when compared pre and post ADAAA.

**Job Acquisition Discrimination.** Following the enactment of the ADAAA, job acquisition charges decreased by 8.6% compared to before the ADAAA. Discriminatory issues that pertained to obtaining a job were placed in this category. (See Appendix A for definitions of discrimination charges in the job acquisition category). This included issues with advertising, exclusion/segregated union, hiring, prohibited medical inquiry, recall, references unfavorable, referral, reinstatement, and training. It can be reasonably concluded that there was either fewer discriminatory incidences occurring in the job acquisition process or fewer individuals filing charges of discrimination in this category.

Some explanations for the reductions in acquisition charges include that the ADA had been instituted for almost two decades by the end of the data collection for this study, giving employers sufficient time to learn, understand, and implement solutions to be in compliance with both the ADA and the ADAAA. During that time, methods for removing negative attitudes held by employers toward hiring individuals with disabilities was recommended for increasing the number of individuals with disabilities in the workplace (Brostrand, 2006; Crudden, 2002; Golub, 2006; O'Day, 1999). Therefore, employers’ attitudes toward hiring individuals with disabilities may have positively shifted over time, as the ADAAA came into effect. Additionally, other recommendations made prior to the end of this current study included methods for teaching employees to identify their disability-related employment needs and initiate dialogue with prospective employers about those needs (Rumrill & Scheff, 1997); employers identifying
strategies to meet their legal obligations under the ADA (Unger et al., 2005); and employees utilizing vocational rehabilitation agency services (Simpson & Rogers, 2002). The implementation or completion of the above recommendations may have contributed to decreased job acquisition discrimination against individuals with visual impairments.

On the other hand, it may not be job acquisition discrimination against individuals with visual impairments per se that has decreased, but rather the filing of discrimination charges. In a 2011 study, a majority of surveyed human resource professionals and supervisors indicated concerns over hiring individuals with disabilities (Kaye, Jans, & Jones, 2011). Their proposed reasons for not hiring individuals with disabilities included the cost of providing reasonable accommodations, a lack of awareness of how to deal with the needs of employees with disabilities, and a fear of potential lawsuits for disciplining or firing an employee with a disability for poor performance (Kaye et al., 2011). Although not specific to individuals with visual impairments, the study results should not be discounted as part of an explanation for the decrease in job acquisition discrimination charges for the vision impaired population.

The identified decrease in job acquisition discrimination charges filed after the enactment of the ADAAA was unique as there was an increase in job satisfaction and job retention discrimination charges. One reason for this outcome may be that individuals with visual impairments were already in their jobs when they developed a visual impairment. Thereby, discrimination due to their vision was not an issue during job acquisition. Another plausible explanation for this result may be the estimated increase of individuals over the age of 55 in the labor force (Bureau of Labor Statistics, 2013). Employers could be hiring more individuals with visual impairments to meet the demands of the U.S.’s aging population. From this study, it is unknown if increased individuals with visual impairments were acquiring more jobs or not filing
discrimination charges on job acquisition as frequently. Furthermore, individuals with visual impairments who acquired a job appeared to have increased discrimination regarding job satisfaction and about getting dismissed from their job.

**Job Satisfaction Discrimination.** Discrimination charges from the job satisfaction category increased by 3.6% under the ADAAA compared to the ADA. Charges in this category included issues with assignments, benefits, demotion, harassment, intimidation, job classification, reasonable accommodations, seniority, terms and conditions of employment, and wages. (See Appendix A for definitions of discrimination charges in the job satisfaction category). As discussed in Chapter 1, increased individuals with visual impairments are entering the workplace shifting attention from career obtainment to career development. This study indicated discrimination in the area of job satisfaction was the most common discrimination issue among individuals with visual impairments.

As a result of the ADAAA’s expanded definitions, employers must offer increased types of accommodations to greater numbers of employees for compliance with the law (Dorrian, 2014). Furthermore, advances in technology have greatly expanded opportunities for individuals with visual impairments offering them parity with their non-disabled peers in the workplace (Gamble et al., 2004; Lynch, 2013; Strobel et al., 2006). Accordingly, while perceived discrimination was once more prevalent for job attainment and retention (McMahon et al., 1995), the results of this study indicate a shift toward discrimination around conditions of job satisfaction. From these results, there seems to be less concern about discrimination around job acquisition and more concerns related to job satisfaction and job retention for individuals with visual impairments.
**Job Retention Discrimination.** Discrimination charges from the job retention category increased by 5.0% under the ADAAA compared to the ADA. Discriminatory issues that dealt with maintaining or continuing employment were placed in the job retention category. This included constructive discharge, discharge, discipline, early retirement incentive, involuntary retirement, layoff, severance pay, suspension, tenure, and waiving ADEA suit rights. (See Appendix A for definitions of discrimination charges in the job retention category).

Results of a 2011 study of job retention for employees with disabilities indicated that the reasons for letting someone go from a job were similar to those for not hiring employees with disabilities (Kaye et al., 2011). The most frequent concerns were lack of awareness of how to handle the employee’s needs, fear that employees with disabilities would become a financial or legal liability, and the costs of accommodations (Kaye et al., 2011). Although not specific to individuals with visual impairments, the common use of assistive technology as accommodations (Strobel et al., 2006) suggested these results could apply to that population.

Additionally, as noted in more recent research, recruiting, training, and retaining employees with disabilities was a lower priority for managers compared to senior employees, young employees, and minorities (Lynch, 2013). Another study indicated seniority and higher wages for older employees resulted in employers interested in cost containment considering discharge, lay off, or incentivizing the retirement of expensive older employees (Von Schrader & Nazarov, 2015). Therefore, older individuals with visual impairments may encounter more than one type of workplace discrimination (Chou & Choi, 2011; Neumark, 2009) in the category of job retention. The results of this current study and previous research do not suggest a changing culture for decreased perceived job retention discrimination charges for individuals with visual impairments following the ADAAA.
Despite almost two decades of exposure to the ADA with additional intricacies with the ADAAA, there are still concerns regarding aspects of the job relating to job retention. Job retention discrimination charges was the largest growing category of discrimination for individuals with visual impairments compared to job acquisition, job satisfaction, and other aspects of the job. Individuals with visual impairments experiencing increased discrimination in keeping their jobs is concerning as it appears individuals are delaying retirement by continuing to work into older age (Strobel et al., 2006), and vision loss is associated with aging (Boerner & Wang, 2010; Crews & Campbell, 2004). Therefore, job retention discrimination charges may increase as the workforce population ages if this trend continues.

**Resolutions Outcomes Before and After the ADAAA.** Results from research question 6 did not reveal associations between the two time periods (pre and post ADAAA) and whether or not resolution outcomes were merit or non-meritorious. After the ADAAA was enacted, there was only a 0.2% increase in merit resolutions from discrimination charges from individuals with visual impairments. In other words, resolutions that favored the employee, indicating discrimination occurred, increased by less than 1% with the passing of the ADAAA. Additionally, there was also a less than 1% change in non-merit resolutions between the two time periods. Following the enactment of the ADAAA, non-meritorious resolutions decreased by 0.2% from discrimination charges from individuals with visual impairments. Subsequently, 72.9% of all discrimination charges post ADAAA from individuals with visual impairments resulted in non-meritorious outcomes indicating discrimination did not occur.

A primary intent of the ADAAA was to shift the courts’ focus from determining if an individual had a disability to determining if workplace discrimination actually occurred (Vierling, 2009). The new language of the ADAAA allowed more individuals opportunities to
demonstrate a disability (Dorrian, 2014). Subsequently, individuals with impairments, although considered disabled by the courts, were being found not able to perform essential job functions (Dorrian, 2014). It may be that individuals with visual impairments had surpassed the initial step of establishing that a visual impairment substantially limited the major life activity of seeing; yet were unable to establish that they could perform the essential job functions. This explanation could reasonably explain the trivial increase in merit resolutions for individuals with visual impairments following the enactment of the ADAAA, a law meant to increase protection for individuals with disabilities against workplace discrimination.

**Discrimination Charges and Resolutions Outcomes.** The results from research question 7 indicated that discrimination charges and resolution outcomes were associated. More specifically, there was a relationship between discrimination charges and resolution outcomes from job acquisition as well as discrimination charges and resolution outcomes from job retention.

Job acquisition discrimination charges made up 14.0% of all discrimination charges for individuals with visual impairments. Additionally, discrimination charges from job acquisition issues were more likely to result in a merit-outcome than any of the other discrimination charges. Although it was still more likely that job acquisition charges resulted in non-meritorious outcomes, job acquisition charges had the highest percentage of merit outcomes compared to the other categories.

Under the umbrella of job acquisition charges was hiring, which accounted for 78.6% of all job acquisition charges. In a study that sought to determine how prospective employers perceived individuals with blindness, applicants who were perceived to be blind were rated as more conscientious, agreeable, extraverted, and open to experience than applicants perceived to
be sighted (Wang et al., 2010). However, those perceptions did not translate into increased hiring of individuals with visual impairments. Those results were consistent with other research that even though personal characteristics of applicants were rated more favorable, positive evaluations were not accompanied by more favorable hire-ability ratings (Bell & Klein, 2001).

Investigations by the EEOC into job acquisition discrimination charges would likely try to determine if a candidate was not chosen for the position based on qualifications or other underlying factors. Factors such as a visual impairment that may not be disclosed during the initial screening process may be observable during an interview. Determining discriminatory practices in the hiring process when candidates appear equal on paper may be more discernible than other instances of workplace discrimination.

The results from research question 7 also indicated there was a relationship between discrimination charges and resolution outcomes for job retention. Within the job retention category, almost 80% of the charges were due to issues of involuntary termination (discharge-71.8% and constructive discharge-7.5%). Charges from job retention made up 35.7% of all discrimination charges and from these 23.4% were merit based. That was the smallest percentage of merit-based charges from all of the discrimination categories. In other words, discrimination charges indicating a job retention issue had the fewest findings of merit compared to the other three categories.

It is not possible to determine from the EEOC database why more than 75% of the job retention charges resulted in non-meritorious outcomes. However, there were some themes from previous research that suggest possible explanations for results such as these. Individuals with visual impairments who indicated fewer years of experience dealing with their vision loss reported greater difficulty mastering the demands of their jobs and performing essential functions.
(Rumrill, Roessler, Battersby-Longden, & Schuyler, 1998). This study concluded that for individuals with visual impairments to retain their job positions, constant adjusting to challenges and stress was needed in the workplace (Rumrill et al., 1998). Although suggested nearly two decades ago, the need for adapting to changes in the workplace remains a relevant issue.

Additionally, Crudden (2002) discussed the impact of technology on job retention for individuals with visual impairments. Her study concluded that even with access to assistive technology, productivity suffered due to stress associated with learning to adapt to new technology (Crudden, 2002). Consequently, both internal and external obstacles to achievement and performances for individuals with visual impairments may have led to job termination. From these results, it appears the pressure to acquire new job skills may be greater for individuals with visual impairments and that being unable to do so may lead to job termination.

**Implications for Employees**

The statistically significant results from this study indicated that characteristics of the employee, including age, gender, and race, all had an influence on discrimination charges and resolution outcomes. A few practical considerations and recommendations can be drawn from those results.

The study results revealed that several races (African American, Asian, and ‘other race’) predicted discrimination charges of job acquisition compared to job satisfaction. Furthermore, gender may have been a factor of hindrance to occupational adaption for individuals with visual impairments in the workplace. Charges from males predicted job acquisition and job retention discrimination when compared to job satisfaction. Females submitted fewer discrimination charges overall, but whether there were fewer perceived discrimination instances or just fewer filings of charges were unknown.
Although the individual characteristic of age played a significant role in predicting discrimination charges and resolution outcomes, the influences of specific ages were not addressed by this study. Therefore, no conclusions were drawn about how different ages impacted discrimination charges and resolutions outcomes for individuals with visual impairments.

As evidenced by discrimination charges, individuals of each race and both genders perceived discrimination in all aspects of employment. Discrimination in the workplace integrates distinctive individual and environmental factors. Successfully attaining employment is a culmination of the individuals’ skills, self-efficacy, and motivation following application for a job where qualified. Utilizing the components of the MOHO to understand occupational dysfunction, the individual’s participation, performance, and skills as well as the individual’s interaction with the workplace environment should be examined.

The perceived discrimination, or a disruption in any of these interrelated factors, may hinder the ability to obtain the desired position, maintain a position, or be satisfied with a position. The interrelated factors from the individual and the environmental contexts contribute to occupational adaptation. When occupational adaptation has not been obtained, the filing of a discrimination charge addresses one part of the multifaceted situation.

**Recommendations for Employees based on MOHO.** Employees or applicants for employment are covered under Title I of the ADA and the ADAAA if they are qualified for the job and have been treated less favorably due to impairment in their visual functioning. Individuals must first understand their employment rights under the ADA and ADAAA to be able to recognize discriminatory instances in the workplace. The EEOC website has resources and materials for employees and job applicants regarding types of discrimination, coverage of
the laws, how to file a discrimination charge, and prohibited practices (www.eeoc.gov).

Additionally, the entire EEOC website is capable of being viewed with zoom text, the ability to make typed print up to three-times larger, and having the text spoken aloud with One-Touch Read.

Continued education and assistance are recommended for individuals with visual impairments for making knowledgeable decisions regarding their employment. Suggestions include utilizing the assistance of vocational rehabilitation services or services from other professionals for successfully relating to and interacting with the workplace environment. This could involve education on orientation and mobility, low vision assistive technology, adaptive communication, and independent living aids (Rak, 2013). Role-playing for building confidence and autonomy for adversarial situations and promoting self-advocacy is also recommended. Furthermore, assistance with identifying and adapting personal factors of volition, habituation, and performance capacity would support increasing independence with occupational adaptation in all aspects of the workplace.

Resolution outcomes indicated that in a majority of the discrimination charges filed, the EEOC determined that discrimination did not occur. Therefore, the importance of individuals with visual impairment being able to distinguish actual discrimination and build a case for its occurrence is paramount. Also, individuals need to possess the knowledge, skills, and resources to complete the entire process of submitting discrimination charges. On the contrary, in 26.9% of the filed discrimination charges, the EEOC determined there was evidence of discriminatory actions in the workplace for individuals with visual impairments. Therefore, employees and applicants with visual impairments must continue to pursue parity in the workplace with their peers without visual impairments.
Implications for Employers

The statistically significant results from this study indicated that the characteristics of the employers, including location, size, and type of industry, all had an influence on the types of discrimination charges filed by individuals with visual impairments and their corresponding resolution outcomes. A few practical considerations and recommendations can be drawn from those results.

Regarding discrimination charges by employer region of location, each region was compared to the South. A majority of the discrimination charges were from the South and statistical significance indicated other regions (Northeast and West) were less likely to predict discrimination charges when compared to the South. Only with job acquisition was the South not a predictor over the other regions when compared with job satisfaction.

A 2008 study that examined all filed discrimination charges from individuals with disabilities covered under Title I of the ADA compared hiring and non-hiring charges based upon characteristics of the employers from 1992 - 2005 (McMahon et al., 2008). The results indicated hiring allegations, or job acquisition discrimination charges, were most frequently filed against employers in the South, followed by the Midwest, West, Northeast, U.S. territories, and Non-U.S. territories (McMahon et al., 2008). This current study indicated the same distribution of discrimination charges by region of location from individuals with visual impairments. McMahon et al. (2008) surmised that both the Northeast and Midwest regions had a greater presence of labor unions that were likely being utilized for resolving disability related workplace issues prior to submission of a discrimination charge to the EEOC. Additionally, the South, with a lesser presence of labor unions serving as mediators between employees and employers, could explain the higher occurrence of discrimination charges for that region (McMahon et al., 2008).
Therefore, employers from the South should be cognizant of disability related workplace issues in all areas of employment.

Employers with less than 501 employees predicted discrimination charges in job retention compared to job satisfaction from individuals with visual impairments. The increased likelihood of perceived discrimination while attempting to maintain the role of employee in a society that puts high demand on employment is not surprising. All employer sizes (15-100, 101-200, and 201-500) when compared to 501+ employees indicated the same results. A practical consideration was that smaller employers, who may have limited finances and positions available, were more likely to release or discharge individuals with visual impairments than very large employers.

The smallest employers (15-100 employees) predicted job acquisition discrimination charges over job satisfaction charges compared to larger employers (501+). The same reasoning of limited finances and positions available may be the result of failure to hire individuals with visual impairments compared to larger employers (> 100 employees). Additionally, as noted by McMahon et al. (2008), smaller employers often do not have separate human resource departments or formal policies regarding disability related workplace issues. Therefore, non-human resource professionals without formal training regarding laws of employment who are involved in the hiring process may fail to adhere to specific requirements of the law (McMahon et al., 2008). It is recommended that small employers engage in professional training and assistance related to the ADA and ADAAA for hiring compliance.

The types of industry, either product or services, indicated differing results regarding types of discrimination charges. The service industry category included more individual industries than the product industry and had a majority of the discrimination charges. It appeared
individuals with visual impairments perceived discrimination with obtaining employment in the service industry as indicated by service industries being a predictor of job acquisition discrimination charges (compared to job satisfaction). On the other hand, it appeared individuals with visual impairments perceived discrimination with retaining their employment with product industries as indicated by product industries being a predictor of job retention discrimination charges (compared to job satisfaction).

**Recommendations for Employers based on the MOHO.** Businesses and private employers of companies who employ 15 or more employees for at least twenty calendar weeks must comply with the laws set forth from the ADA and ADAAA (U.S. Equal Employment Opportunity Commission, n. d., para. 1). As evidenced by discrimination charges filed in all aspects of employment, employers from every region of location, size, and type of industry were included in perceived discrimination from individuals with visual impairments. Therefore, continued education and assistance are recommended for employers for making knowledgeable decisions regarding their employment practices.

Awareness and understanding of ADA and ADAAA regulations would be the first recommended step to establishing employer compliance. The EEOC offers many online options for guidance including compliance manuals, a webpage dedicated to prohibited employment policies and practices, and lists of proposed regulations. Informal discussion letters, written by the staff in the EEOC Office of Legal Counsel to inquiries from the public on how the EEOC laws may apply in particular situations are also available. These resources are free and accessible to the public on the EEOC website (www.eeoc.gov).

Specific recommendations for employers to establish compliance under the ADA with job acquisition include using online applications with blanks and formatted resumes. The use of
standardized applications could assist with eliminating human resources managers basing their hiring judgments on visual resume presentation instead of applicant merit (Wang et al., 2010). In regards to job satisfaction, Ford (2012) recommended having a designated company representative knowledgeable about the ADA and ADAAA who could be responsible for responding to employees’ reasonable accommodation requests. Discrimination charges from the job satisfaction category were the most numerous and as discussed in Chapter 2, the use of portable reading and auditory output devices would allow individuals with visual impairments modifications of the workplace to overcome the dysfunction of the visual impairment. This company representative should also conduct training for managers and human resources staff for compliance issues as well as review and update the company’s policies related to the laws (Ford, 2012).

For improving job retention, Kaye et al., (2011) recommended increasing training on disability issues for supervisors and managers, implementing organization wide sources for expertise on providing accommodations issues, and providing written guidelines on disability concerns as practical solutions. These general recommendations for employers of individuals with disabilities also apply to employers of individuals with visual impairments.

Although a majority of discrimination charges resulted in non-meritorious outcomes, recommendations for employers of individuals with visual impairments should be focused on creating environments in which employees can achieve their own occupational adaptation. Employers have their own responsibility to understand the interrelated factors that contribute to occupational dysfunction and be willing to work together with employees for overcoming encountered workplace discrimination.
Implications for Professionals

Professionals who serve individuals with visual impairments should be knowledgeable of the federal and state laws where they practice regarding workplace discrimination. This includes occupational therapists, vocational rehabilitation service providers, job placement agencies, and Job Accommodation Network employees. Results from the trend analyses indicated that increasing numbers of discrimination charges were being filed yearly since the ADAAA, yet non-meritorious resolutions were increasing at a greater rate than meritorious resolutions. This suggests a need for professionals to extend their involvement regarding employment for individuals with visual impairments.

Discrimination charges indicated perceived discrimination occurred in all aspects of employment from varying characteristics of individuals and their employers. Subsequently, no one type of individual or employer was solely involved. Therefore, it should be considered that each discrimination experience was unique and personal.

Recommendations for Professionals based on the MOHO. It is recommended that professionals work one on one with individuals with visual impairments throughout the entire employment process. Employees each possess individual volitions, habituations, and performance capacities that when combined with the environmental contexts, influence behavior differently. Assuming conflict in the workplace is not the same for all individuals with visual impairments; resolutions for overcoming these conflicts must also not be the same. Professionals should examine the employee and the workplace to determine the characteristics that support and detract from workplace success. Then, individualized coaching and counseling to address these concerns would be a starting place for obtaining workplace occupational adaptation for individuals with visual impairments.
Recommendations for Future Research

The research questions for this study examined whether there were predictors, differences, and associations among the variables. The questions did not address how the independent variables predicted the dependent variables, what the differences were, or the extent of the relationships among the variables. Future research should address these types of questions to further understand the interactions of charging party and respondent characteristics on discrimination charges and resolution outcomes.

As mentioned earlier, the study’s time frame being only three years after the enactment of the ADAAA, likely did not include enough time for employers and employees to understand and implement necessary changes under the ADAAA. Therefore, it is imperative to replicate the analyses performed in this particular study with updated data of discrimination charges and resolution outcomes for comparisons before and after the ADAAA. Associations and differences between the two time periods and between discrimination charges and resolution outcomes that were not evident with this current study may be seen with additional data.

This current study also examined only resolved cases of visual impairment discrimination charges filed under Title I of the ADA and the ADAAA. To date, no studies have specifically compared visual impairment charges and resolutions with the sensory impairment of hearing. It is unknown how sensory (visual and hearing) impairments associate with one another and how sensory impairments compare with other disabilities covered under the ADA regarding charges and resolutions. Understanding how discrimination charges and resolutions associate with age related sensory impairments would provide a more sensitive understanding of workplace discrimination for the aging U.S. population.
Examining concurrent discrimination charges filed under both Title I of the ADA and ADAAA and the Age Discrimination in Employment Act of 1967 from individuals with visual impairments would allow a focused analysis of dual discrimination individuals experienced while aging with a visual impairment. As Chapter 1 indicated, vision loss is primarily an age related phenomenon and the U.S. is experiencing an aging population and workforce. Therefore, understanding workplace discrimination patterns and trends for the increasing population of older adults with visual impairments is paramount. Additionally, examining allegations of discrimination filed under other federal disability employment discrimination laws that the EEOC oversees such as Title V of the ADA and Sections 501 and 505 of the Rehabilitation Act of 1973 would be beneficial to compare visual impairment charges and resolutions under these forms of legislation.

Limitations

This study examined a secondary database, meaning this researcher did not originally collect nor record the data. Therefore, assumptions were drawn that the original data was accurately received and recorded by the EEOC and IMS researchers.

The variables available from the IMS database, excluding age, were nominal measurements. This limited the types of research questions that could be asked and the types of data analyses techniques that could be performed due to the nature of the variables. Additionally, the reliability of some variables could be questioned. For example, the individual submitting the charge supplied employer size and industry information that may be a best estimate or intentionally or unintentionally left blank (McMahon et al., 2005). These blanks or unknown data within the independent variables must also be considered regarding employee and employer characteristics and the conclusions drawn.
The dataset consisted of resolved cases from filed discrimination charges. Charges that were still pending resolution at the time of the study, and incidences that were not reported to the EEOC could not be included. Therefore, the exact amount and types of workplace discrimination against individuals with visual impairments were unidentifiable. Lastly, the study’s time frame concluded three years after the enactment of the ADAAA. This quick examination of the dataset may have overlooked an important learning period for both employees and employers of changes in the law. The influence of these limitations on the study’s conclusions should be considered.

Conclusion

This study revealed unique concerns regarding workplace discrimination for individuals with visual impairments. As evidenced by discrimination charges submitted to the EEOC, perceived workplace discrimination was still an issue in all aspects of employment almost two decades after Title I of the ADA was established. Additionally, the EEOC determined discrimination did not occur in a majority of the filed allegations from individuals with visual impairments. Further education, advocacy, and research are highly recommended for assisting this vulnerable, and growing, population.
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Appendix A

Categories, EEOC Issue Codes, Types, and Definitions of Discrimination Charges
<table>
<thead>
<tr>
<th>Categorical Group</th>
<th>Issue Codes</th>
<th>Types of Discrimination Charges</th>
<th>Definitions of Discrimination Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Acquisition</td>
<td>H2</td>
<td>Hiring</td>
<td>Failure or refusal by an employer to engage a person as an employee.</td>
</tr>
<tr>
<td></td>
<td>P4</td>
<td>Prohibited Medical Inquiry</td>
<td>Respondent unlawfully required an individual to take a medical examination (e.g., during pre-job-offer stage) or to respond to prohibited medical inquires (e.g., on a job application from or during a pre-employment interview).</td>
</tr>
<tr>
<td></td>
<td>R1</td>
<td>Recall</td>
<td>The calling back to regular employment status of persons who have been in a layoff status (see layoff status) or in general the system used to determine the order or sequence of persons called back from layoff status.</td>
</tr>
<tr>
<td></td>
<td>R2</td>
<td>References Unfavorable</td>
<td>Providing or causing to be provided to potential employers references which are designed to place a person in an unfavorable light because of disability.</td>
</tr>
<tr>
<td></td>
<td>R3</td>
<td>Referral</td>
<td>Failure or refusal by a labor organization or employment agency to nominate an applicant for hire, training or apprenticeship or nomination of an applicant for jobs or training other than those requested by the applicant based on the</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>Advertising</td>
<td>Expression of a preference or restriction as to disability/health status when soliciting applicants for employment training, apprenticeship, or union membership by announcements in print or radio or television by an employer, union, or employment agency.</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>Apprenticeship</td>
<td>Failure or refusal to admit a person into a program or job which will serve as a learning experience, usually involving a contractual arrangement between the employer, labor organization and the apprentice.</td>
</tr>
<tr>
<td></td>
<td>E1</td>
<td>Exclusion/Segregated Union</td>
<td>Failure or refusal of a labor organization to admit individual to membership. Use of this code only when respondent is a labor organization or join an apprenticeship council; or the maintenance of two or more separate labor organizations or subdivisions of a labor organizations which represents the same or similar class of employees in the same geographic area in which the separate labor organizations’ membership consists solely or primarily of persons with disability.</td>
</tr>
<tr>
<td>Code</td>
<td>Term</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td>Reinstatement</td>
<td>Failure or refusal of an employer to reinstate a person as an employee.</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>Training</td>
<td>Failure or refusal to admit a person into a training program or job which will serve as a learning experience sometimes involving a contractual arrangement between the employer, labor organization and the trainee.</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Assignment</td>
<td>Designation of an employee to less desirable duty, shift, or work location.</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>Benefits</td>
<td>Inequities based on race, color, religion, sex, national origin, disability or age in providing non-wage compensation items, such as: providing free or reduced rate parking, gifts or bonuses at holidays, employee discounts, etc. As a general rule benefits which can be reduced to monetary value, and do not fall into any of the following specific benefit categories, should be identified using this code. Benefits which cannot be reduced to monetary value are to be identified used code “Terms and Conditions”.</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>Benefits: Insurance</td>
<td>Discrimination with respect to the provision of insurance benefits.</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>Benefits: Pension</td>
<td>Discrimination with respect to the awarding of pension/retirement benefits.</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>Demotion</td>
<td>Involuntary downgrading to a lower paid or less desirable job or classification with reduced benefits or lesser opportunities for advancement.</td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>Harassment</td>
<td>Same as Intimidation except that this issue would be used to describe antagonism direct at an individual because of disability in non-employment situations or settings.</td>
<td></td>
</tr>
<tr>
<td>I1</td>
<td>Intimidation</td>
<td>Bothering, tormenting, troubling, ridiculing or coercing a person because of disability. For example: (1) making, allowing or condoning the use of jokes, epithets or graffiti; (2) application of different or harsher standards of performance of constant or excessive supervisions; (3) the assignment to more difficult, unpleasant, menial or hazardous jobs; (4) threats or verbal abuse; or (5) application of stricter disciplinary measures such as verbal warning, written reprimands, impositions, fines, or temporary suspensions.</td>
<td></td>
</tr>
<tr>
<td>J1</td>
<td>Job Classification</td>
<td>Restriction of employees with a disability to a certain type of job or class of jobs.</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>Maternity</td>
<td>Treating a woman differently from others who applicant’s disability.</td>
<td></td>
</tr>
</tbody>
</table>
are similar in their ability or inability to work for any employment related purpose based upon her pregnancy, childbirth or related medical conditions, or her child care/health care responsibilities.

<table>
<thead>
<tr>
<th>Code</th>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3</td>
<td>Promotion</td>
<td>Advancement to a higher level or work usually involving higher pay, potential for higher pay or more prestigious work environment.</td>
</tr>
<tr>
<td>R6</td>
<td>Reasonable Accommodation</td>
<td>Respondent failed to provide reasonable accommodation to known physical or mental limitations of a qualified person with a disability.</td>
</tr>
<tr>
<td>S1</td>
<td>Segregated Facilities</td>
<td>Maintenance by instruction or common usage and custom of separate facilities such as separate locker rooms, restrooms, dining areas, entrances, exits, pay lines, first aid stations, water fountains, coat racks, rest or smoking areas, interview rooms, recreational facilities, sports teams, picnics and outings, sponsored trips or transportation on the basis of disability.</td>
</tr>
<tr>
<td>S2</td>
<td>Segregated Union Locals</td>
<td>Two or more separate labor organizations based on disability which represent a similar class of employees.</td>
</tr>
<tr>
<td>S3</td>
<td>Seniority</td>
<td>The length of service in employment or membership. Usually the issue will occur in conjunction with the use made of seniority; for example in referral, promotion, layoff, demotion or transfer; charging parties allege that they are not allowed to use their seniority in the same manner as others.</td>
</tr>
<tr>
<td>T2</td>
<td>Terms / Conditions of Employment</td>
<td>Denial or inequitable application of rules relating to general working conditions or the job environment and employment privileges which cannot be reduced to monetary value. If a privilege or benefit can be reduced to monetary value, it is coded as “wages”.</td>
</tr>
<tr>
<td>W1</td>
<td>Wages</td>
<td>Inequities in monetary compensations paid for work performed. Wages include the hourly, weekly or monthly salary and tips, gratuities, commission on sales, amounts paid for completion of specific items or work, granting and general use of incentive rates or bonuses.</td>
</tr>
<tr>
<td>C1</td>
<td>Constructive Discharge</td>
<td>Employee is forced to quit or resign because of the employer’s discriminatory restrictions, constraints, or intolerable working conditions.</td>
</tr>
<tr>
<td>D2</td>
<td>Discharge</td>
<td>Involuntary termination of employment status on a permanent basis.</td>
</tr>
<tr>
<td>Code</td>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>D3</td>
<td>Discipline</td>
<td>The assessment of disciplinary action against an employee.</td>
</tr>
<tr>
<td>B6</td>
<td>Early Retirement Incentive</td>
<td>Represent allegations that a respondent offered early retirement to induce older workers to leave the workforce.</td>
</tr>
<tr>
<td>R5</td>
<td>Involuntary Retirement</td>
<td>Compelling an employee to retire.</td>
</tr>
<tr>
<td>L1</td>
<td>Layoff</td>
<td>Temporary involuntary separation from the respondent work force due to lack of work. Facts must clearly indicate that the involuntary separation is temporary in nature.</td>
</tr>
<tr>
<td>B5</td>
<td>Severance Pay</td>
<td>Denial of severance pay upon leaving employment.</td>
</tr>
<tr>
<td>S5</td>
<td>Suspension</td>
<td>Suspension of employment status because of disability.</td>
</tr>
<tr>
<td>T1</td>
<td>Tenure</td>
<td>The granting of the status of holding a position on a permanent basis upon fulfillment of certain requirements; for educational institutions only.</td>
</tr>
<tr>
<td>B4</td>
<td>Waive ADEA Suit Rights</td>
<td>Respondent made provision of benefits contingent upon employee’s agreement to waive the right to seek redress under the ADEA.</td>
</tr>
<tr>
<td>O1</td>
<td>Other</td>
<td>Issues alleged which do not fit under any other defined code.</td>
</tr>
<tr>
<td>P5/P6</td>
<td>Posting Notices</td>
<td>Failing to post a required notice.</td>
</tr>
<tr>
<td>P4</td>
<td>Prohibited Medical Inquiry</td>
<td>Respondent unlawfully required an individual to take a medical examination (e.g., during pre-job-offer stage) or to respond to prohibited medical inquires (e.g., on a job application from or during a pre-employment interview).</td>
</tr>
<tr>
<td>Q1</td>
<td>Qualification Standards</td>
<td>Discrimination with respect to the factors or criteria used in determining one’s fitness for employment, referral, promotion, admission to membership in a labor organization, training or assignment to a job or class of jobs.</td>
</tr>
<tr>
<td>R7</td>
<td>Record Keeping Violation</td>
<td>Failing to retain required records.</td>
</tr>
<tr>
<td>T3</td>
<td>Testing</td>
<td>Use of written or oral tests in determining a person fitness for employment, referral, promotion, admission to membership in a labor organization, training or assignment to a job or class of jobs.</td>
</tr>
<tr>
<td>U1</td>
<td>Union Representation</td>
<td>Failure or refusal by a labor organization empowered to do so to process or diligently pursue a grievance or dispute, or failure or refusal to adequately represent the interest of a</td>
</tr>
</tbody>
</table>
particular group or person because the interest of a particular groups of persons because of their race, color, religion, sex, national origin, disability or age.

*Note.* Adapted from National EEOC ADA Research Project, (2011b).
Appendix B

Categories, EEOC Closure Codes, Types, and Definitions of Resolution Outcomes
<table>
<thead>
<tr>
<th>Categorical Group</th>
<th>Closure Codes</th>
<th>Types of Resolution Outcomes</th>
<th>Definitions of Resolution Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Merit Resolutions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges with outcomes favorable to charging parties and/or charges with meritorious allegations</td>
<td>M1</td>
<td>Withdrawn with benefits by charging party</td>
<td>Withdrawn with benefits (e.g., after independent settlement, resolved through grievance procedure, or after respondent unilaterally granted desired benefit to charging party without formal “agreement”).</td>
</tr>
<tr>
<td></td>
<td>M2</td>
<td>Settled with benefits to charging party</td>
<td>Settled with benefits, where EEOC was party to settlement.</td>
</tr>
<tr>
<td></td>
<td>M4</td>
<td>Successful conciliation</td>
<td>EEOC has determined discrimination occurred, and respondent has accepted resolution.</td>
</tr>
<tr>
<td></td>
<td>M5</td>
<td>Conciliation failure</td>
<td>EEOC has determined discrimination occurred, but respondent has not accepted resolution.</td>
</tr>
<tr>
<td></td>
<td>M3</td>
<td>No cause finding</td>
<td>Full EEOC investigation failed to support alleged violation(s)</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>Administrative closure: Process</td>
<td>Administrative closure due to processing problems; e.g., respondent out of business or cannot be located, file lost or cannot be reconstructed.</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>Administrative closure: Bankruptcy</td>
<td>Administrative closure due to respondent bankruptcy</td>
</tr>
<tr>
<td></td>
<td>X4</td>
<td>Administrative closure</td>
<td>Administrative closure because charging party cannot be located</td>
</tr>
<tr>
<td></td>
<td>X5</td>
<td>Administrative closure</td>
<td>Administrative closure because charging party non-responsive</td>
</tr>
<tr>
<td></td>
<td>X6</td>
<td>Administrative closure</td>
<td>Administrative closure because charging party uncooperative</td>
</tr>
<tr>
<td></td>
<td>X7</td>
<td>Administrative closure</td>
<td>Administrative closure due to outcome of related litigation</td>
</tr>
<tr>
<td></td>
<td>X8</td>
<td>Administrative closure</td>
<td>Administrative closure because charging party failed to accept full relief</td>
</tr>
<tr>
<td></td>
<td>Y1</td>
<td>Administrative closure</td>
<td>Administrative closure because EEOC lacks jurisdiction; includes inability of charging party to meet definitions, respondent &lt;15 workers, etc.</td>
</tr>
<tr>
<td></td>
<td>Y2</td>
<td>Administrative closure</td>
<td>Administrative closure because charging party withdraws without settlement or benefits. Reason unknown.</td>
</tr>
</tbody>
</table>

**Note.** Adapted from National EEOC ADA Research Project, (2011c).
Vita

Jane Callan McNeil was born on April 24, 1983 in Fairfax, Virginia and is an American citizen. In 2001, she graduated from Fairfax High School in Fairfax, Virginia. In 2006, Ms. McNeil graduated with a Bachelor of Science in Health Sciences with a concentration in Occupational Therapy from James Madison University in Harrisonburg, Virginia. She earned a Master of Occupational Therapy in 2009 from the University of Texas Health Science Center in San Antonio, Texas after completion of relevant coursework and a thesis entitled “Daily Craft Group’s Effects on Length of Stay Efficiency Scores”. Ms. McNeil has nine years of experience working as an occupational therapist with adults in acute, sub acute, and long-term rehabilitation. Throughout her doctoral studies she continued to work as a clinical occupational therapist. Within the past year she became an adjunct faculty member at Trinity Washington University in Washington, D.C. in their Occupational Therapy Assistant Program.