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## The cost of discrimination job age-type and legal outcomes

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THE COST OF DISCRIMINATION:  
JOB AGE-TYPE AND LEGAL OUTCOMES

by

NICHOLAS ANTHONY SMITH

A thesis submitted in partial fulfillment of the requirements  
for the Honors in the Major Program in Psychology  
in the College of Science  
and in The Burnett Honors College  
at the University of Central Florida  
Orlando, Florida

Summer Term  
2012

Thesis Chair: Dr. Barbara Fritzsche

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## **ABSTRACT**

The older population is growing rapidly and businesses must prepare for changes in their workforce. Cases of age discrimination have also become more common. Older workers are being forced out of their jobs at a faster rate than any other age group. As a result, older workers commonly take jobs in different careers, where they compete with younger workers who have similar relevant experience and are valued for their youth. Both prototype matching theory and career timetables theory state that people hold stereotypes of the job in addition to stereotypes of people. In laboratory research, a mismatch between the age of the worker and the age-type of the job has led to lower evaluations, lower job suitability ratings, and other indicators of discrimination. The purpose of this thesis is to assess whether the construct of age-type is related to discrimination in real-world legal cases. Real life instances of discrimination were attained from a 15-year sample of 388 age discrimination jury verdicts and settlements. Each job in the sample of cases was rated to determine age-type, perceived proportion of older and younger workers in the job, and importance of stereotypically older worker features to the job. Results showed that all forms of age stereotypes, both general and specific, were related to the frequency of cases in jobs associated with older or younger stereotypes. Specifically, older workers were more likely to have age discrimination cases go to trial in younger age-typed jobs. However, these variables did not help to predict formal outcomes of the cases (win vs. loss). Among the cases that did win, cases in older age-typed jobs won significantly more money than in younger age-typed jobs.

I dedicate this thesis, first, to my mentor and adviser, Dr. Barbara Fritzsche, for her tireless and unfailing support. Dr. Fritzsche continues to inspire me to excel in all areas of my life. I give to her my unending gratitude for always believing in me.

Also, to my grandmother, Marie Harr, whose never ending love for others has remained a beacon of light throughout my life. She taught me, at all costs, to follow my dreams and live in joy. Words cannot express the impact she has on my life.

Last but not least, to my late grandfather, Alfred Actisdano. May this work be a testament to his dream that his children always be afforded the opportunity to engage in the pursuit of knowledge.

## ACKNOWLEDGMENTS

I would like to express my sincerest gratitude to all of those who made this thesis possible.

Above all, I would like to thank my thesis chair, Dr. Barbara Fritzsche, and committee members, Dr. Janan Smither and Dr. Ida Cook for their supervision, feedback, and patience throughout this thesis.

Also, Michael Reeves, for the countless hours he spent guiding and mentoring me. Michael's dedication to the science set an example that I continue to strive to achieve.

Elizabeth Sanz, for encouraging my interests, answering my questions, and listening to my many ideas. Elizabeth has always supported me, and I know that as a result, she has impacted the path I am on in my life.

My fellow research assistants, especially William Hamilton, Jamie Dalman, and Dorey Chaffee, along with Sierra Snow, Rachel Bassett, Krystle Costello, Trudy Fletcher, Jay Barreto, Jennifer Walker, and Steven Schnell. Without their help, this research would never have been able to be completed within the required time. I can never thank them enough for their hours of dedication and hard work, often on weekends and late into the evening.

Finally, Robby Brownell, for his never ending positive words and thoughtful motivation. Even when I felt overwhelmed, Robby was always there to help me focus and keep me going.

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## INTRODUCTION

“Discrimination due to age is one of the great tragedies of modern life. The desire to work and be useful is what makes life worth living, and to be told your efforts are not needed because you are the wrong age is a crime” (Ball as cited in Brainy Quote). The population is aging rapidly and businesses must prepare for changes in their workforce. By 2050, the number of adults over 65 is expected to increase 42%, and is projected to grow faster than any other age group (Vincent & Velkoff, 2010). Additionally, those aged 55 and over will make up nearly one-fourth of the overall labor force by 2020 (Toosi, 2006).

Research suggests that negative biases are pervasive against older adults in the workplace (Bird & Fisher, 1986; Clapham & Fulford, 1997). Thus, attention should be paid to age discrimination. Bendick, et al. (1996) conducted a study where pairs of resumes were sent out to 775 employment agencies and firms in the United States. Each resume contained the same qualifications, however the age of the applicant differed (either 57 or 32 years old). They found that the older applicant received positive responses (e.g. being asked by the employer for an interview) 26.5% less than the younger applicant. Although the Age Discrimination in Employment Act (ADEA) of 1967 intended to protect individuals age 40 and over, cases of age discrimination are becoming more common. In fact, over the past decade, the number of Equal Employment Opportunity Commission (EEOC) claims increased by 65%. And, age discrimination suits are particularly costly to companies. Between 1988 through 1992, juries awarded an average of \$450,289 per case of age discrimination, which is 175% to 300% higher than those for sex, race or disability discrimination (Marley, 1994).

The number of older workers being forced out of their jobs has increased at a quicker rate than any other age group (Johnson, Kawachi, & Lewis, 2009). Unfortunately, workers over age 55 can take approximately two months longer to gain new employment compared to workers under age 55 (Goldberg, 2007). While attempting to re-career, many of these workers take jobs in different fields where they compete with younger workers who have similar relevant experience but are valued for their youth (Johnson, et al., 2009).

## **LITERATURE REVIEW**

Based on prototype matching theory (Perry, 1994; Niedenthal, Cantor, & Kihlstrom, 1985) and the career timetables perspective (Lawrence, 1988), Perry and Finkelstein (1999) proposed that age discrimination is more likely when the age of the worker does not match the age-type of the job. Cleveland and Hollmann (1990) defined age-type as the “degree to which older and younger workers are perceived as suitable for particular occupations” (Reeves, 2011).

### Prototype Matching

According to prototype matching theory, individuals are compared to the typical person-in-job prototype for a particular job, which is defined as the stereotypical age, personality, and features of a person who would hold that job. For example, the prototypical age for pizza delivery person is young male, usually high school or early college age. With this application of prototype matching, Perry (1994) performed a laboratory study asking university students to rate job applicants. Applicants who received higher ratings also more closely matched person-in-job prototypes. Additionally, applicants were more highly rated when they matched the age stereotype of the job. These findings suggested that the degree of match between an individual’s features (e.g., age, gender) and person-in-job prototypes leads to the perceived fit of the individual (Perry, 1994; Perry & Finkelstein, 1999).

## Career Timetables

The career timetables perspective proposes that age norms are associated with certain occupations, and are determined by the normative age of workers in the occupation (Lawrence, 1988). “The normative approach defines age groups, also known as age grades (Radcliffe-Brown, 1929: 21), by members' shared age judgments or age estimates of others within their social system” (Lawrence, 1988, p. 311). This perspective posits that as workers age, they should work in job categories more prestigious or higher in rank than those of younger workers (Shore & Goldberg, 2005). For example, one might expect that older individuals in the military would be higher in rank (e.g., Colonel) than younger individuals (e.g., Second Lieutenant). Laboratory research has shown that discrimination (including lower evaluations and lower suitability ratings) is more likely when there is a mismatch between the age norm of the job and the age of the worker (e.g. Cleveland & Hollmann, 1990; Panek, Hiles, & Staats, 2006; Perry, 1994; Perry & Bourhis, 1998; Perry, Kulik, & Bourhis, 1960). The potential for discrimination, however, is asymmetrical, where workers older than the normative age (perceived as being “behind schedule”) are more greatly punished compared with workers who are younger (perceived as being “ahead of schedule”) (Lawrence, 1988).

Cleveland and Shore (1992) demonstrated that when employees were older than the workgroup’s normative age, compared to the prototypical employee of the same rank and relative to the age of one’s supervisor, they received lower ratings of promotability and performance, suggesting that workgroups are viewed to have an appropriate age. So research has found evidence supporting that there are normative ages for individuals within workgroups. Additionally, prior studies have found that occupations also are viewed to be more appropriate

for certain age groups (Gordon & Arvey, 1986; Macan, Detjen, & Dickey, 1994; Reeves, 2011). Therefore it was predicted that older workers will be discriminated against when they are employed in an occupation viewed to be appropriate for workers younger than themselves. In other words, one can be considered too old for certain occupations that are expected to be held by younger workers.

## PURPOSE

The purpose of this study was to add to the age discrimination literature by applying theory to real-world employment age discrimination jury verdicts and settlements to help determine whether the construct of age-type and its theoretical antecedents (feature centrality and proportional representation) is helpful to understanding real-world age discrimination. Past studies have examined the interaction between feature centrality and proportional representation to outcomes of worker age and occupational age-type (e.g., Cleveland & Shore, 1992; Lawrence, 1988; Perry et al., 1996; Perry & Bourhis, 1998). This study sought to further explore the interaction of these variables by examining age discrimination legal cases and measuring the age-type, feature centrality, and perceived proportional representation of the claimant's occupation.

Under the guidance of prototype matching theory and career timetables theory, it was proposed that a lack-of-fit between age of the worker and the age stereotypes along with perceived proportional representation of the job would be associated with a greater likelihood of discrimination in the real-world.

*Hypothesis 1a, 1b, 1c: The number of claims was expected to be greater in jobs that a) are more strongly young-typed, b) are perceived to have a lower representation of older workers, and c) more strongly require features that are negatively associated with older workers.*

By examining the number of claims, I was able to measure the effects that age-type, perceived proportional representation, and feature centrality had on the chance workers filed legal action that resulted in a jury trial.

*Hypothesis 2a, 2b, 2c: The number of rulings in favor of the older worker was expected to be greater in jobs that a) are more strongly young-typed, b) are perceived to have a lower representation of older workers, and c) more strongly require features that are negatively associated with older workers.*

Measuring the number of rulings in favor of the plaintiff and the interaction between age-type, perceived proportional representation, and feature centrality, helped to determine how often and which age-type variables predicted cases where the plaintiff won.

*Research Question 1: Will the average award granted to plaintiffs be greater for age discrimination cases involving stereotypically older worker jobs?*

As the size of award granted to plaintiffs can vary due to many factors, it is unclear how exactly age-type of the occupation will relate to the size of the award. Older age-typed jobs do, however, often pay higher salaries than younger age-typed jobs. I explored this research question to help determine how age-type interacts with the amount won by the plaintiff.



## METHOD

### Participants

Eight undergraduate research assistants (5 females and 3 males) at the University of Central Florida coded a total of 388 age discrimination lawsuit jury verdicts and settlements. Then, 237 undergraduate students from the University of Central Florida each rated 10 of the plaintiffs' occupations by age-type, feature centrality, and perceived proportional representation. A modified version of the Spearman-Brown Prophecy Formula (Shrout & Fleiss, 1979) was used to assess the number of participants needed to reliably rate the plaintiffs' occupations. Reeves (2011) found that participants rated age-type at a lower-bound intraclass correlation (ICC) of .85 and feature centrality at a lower bound ICC of .49. Setting the aspired reliability at .90 resulted in the minimally acceptable number of raters at 2 for age-type and 10 for prototypicality. Therefore, a sample size of 10 raters per occupation was acceptable. Participants were enrolled in one or more psychology classes and were recruited through SONA Systems. Participants were removed from the dataset who responded in a manner that appeared to be invalid, such as answering all questions with the same response. After removing invalid data, 210 completed responses remained. All survey conditions in the final dataset met the required amount and included a minimum of 14 participants and a maximum of 21 participants. The final sample consisted of 86 participants who reported that they were currently employed. Ages ranged from 18 to 50 years ( $M = 20.67$ ,  $SD = 5.33$ ). There were 150 females and 60 males, including 132 Caucasians, 7 African-Americans, 15 Asians, 5 Native Hawaiian or other Pacific Islanders, and 63 Hispanics.

### Legal Cases

Real-life instances of discrimination were obtained by searching WestLawNext for employment age discrimination jury verdicts and settlements from January 1, 1995 to December 31, 2009. This search resulted in 388 jury verdicts and settlements. Each job in the legal cases was then matched to occupations listed by the U.S. Census Bureau (2000). 25 jury verdicts and settlements were removed, as no occupation was listed for the plaintiff. 159 unique occupations remained in the sample, 48 of which were rated for the variables in past research (Reeves, 2011).

### Procedure

Each age discrimination jury verdict and settlement was coded for: age of claimant, sex of claimant, race / ethnicity of claimant, employer of claimant, number of people employed by claimant's employer, job of claimant, matched U.S. Census Bureau (2000) occupation, salary of claimant, result of claim, and amount awarded to claimant (if applicable). The eight undergraduate research assistants coded a minimum of 20 and a maximum of 80 case outcomes of the 388. Then each case was reexamined by two undergraduate research assistants to check for reliability of ratings.

Undergraduate students were then recruited through SONA Systems, where they were presented with the online measures. Participants were presented with written instructions about the measures before the survey was administered, and were randomly assigned to one of two conditions for each survey completed. Respondents were not able to complete more than one condition of any survey. Each survey contained unique occupations for the measures of the

importance of stereotypically older worker features (Perry & Bourhis, 1998; Reeves, 2011) and the perceived proportion of older and younger workers in the job (Cejka & Eagly, 1999; Cleveland & Hollmann, 1990). Then a separate set of unique occupations was given for the age-type measure. The same measures were given to each group, however the occupations differed. Also, no participant was able to rate the same occupation for age-type that they rated for the other measures. Each participant then completed a demographic measure. After all measures were completed, participants were given a written debriefing and thanked.

## Measures

### Occupational Age-Type

To determine occupational age-types, a two-item age-type measure was used. Both items used a 9-point Likert-type scale. The first item asked raters to describe jobs from being typically a “younger worker’s job” (1) to an “older worker’s job” (9). The second item asked which jobs were more appropriate for younger or older workers with response options ranging from 1 (“highly more appropriate for younger workers”) to 9 (“highly more appropriate for older workers.”) This measure of age-type resulted in an alpha coefficient of .99 (Reeves, 2011), and was developed by Cleveland and Hollman (1990).

### Perceived Proportional Representation

The perceived proportional representation measure, developed by Reeves (2011), was a modified version of Cejka and Eagly’s (1999) sex distribution measure, which resulted in an

alpha coefficient of .99. For each job, this measure presented participants with the item, “to the best of your ability, identify the proportion of workers 50 years of age or older relative to workers 39 years of age or younger.” Response options ranged on 5-point Likert-type scale from 1 (“far more workers age 39 and younger”) to 5 (“far more older workers age 50 and over.”)

### Feature Centrality

In order to measure the importance of stereotypically worker features, Reeves’ (2011) modified version of Cejka and Eagly’s (1999) measure, belief in gender-stereotypic attributes’ importance to success, was utilized. This measure replaced the gender features from the original with the items in Marcus et al.’s (2011) work-related, age-based stereotype scale (WAS.) The WAS was an age stereotype measure designed specifically for the workplace, and included 24 items, divided into four dimensions. Reeves (2011) study resulted in the following alpha coefficients among the different dimensions measured: competence ( $\alpha = .98$ ), adaptability ( $\alpha = .94$ ), stability ( $\alpha = .99$ ), and warmth/friendliness ( $\alpha = .96$ ). Raters were asked to “please identify the extent to which you believe each worker feature presented in necessary to be successful in the job,” and presented with a 6-point Likert-type scale for each item (1= disagree very much, 6= agree very much.) The six items within each dimension were then averaged in order to obtain the final scores for each dimension.

### Demographics

As age bias is related to rater age (Finkelstein et al., 1995; Shore et al., 2003), gender (Connor et al., 1978), race (Crew, 1984), and national culture (Chiu et al., 2001; Levy & Langer,

1994; Perry & Parlamis, 2005), participants were asked to complete a demographic measure asking for: age, sex, race/ethnicity, birthplace, and work experience.

## RESULTS

### Data Analysis

All data were prepared in Microsoft Excel 2010 and SPSS 19.0, and analyzed in SPSS 19.0. To check the reliability of the survey data, four occupations rated in Reeves' (2011) study were randomly selected and measured. The resulting age-type, feature centrality, and perceived proportional representation variables ( $N = 40$ ) were then tested against Reeves (2011) data ( $r = .89, p < .001$ ). Additionally, internal consistency reliability was tested for the dimensions of older worker stereotypes: competence, adaptability, stability, and warmth ( $\alpha = .80$ ), and the variables measuring the age-type of the job: typical and normative age-type ( $\alpha = .95$ ).

#### How Does Age-Type Affect Legal Action?

Hypothesis 1 stated that the number of claims would be related to relationship between the older worker stereotypes and the plaintiff's occupation. Specifically, more claims were expected to be filed and result in a jury trial in occupations that were more strongly young-typed (H1a), perceived to have a low representation of older workers (H1b), and required features that were negatively associated with older workers (H1c). In order to test these hypotheses, each variable was dichotomized and a chi-square test of independence was performed.

Based on the 9-point scale used to measure age-type (1 = strongly young-typed; 9 = strongly old-typed), the age-type variable was divided into young-typed (less than five) and old-typed (more than five), with age neutral (equal to five) removed. This resulted in 237 (65.65%) instances of young-typed cases and 124 (34.35%) instances of old-typed cases (see Table 1). A

chi-square test of independence was then run to examine the frequency of old-typed and young-typed cases in the overall sample. The chi-square statistic was significant,  $X^2(1, N = 361) = 9.80, p < .01$  (see Table 2). More cases were likely to be filed and go to trial or be settled in a young-typed job than an old-typed job. Results supported hypothesis 1a.

To test hypothesis 1b, the variable measuring the perceived proportion of workers by age in the occupation was divided into younger proportion (less than three) and older proportion (more than three), with the age-neutral proportion (equal to three) removed. This resulted in 268 (76.35%) instances of younger proportion cases and 83 (23.65%) instances of older proportion cases (see Table 1). The chi-square test of independence was run to examine the relationship between instances of younger and older proportion cases in the overall sample. The relation between these variables was significant,  $X^2(1, N = 351) = 27.77, p < .0001$  (see Table 2). More cases were likely to be filed and go to trial or be settled in a job perceived to be made up of a higher proportion of younger workers than older workers. Such a finding provided support for career timetables theory (Lawrence, 1988). Results supported hypothesis 1b.

The variable measuring the importance of features negatively associated with older workers (mean importance of competence and adaptability) to the occupation was divided into lower importance (less than 3.5) and higher importance; however 99.7% of the responses were above 3.5. Therefore, the maximum response (5.66) and the minimum response (3.26) were determined, and the median score to the range (4.46) was set as neutral importance, with the cases divided as lower importance (less than 4.46) or higher importance (more than 4.46). This resulted in 34 (9.37%) instances of lower importance cases and 329 (90.63%) of higher importance cases (see Table 1). A chi-square test of independence was run to examine the

relationship between instances of lower and higher importance cases in the overall sample of responses. The relation between these variables was significant,  $X^2(1, N = 363) = 66.03, p < .0001$  (see Table 2). More cases were likely to be filed and go to trial or be settled in jobs that required features that are negatively associated with older workers. Results supported Hypothesis 1c.

### Age-Type and Legal Outcomes

Hypothesis 2 stated that the number rulings in favor of the plaintiff would be related to the relationship of the older worker stereotypes to the plaintiff's occupation. Specifically, more rulings were expected to be in favor of the plaintiff in cases where the plaintiff's occupation was more strongly young-typed, perceived to have a low representation of older workers, and required features that were negatively associated with older workers. As the dependent variable was dichotomous (win vs. lose), direct logistic regression was run to evaluate the impact of three independent variables on the likelihood that plaintiffs would win or settle their case. The independent variables were the overall age-type of the plaintiff's occupation, the perceived proportional representation of workers by age in the plaintiff's occupation, and the importance of negative older worker stereotypes to the plaintiff's occupation. The full model containing all predictors was not statistically significant,  $X^2(3, N = 363) = 1.389, n.s., p$  is greater than .05, showing that the model was not able to distinguish between the wins and losses of cases (see Table 3). Results did not support hypotheses 2a, 2b, or 2c.



## Older Worker Jobs and Amount Awarded

Research Question 1 asked if the average award granted to plaintiffs would be greater for age discrimination cases involving stereotypically older worker jobs. It was found that the total amount awarded to the plaintiff was correlated with the age-type of the job ( $r = .17, p < .05$ ). Also, the median salary was found to be correlated with both the age-type of the job ( $r = .61, p < .001$ ) and the total amount awarded to the plaintiff ( $r = .24, p < .01$ ) (see Table 4). When the amount awarded was regressed onto age-type and median salary, only median salary remained significant ( $\beta = .24, t(3) = 2.27, p < .05$ ), suggesting that the salary fully mediates the predictive relationship that age-type has on the amount awarded (see Table 5) (Baron & Kenny, 1986).

## DISCUSSION

This study was conducted to explore the relationship that age-type and its theoretical antecedents (feature centrality and perceived proportional representation) had with legal outcomes for workers who claimed to be discriminated against because of age. Specifically, the number of cases that resulted in a jury trial was highly related to the age stereotypes that were held about the job of the plaintiff. Many more cases were observed where the age-type of the job was young, the job was perceived to be made up of younger workers, and where features negatively associated with older workers were more important. However, the age-type variables did not help to predict the outcome of the case. Additionally, when plaintiffs were awarded money, the amount of money awarded was positively related to the age-type of the job.

### The Age-Type of Occupations

Drawing upon prototype matching theory (Perry, 1994; Perry & Finkelstein, 1999) and the career timetables perspective (Shore & Goldberg, 2005), this study sought to quantify age stereotypes associated with each of the occupations of the plaintiffs. This study did so by utilizing methods employed by Reeves (2011), and resulted in data describing the degree to which 113 occupations were age-typed (see Table 6). As in Reeves (2011), this table was presented so that researchers can further identify the degree to which age stereotypes are associated with specific occupations. The table was ordered by age-type from youngest to oldest (5 being neutral), and also includes data describing the perceived proportional representation of

workers in the job and the importance of specific negative (competence and adaptability) and positive (stability and warmth) older worker features to the job.

### Legal Outcomes of Age Discrimination

By quantifying the age-type of occupations, this study was able to establish a relationship that each of the negative age stereotypes associated with certain jobs had with legal outcomes. The number of claims was found to be significantly greater in jobs that a) were young-typed, b) were perceived to be made up of a low representation of older workers, and c) more strongly required features that were negatively associated with older workers. In fact, over 99.7% of the cases were from jobs that required (scored above 3.5 on a scale from 1 – 6) these negatively associated features. Even once the median score was assessed based on the range in the sample (4.46) still over 90.63% of the cases were from occupations scored above the median (see Table 1). Such a finding provided support for prototype matching theory (Perry, 1994), as the mismatch of the features and the worker to the job were related.

The age-type variables, however, were not found to be helpful in predicting the actual outcome of the case (win vs. loss) (see Table 3). Clermont and Eisenberg (1998) noted that treating law cases as dichotomous variables may not provide a complete story, and explained that only formal wins or losses are reported. Scenarios do exist when the plaintiff may lose, however their case may have had other positive effects. Additionally a win may result in an award that does not appropriately compensate the claimant. Furthermore, most cases that have a clear outcome will often settle, leaving a large percentage of cases that are ambiguous in nature to go

to trial (Clermont & Eisenberg, 1998). Such research may explain, in part, why no relationship was found.

Although support was not found between the variables and actual outcomes of the case, the amount of money awarded to the claimant was related to the age-type and the median salary of the occupation. As the age-type of the job increased, more money was awarded to the plaintiff presumably because older age-typed jobs were associated with higher salary (see Table 4). These findings supported the research on age-type, as Cleveland and Hollmann (1990) found that older age-typed jobs were associated with more value, prestige, and salary.

### Limitations

#### Legal Cases

While the sample of cases included all age discrimination cases found that went to a jury trial over a 15 year period, biases may have existed that distorted the sample. For example, the sample of cases was restricted to only federal courts. Additionally, defendants were very likely to have settled cases that were clearly in the plaintiff's favor before ever reaching trial. Such cases were also excluded from the sample. Clermont, and Eisenberg (1998) also found that removal jurisdiction (the legal process where an out of state defendant can move a case to a federal court from a state court) has a negative effect on case outcome (36.77% win rate among removed cases, 57.97% overall win rate). While such limitations do exist, legal cases that go through jury trial are still a valuable sample to explore. The cost associated with such trials is

evident, and researchers and companies should hold an interest in understanding how and in what situations age stereotypes associated with jobs relate to legal outcomes.

### Participants

The use of a student sample to measure age stereotypes may reduce the external validity of findings. Additionally, only 40% of the participants responded that they were employed. Using a student sample to measure age-related stereotypes may have inherent weaknesses. In fact, research has found (e.g. Barr & Hitt, 1986; Singer & Bruhns, 1991) that students tend to make different decisions than managers in selection scenarios. Barr and Hitt (1986) do caution that it cannot be assumed that such differences will exist in other domains. Results from the survey, however, did appear reliable and were found to be consistent with prior research (Reeves, 2011).

### Directions for Future Research

#### Age-type of Jobs

Future research should seek to continue testing age-type of jobs with a sample made up of a more diverse age range. Gathering data with such a sample would overcome biases that a younger sample may have regarding older worker stereotypes. Examining differences in responses between groups of students and the general population would also be valuable. Such research would help to determine if differences exist regarding measurements of age related stereotypes among occupations.

## EEOC Outcomes

Few employment discrimination cases result in trial outcomes. Data gathered from the Administrative Office of the U.S. Courts showed that of all Federal employment discrimination civil claims from 2002 – 2011 ( $N = 151,963$ ), only 3.19% proceeded to a trial by jury (see Table 7). Such an outcome is not an anomaly; in fact, 1.2% of all federal civil claims ( $N = 2,614,892$ ) over the same period of time resulted in a trial by jury (see Table 7). Employment discrimination litigation is unique, however, in that workers are required to file a complaint with either the US Equal Employment Opportunity Commission (EEOC) or a local Federal Employment Protection Agency (FEPA) before going on to court (Hirsh, 2008). At the end of the EEOC's administrative process, the complaint is resolved either with merit (discrimination was found) or without merit (no discrimination was found) (McMahon, West, Mansouri, & Belongia, 2005). As this investigation is the first step in the litigation process and the EEOC is the primary enforcer of Title VII, future research examining a sample of EEOC decisions may provide a clearer account of discrimination. In fact, such research has been completed regarding discrimination of workers with diabetes (McMahon et al., 2005). Employing methods as in McMahon et al. (2005), such a study has the potential to provide another group of cases with which to test outcomes against, further explaining the relationship that age stereotypes have with actual worker outcomes.

## Litigation Outcomes

When conducting legal outcomes research regarding workplace age discrimination, utilizing a more holistic method to measure outcomes, compared to a dichotomous win vs. lose scenario would be of value. The legal process is complex and lengthy, and many factors affect the outcome of a case from EEOC complaint to trial. Using a sequential variable, such as Nielsen, Nelson, and Lancaster's (2005) items (1 = dismissed, 2 = early settlement, 3 = summary judgment loss for plaintiff, 4 = late settlement, 5 = trial win for plaintiff, and 6 = trial loss for plaintiff) would provide a more accurate account of the litigation process. Such a method may better link the case outcome to the actual discriminatory behavior.

## Conclusion

This study examined the relations between legal outcomes and age-type, perceived proportional representation, and feature centrality. Age-type of the job and perceived proportional representation were found to be negatively related to the number of cases that went to trial. When the job was young age-typed and perceived to be made up of more young workers, more cases survived to trial. Additionally, feature centrality (specifically the importance of negatively associated older worker features to the job) was positively related to the number of cases that went to trial. Finally, once the plaintiff was awarded money, the amount awarded was positively associated with the age-type of the job. These findings provided support for the age-type literature, prototype matching theory, and career timetables perspective, further linking theory to actual outcomes of discrimination.





## **APPENDIX A: MEASURES**

*Age Discrimination Claim Coding Sheet*

Case Number: \_\_\_\_\_

Case Identification: (i.e. Smith vs. Jones) \_\_\_\_\_

Age of Claimant: \_\_\_\_\_

Sex of Claimant:        1. Male                    2. Female

Race / Ethnicity of Claimant:

1. White (Non-Hispanic)
2. Black or African American (Non-Hispanic)
3. Asian
4. American Indian or Alaska Native
5. Native Hawaiian or Other Pacific Islander
6. Hispanic or Latino
7. Other: (Specify) \_\_\_\_\_

Employer of Claimant: \_\_\_\_\_

Number of People Employed: \_\_\_\_\_

Which level of Court was the Case Decided at?

1. Local Trial Court
2. State Appeals Court
3. Highest State Appeals Court
4. US District Courts
5. US Courts of Appeals
6. Supreme Court of the United States

Job of Claimant: \_\_\_\_\_

Matched U.S. Census Bureau Occupation (Please find the closest matches, up to 3):

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

Salary of Claimant (if given): \_\_\_\_\_

Result of Claim (circle):    1. Won        2. Did not Win        3. Other \_\_\_\_\_

Amount Awarded to Claimant: \_\_\_\_\_

### *Occupational Age-Type (With Sample Occupations)*

1. Please circle the number indicating the degree to which the following jobs are typically a younger person's job or an older person's job.

	Younger worker's job								Older worker's job
	1	2	3	4	5	6	7	8	9
1 Secretaries and Administrative Assistants	1	2	3	4	5	6	7	8	9
2 Retail Salespersons	1	2	3	4	5	6	7	8	9
3 Driver/Sales Workers and Truck Drivers	1	2	3	4	5	6	7	8	9
4 Elementary and Middle School Teachers	1	2	3	4	5	6	7	8	9
5 Cashiers	1	2	3	4	5	6	7	8	9
6 First-Line Supervisors/Managers of Retail Sales Workers	1	2	3	4	5	6	7	8	9
7 Registered Nurses	1	2	3	4	5	6	7	8	9
8 Customer Service Representatives	1	2	3	4	5	6	7	8	9
9 Janitors and Building Cleaners	1	2	3	4	5	6	7	8	9
10 Laborers and Freight, Stock, and Material Movers, Hand	1	2	3	4	5	6	7	8	9
11 Cooks	1	2	3	4	5	6	7	8	9
12 Waiters and Waitresses	1	2	3	4	5	6	7	8	9
13 Nursing, Psychiatric, and Home Health Aides	1	2	3	4	5	6	7	8	9
14 Accountants and Auditors	1	2	3	4	5	6	7	8	9
15 Bookkeeping, Accounting, and Auditing Clerks	1	2	3	4	5	6	7	8	9
16 First-Line Supervisors/Managers of Office and Administrative Support Workers	1	2	3	4	5	6	7	8	9
17 Office Clerks, General	1	2	3	4	5	6	7	8	9
18 Carpenters	1	2	3	4	5	6	7	8	9
19 Sales Representatives, Wholesale and Manufacturing	1	2	3	4	5	6	7	8	9
20 Other Production Workers, Including Semiconductor Processors and Cooling and Freezing Equipment Operators	1	2	3	4	5	6	7	8	9
21 Child Care Workers	1	2	3	4	5	6	7	8	9
22 Stock Clerks and Order Fillers	1	2	3	4	5	6	7	8	9
23 First-Line Supervisors/Managers of Production and Operating Workers	1	2	3	4	5	6	7	8	9
24 Miscellaneous Assemblers and Fabricators	1	2	3	4	5	6	7	8	9
25 Construction Laborers	1	2	3	4	5	6	7	8	9
26 Maids and Housekeeping Cleaners	1	2	3	4	5	6	7	8	9
27 Receptionists and Information Clerks	1	2	3	4	5	6	7	8	9
28 Postsecondary Teachers	1	2	3	4	5	6	7	8	9
29 Chief Executives	1	2	3	4	5	6	7	8	9
30 Marketing and Sales Managers	1	2	3	4	5	6	7	8	9

2. Please circle the number indicating the degree to which the following jobs are more appropriate for younger or older workers.

	Highly more appropriate for younger workers							Highly more appropriate for older workers	
	1	2	3	4	5	6	7	8	9
1 Secretaries and Administrative Assistants	1	2	3	4	5	6	7	8	9
2 Retail Salespersons	1	2	3	4	5	6	7	8	9
3 Driver/Sales Workers and Truck Drivers	1	2	3	4	5	6	7	8	9
4 Elementary and Middle School Teachers	1	2	3	4	5	6	7	8	9
5 Cashiers	1	2	3	4	5	6	7	8	9
6 First-Line Supervisors/Managers of Retail Sales Workers	1	2	3	4	5	6	7	8	9
7 Registered Nurses	1	2	3	4	5	6	7	8	9
8 Customer Service Representatives	1	2	3	4	5	6	7	8	9
9 Janitors and Building Cleaners	1	2	3	4	5	6	7	8	9
10 Laborers and Freight, Stock, and Material Movers, Hand	1	2	3	4	5	6	7	8	9
11 Cooks	1	2	3	4	5	6	7	8	9
12 Waiters and Waitresses	1	2	3	4	5	6	7	8	9
13 Nursing, Psychiatric, and Home Health Aides	1	2	3	4	5	6	7	8	9
14 Accountants and Auditors	1	2	3	4	5	6	7	8	9
15 Bookkeeping, Accounting, and Auditing Clerks	1	2	3	4	5	6	7	8	9
16 First-Line Supervisors/Managers of Office and Administrative Support Workers	1	2	3	4	5	6	7	8	9
17 Office Clerks, General	1	2	3	4	5	6	7	8	9
18 Carpenters	1	2	3	4	5	6	7	8	9
19 Sales Representatives, Wholesale and Manufacturing	1	2	3	4	5	6	7	8	9
20 Other Production Workers, Including Semiconductor Processors and Cooling and Freezing Equipment Operators	1	2	3	4	5	6	7	8	9
21 Child Care Workers	1	2	3	4	5	6	7	8	9
22 Stock Clerks and Order Fillers	1	2	3	4	5	6	7	8	9
23 First-Line Supervisors/Managers of Production and Operating Workers	1	2	3	4	5	6	7	8	9
24 Miscellaneous Assemblers and Fabricators	1	2	3	4	5	6	7	8	9
25 Construction Laborers	1	2	3	4	5	6	7	8	9
26 Maids and Housekeeping Cleaners	1	2	3	4	5	6	7	8	9
27 Receptionists and Information Clerks	1	2	3	4	5	6	7	8	9
28 Postsecondary Teachers	1	2	3	4	5	6	7	8	9
29 Chief Executives	1	2	3	4	5	6	7	8	9
30 Marketing and Sales Managers	1	2	3	4	5	6	7	8	9

*Sample Feature Centrality Items with Perceived Proportional Representation Embedded*

Please identify the extent to which you believe the below worker features are necessary to be successful in the job of: Secretary and Administrative Assistant

	Disagree				Agree very	
	very much				much	
	1	2	3	4	5	6
1 Competence	1	2	3	4	5	6
2 High drive for achievement	1	2	3	4	5	6
3 Capable	1	2	3	4	5	6
4 High degree of performance	1	2	3	4	5	6
5 Productive	1	2	3	4	5	6
6 Skillful in job	1	2	3	4	5	6
7 Suitable for training	1	2	3	4	5	6
8 Potential for development	1	2	3	4	5	6
9 Fast learning	1	2	3	4	5	6
10 Flexible	1	2	3	4	5	6
11 Ability to learn new things	1	2	3	4	5	6
12 Responsive to training	1	2	3	4	5	6
13 Loyalty	1	2	3	4	5	6
14 Devotion	1	2	3	4	5	6
15 Dedication to work and professional-ism	1	2	3	4	5	6
16 Stability	1	2	3	4	5	6
17 Dedication to the job	1	2	3	4	5	6
18 Ability and willingness to stay with the company for the long run	1	2	3	4	5	6
19 Warmheartedness	1	2	3	4	5	6
20 Warm personality	1	2	3	4	5	6
21 Likability	1	2	3	4	5	6
22 Cold personality	1	2	3	4	5	6
23 Kindness	1	2	3	4	5	6
24 Friendliness	1	2	3	4	5	6

To the best of your ability, identify the proportion of workers 50 years of age or older relative to workers 39 years of age or younger in the job of: Secretary and Administrative Assistant

Younger than  
or equal to age 39  
  
Far more workers  
age 39 and younger

Equal to  
or over age 50  
  
Far more workers  
age 50 and over

1                      2                      3                      4                      5

### *Demographics Measure*

Please answer the following questions about yourself to the best of your knowledge. If you do not know the answer to the question or the question does not apply to you, please write "N/A" to indicate it is not applicable.

1. How old are you? \_\_\_\_\_
2. What is your sex? (circle one)
  1. Male
  2. Female
3. What is your race or ethnic background? (check next to each race or ethnic group you identify with; if you choose "Other" as your response, please specify your race or ethnic group)
  1. White (Non-Hispanic)
  2. Black or African American (Non-Hispanic)
  3. Asian
  4. American Indian or Alaska Native
  5. Native Hawaiian or Other Pacific Islander
4. If you chose more than one race or ethnic group in the previous question, which one do you most identify with?
  1. White (Non-Hispanic)
  2. Black or African American (Non-Hispanic)
  3. Asian
  4. American Indian or Alaska Native
  5. Native Hawaiian or Other Pacific Islander
  6. Hispanic or Latino
  7. Other: (specify)\_\_\_\_\_
5. Where were you born? (City, State; Country if outside the US) \_\_\_\_\_
6. Please indicate if there is a country different from the country in which you were born that you identify with more or it has more cultural influence on you? \_\_\_\_\_
7. Do you work? If so, what is your job and job title? \_\_\_\_\_

## **APPENDIX B: TABLES**

*Table 1:  
Categorical Frequency of Cases by Age-Type Variables*

	Age-Type		Perceived Proportion		Importance of Negative Features	
	Young	Old	Younger	Older	Lower	Higher
Frequency	237	124	268	83	34	329
Percentage	65.65%	34.35%	76.35%	23.65%	9.37%	90.63%

*Note:*

*Age-type on a scale of 1 - 9. Young-typed < 5; Old-typed > 5*

*Perceived proportion of age of workers on a scale of 1 - 6. Younger proportion < 3; Older proportion > 3*

*Importance of negative features on a scale of 3.26 - 5.66. Lower importance < 4.46; Higher importance > 4.46*



*Table 2:*  
*Chi Squared Analysis of Categorical Frequency of Cases by Age-Type Variables*

	Pearson Chi-Square	<i>N</i>	<i>df</i>	Significance
Age-Type	9.80	361	1	p < .01
Perceived Proportion	27.77	351	1	p < .0001
Importance of Negative Features	66.03	363	1	p < .0001

*Table 3:*  
*Binary Logistic Regression Analysis for Variables Predicting Outcome of Case*

Variable	<i>B</i>	<i>SE B</i>	Significance
Importance of Negative Features	0.33	0.29	0.26
Perceived Proportion	-0.14	0.30	0.65
Age-Type	0.04	0.22	0.84

*Note:*

*N = 363*

*For outcome of case, 0 = Lose, 1 = Win*

*$\chi^2 (3, N = 363) = 1.39, n.s., p$  is greater than .05*

*Cox and Snell  $R^2 = .004$ ; Nagelkerke  $R^2 = .005$*

*Table 4:*  
*Zero-Order Correlation Matrix among Age-Type, Salary, and Award*

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3
1. Age-Type	363	4.67	0.80	-	0.61***	0.17*
2. Median Salary	363	62768.07	32509.46		-	0.24**
3. Amount Awarded	161	1115528.60	3267895.53			-

*Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$  (2 tailed)*

*Table 5:  
Summary of Hierarchical Regression Analysis for Variables Predicting Amount Awarded (N = 161)*

Variable	B	SE B	$\beta$
Step 1			
Age-Type	674238.45	311454.11	.17*
Step 2			
Age-Type	9477.70	424839.89	0
Salary (Median)	24.40	10.76	.24*

*Note:  $R^2 = .19$  for step 1;  $\Delta R^2 = .40$  for step 2; ( $ps < .01$ ) \* $p < .05$*

*Table 6:  
Descriptive Statistics*

Occupation Title	Age-Type	Perceived Proportional Representation	Feature Centrality Negative (Competence)	Feature Centrality Negative (Adaptability)	Feature Centrality Positive (Stability)	Feature Centrality Positive (Warmth)
Combined Food Preparation and Serving Workers, including Fast Food	2.66	1.36	4.19	4.89	4.29	4.79
Gaming Dealers	2.68	1.53	4.12	4.26	3.68	4.18
Reporters and Correspondents	3.14	2.00	5.00	4.89	4.87	4.27
Desktop Publishers	3.21	2.50	4.93	4.68	4.46	3.57
Helpers--Production Workers	3.26	2.26	4.39	4.70	4.24	3.87
Graphic Designers	3.30	1.76	5.14	4.94	4.70	3.86
First-Line Supervisors of Food Preparation and Serving Workers	3.32	2.47	4.55	4.93	4.82	4.09
Concierges	3.37	1.71	4.73	4.77	4.68	5.18
Food Preparation Workers	3.47	2.67	3.93	3.98	3.46	3.34
Gaming Supervisors	3.55	2.47	4.59	4.82	4.68	3.98
Meeting, Convention, and Event Planners	3.57	2.05	5.14	4.97	5.13	5.18
Photographers	3.58	2.29	5.12	5.11	5.02	4.35
Team Assemblers	3.66	2.61	4.73	4.78	4.43	4.31
Mobile heavy equipment mechanics, except engines	3.68	2.47	5.13	5.03	4.57	3.54
Couriers and Messengers	3.69	2.12	4.38	4.40	4.05	4.01
Millwrights	3.69	2.68	5.01	4.85	4.56	3.73
Surveyors	3.71	2.24	4.99	4.84	4.22	3.95
Police, Fire, Ambulance Dispatchers	3.75	2.12	5.18	5.15	5.02	4.48
Personal Care Aides	3.78	2.06	4.88	5.08	5.20	5.71
Computer network support specialist	3.82	2.21	5.42	5.07	4.82	3.76

Procurement Clerks	3.95	2.36	4.45	4.54	4.18	4.12
Refuse and recyclable material collector	3.96	2.53	3.55	3.56	3.68	3.63
Tool and Die Makers	3.97	3.00	4.83	4.82	4.39	3.20
Billing, Cost, and Rate Clerks	4.00	2.79	4.77	4.86	4.50	4.16
Radio and Television Announcers	4.00	2.06	4.68	4.83	4.87	5.14
Registered Nurses	4.08	2.44	5.63	5.55	5.18	5.27
Market Research Analysts and Marketing Specialists	4.09	2.84	5.35	5.19	5.16	4.32
Broadcast News Analysts	4.12	2.00	5.39	5.36	5.41	4.89
Marking Clerks	4.15	2.11	3.94	4.21	3.71	3.73
Telephone Installers Installers and Repairers	4.15	2.44	4.65	4.69	4.32	3.73
Electrical and Electronic Equipment Assemblers	4.18	2.83	5.43	5.33	4.62	3.56
Security Guards	4.23	2.62	4.78	4.49	4.75	3.17
File Clerks	4.25	2.35	4.32	4.51	4.16	3.48
Storage and Distribution Managers	4.25	2.79	4.21	4.39	4.10	4.00
Administrative services managers	4.29	3.26	5.23	5.11	4.78	3.96
Training and Development Specialists	4.31	3.21	5.14	5.24	4.86	4.76
Human Resources Specialists	4.34	2.56	4.73	4.78	5.01	4.97
Occupational Therapists	4.36	2.33	5.04	5.18	4.86	5.39
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	4.38	3.13	4.49	4.54	4.11	3.77
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	4.45	2.35	4.42	4.49	3.86	3.38
Information technology project managers	4.47	2.53	5.19	5.12	5.10	4.56
Air Traffic Controllers	4.50	2.88	5.27	5.30	5.13	4.21
Education Teachers, Postsecondary	4.53	2.82	5.38	5.22	5.27	4.80
Sales Agents, Financial Services	4.53	2.82	5.40	5.04	5.17	4.80
Sales Managers	4.53	2.29	5.19	5.34	5.04	4.79

First-Line Supervisors of Retail Sales Workers	4.57	2.68	4.95	4.87	4.75	4.81
Arts Directors	4.59	2.63	5.05	4.71	4.91	4.44
Medical Equipment Repairers	4.61	2.35	5.42	5.08	4.51	3.65
Bill and Account Collectors	4.62	3.00	4.66	4.65	4.34	3.64
Loss Prevention Managers	4.67	2.62	5.02	4.84	4.70	3.76
Social Workers	4.67	2.47	4.84	5.15	5.15	5.13
Architectural and Engineering Managers	4.67	3.00	5.58	5.36	5.18	4.48
Security Managers	4.68	2.61	5.14	4.97	4.99	3.72
Computer Hardware Engineer	4.68	2.58	5.35	5.18	5.06	4.11
Executive Secretaries and Executive Administrative Assistants	4.68	2.68	5.04	5.10	5.07	4.96
Machinists	4.70	2.52	5.17	4.91	4.60	3.44
Etchers and Engravers	4.71	3.58	4.89	4.75	4.61	3.53
Technical Directors/Managers	4.71	2.61	5.29	5.06	4.84	4.23
Management Analysis	4.71	2.60	4.88	4.82	4.66	4.78
Forensic Scientist Technician	4.75	2.42	5.39	5.18	5.17	3.74
Industrial Production Managers	4.75	3.06	4.98	5.07	4.95	4.44
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	4.76	3.22	4.86	4.68	3.86	3.19
Area, Ethnic, and Cultural Studies Teachers, Postsecondary	4.81	3.24	5.17	5.02	5.16	4.82
First-Line Supervisors of Office and Administrative Support Workers	4.81	2.94	5.11	5.06	4.94	4.64
Property, Real Estate, and Community Association Managers	4.82	3.19	5.08	4.85	5.23	4.70
Loan Officers	4.83	2.53	5.11	4.91	4.67	4.10
Education Administrators, Elementary and Secondary School	4.84	2.86	5.51	5.31	5.55	5.65
Supervisors, Police and Detectives	4.85	2.78	5.26	5.26	5.19	3.39
Manufacturing engineers	4.87	2.93	5.45	5.18	5.05	4.29
Production, Planning, and Expediting Clerks	4.88	3.00	4.84	4.76	4.71	4.37

Human Resources Managers	4.91	2.59	4.72	4.86	4.70	4.66
Airline Pilots, Copilots, and Flight Engineers	4.92	2.86	5.64	5.43	5.45	4.44
Manufacturing Production Technicians	4.93	3.11	4.75	4.64	4.57	3.82
Elevator Installers and Repairers	4.97	3.14	5.06	4.71	4.38	3.14
Assemblers and Fabricators	4.97	3.06	4.97	4.80	4.78	3.50
Auditors	4.97	3.11	5.51	5.08	5.19	3.59
Claims Adjusters, Examiners, and Investigators	4.97	2.82	5.01	5.05	4.89	3.96
First-Line Supervisors of Correctional Officers	5.00	3.06	5.04	5.03	4.88	3.38
Title Examiners, Abstractors, and Searchers	5.00	2.47	4.82	4.61	4.48	3.82
Computer and Information Systems Manager	5.03	2.65	5.20	5.19	4.82	3.58
Construction and Building Inspectors	5.06	3.18	5.01	5.06	4.76	3.72
Construction managers	5.06	3.47	5.19	5.17	5.13	4.18
Computer Science Teachers, postsecondary	5.06	3.44	5.00	4.55	5.09	4.30
First-line Supervisors of Housekeeping and Janitorial Workers	5.07	3.13	4.03	4.41	3.78	3.72
First-line Supervisors of Production and Operating Workers	5.12	3.13	4.84	4.65	4.94	4.20
Commercial Pilots	5.13	3.29	5.45	5.36	5.23	4.17
Civil Engineers	5.16	2.56	5.37	5.24	4.96	3.47
Mechanical Engineers	5.16	3.29	5.68	5.39	5.25	3.83
English Language and Literature Teachers, Postsecondary	5.18	2.95	5.29	5.24	5.39	5.00
Chemists	5.21	2.95	5.43	5.36	5.35	3.61
Clinical Research Coordinators	5.21	3.33	4.88	4.91	4.67	4.36
Transportation Security Screeners	5.23	2.24	4.85	4.71	4.67	3.48
Purchasing Managers	5.26	2.06	5.47	5.18	5.05	4.93
Electrical Drafters	5.29	2.41	5.44	5.31	4.70	3.96
Electricians	5.29	3.39	5.00	4.94	4.50	3.57
Education Administrators, Postsecondary	5.29	2.72	5.49	5.31	5.11	5.15



Medical Records and Health Information Technicians	5.30	2.57	5.31	4.94	4.84	4.33
Materials Engineers	5.32	2.83	5.28	5.19	4.75	3.74
Social and Community Service Managers	5.32	2.81	5.00	4.84	5.13	4.65
Municipal Clerks	5.35	3.28	4.68	4.64	4.86	4.10
Postsecondary Teachers	5.38	2.67	5.30	4.99	5.04	4.98
Loan Interviewers and Clerks	5.43	2.73	4.59	4.61	4.28	4.16
Career/Technical Education Teachers, Postsecondary	5.48	3.20	4.74	4.87	4.87	4.90
Environmental Science Teachers, Postsecondary	5.64	3.47	5.13	5.10	4.90	4.72
Payroll and Timekeeping Clerks	5.67	3.00	4.96	4.48	4.56	3.83
Treasurers and Controllers	5.67	2.84	5.04	5.05	4.96	3.97
Top Executives	5.69	3.79	5.55	5.21	5.23	4.41
Chemistry Teachers, Postsecondary	5.75	3.21	5.32	5.04	5.22	4.48
Agricultural Inspectors	5.97	3.57	4.65	4.53	4.34	3.68
General and Operations Managers	5.97	3.38	5.36	5.17	5.21	4.56
Anesthesiologists	6.09	3.17	5.57	5.31	5.44	4.91
Family and General Practitioners	6.18	3.29	5.81	5.48	5.64	5.61
Obstetrician and Gynecologists	6.24	2.94	5.79	5.50	5.49	5.73
Neurologists	6.26	3.06	5.70	5.61	5.41	4.75
Directors, Religious Activities Education	6.32	3.74	4.65	4.53	4.87	5.05

*Note: Order based on mean age-type values from 1 (most young-typed) to 9 (most old-typed), with 5 as age-neutral. Perceived proportional representation is on a 5 point scale from 1 (far more younger workers) to 5 (far more older workers). Feature centrality dimensions are measured on a 6 point scale, 1 indicating the dimension is not very important to the job and 6 indicating the dimension is highly important to the job.*

*Table 7:  
Federal Civil Case Outcomes, 2002 – 2011*

Year	All Civil Cases			Employment Discrimination Cases		
	Total	Trial by Jury	Percent Reaching Jury Trial	Total	Trial by Jury	Percent Reaching Jury Trial
2002	248,377	3,112	1.25%	18,338	628	3.42%
2003	266,854	2,811	1.05%	18,362	607	3.31%
2004	241,184	2,622	1.09%	17,899	535	2.99%
2005	260,155	2,600	1.00%	17,749	521	2.94%
2006	280,492	2,464	0.88%	16,318	504	3.09%
2007	254,349	2,411	0.95%	14,297	419	2.93%
2008	237,631	8,648	3.64%	13,072	398	3.04%
2009	237,802	2,225	0.94%	12,197	333	2.73%
2010	285,126	2,280	0.80%	11,538	325	2.82%
2011	302,922	2,254	0.74%	12,193	571	4.68%
<b>Total</b>	<b>2,614,892</b>	<b>31,427</b>	<b>1.20%</b>	<b>151,963</b>	<b>4,841</b>	<b>3.19%</b>

*Note: Data gathered from annual documents from the Administrative Office of the U.S. Courts (2002 – 2011), “Table C-4, U.S. District Courts – Civil Cases Terminated, by Nature of Suit and Action Taken.”*

## **APPENDIX C: IRB APPROVAL LETTER**



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### Approval of Exempt Human Research

From: **UCF Institutional Review Board #1  
FWA00000351, IRB00001138**

To: **Nicholas A. Smith and Co-PI: Barbara Fritzsche**

Date: **June 22, 2012**

Dear Researcher:

On 6/22/2012, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
Project Title: Perceptions of Occupations  
Investigator: Nicholas A Smith  
IRB Number: SBE-12-08509  
Funding Agency:  
Grant Title:  
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 06/22/2012 10:37:56 AM EDT

A handwritten signature in black ink that reads 'Joanne Muratori'.

IRB Coordinator

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