

**Job Satisfaction and Employee Turnover Intention:  
What does Organizational Culture Have To Do With It?**

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## Table of Contents

Abstract .....	3
Introduction.....	4
Literature Review.....	5
Job Satisfaction and Turnover Intention .....	5
Job Satisfaction and Culture .....	6
Job Satisfaction, Culture and Turnover Intention .....	9
Summary .....	10
Data .....	11
Sample and Data Collection.....	11
Descriptive Statistics.....	12
Methodology and Results .....	17
Initial Model.....	17
Results: Model 1 .....	18
Results: Model 2 .....	19
Results: Model 3 .....	23
Results: Model 4 .....	24
Final Model.....	26
Results: Model 5 .....	26
Discussion .....	27
Conclusion .....	30
Works Cited .....	33
Appendix.....	36

## **Abstract**

This study explores the relationship between job satisfaction and employee turnover intention in the context of organizational culture, using data from the Quality of Work Life (QWL) module, a sub-section of the General Social Survey (GSS). Job satisfaction, the independent variable, assesses overall job satisfaction, while the dependent variable, turnover intention, measures intent to find a new job, with another employer, within the next year. While organizational culture varies by industry, employer and even by department, it is important in all working environments. Organizational culture influences employee's job satisfaction, and in prior studies, high job satisfaction has been associated with better job performance. High performing cultures have also been shown to produce excellent results, attract, motivate, and retain talented employees, and adapt readily to change. Job satisfaction is inversely related to turnover intention and low turnover has been shown to increase organizational productivity and performance. This study finds that job satisfaction is inversely associated with turnover intention and that organizational culture moderates the magnitude of this relationship. Sub-group analyses reveal that job satisfaction is more predictive of turnover intention for younger workers. These findings have significant implications for the changing composition of workforce due to the aging population.

## **Introduction**

For the past few decades, employee retention has been of interest to researchers and employers in various fields. To remain competitive in the rapidly expanding global economy and to keep pace with technological advances requires a workforce with robust institutional knowledge; therefore, employee retention is of great importance to business and academic communities (Benko & Weisberg, 2007; Becker, 2007; The Future of Work 2020, 2007). Prior research has shown that job satisfaction is strongly and inversely associated with employee's intention to leave an organization (Egan, Yang & Bartlett, 2004; Lambert, Hogan & Barton, 2001; MacIntosh & Doherty, 2010; Schwepker, 2001; Silverthorne, 2004). In other words, more satisfied employees are less likely to seek a new job, with a new employer. For this reason, studying the factors associated with job satisfaction is practical and valuable. Two general categories are believed to influence employee job satisfaction: demographic characteristics and organizational culture. Demographic characteristics include age, gender, education, income, and tenure of employment. Organizational culture is difficult to define succinctly, but it is generally described as the shared thoughts, feelings and behaviors of a group (Christensen, 1999; Schein, 1990; Schein, 1996; Sheridan, 1992; Sims, 2002). Research in a variety of settings suggests that organizational culture has a meaningful influence on job satisfaction and, in turn, employee turnover intention.

The purpose of this study is to explore the relationship between job satisfaction and employee turnover intention in the context of organizational culture. More specifically, the following research questions guided this study:

- Does increased job satisfaction predict decreased employee turnover intention?

- Do demographic characteristics, such as, age, influence the relationship between job satisfaction and turnover intention?
- Does the level of satisfaction with organizational culture moderate the relationship between job satisfaction and employee turnover intention?
  - Does increased satisfaction with organizational culture decrease employee turnover intention?

While most studies exploring the relationship between job satisfaction and turnover intention have examined employees in a single or handful of occupations, few have explored this relationship across a variety of industries and occupations. This analysis contributes to the literature by examining the relationship between job satisfaction and employee turnover intention on a nationally representative sample of adult workers, over a time-span of eight years. Additionally, this study explores how satisfaction with organizational culture influences job satisfaction, and its subsequent impact on employee turnover intention.

## **Literature Review**

### *Job Satisfaction and Turnover Intention*

Researchers have developed a variety of conceptual frameworks to model the turnover process. As noted by Lambert et al. (2001), scholars speculate that employee turnover can be predicted using comprehensive measures of job satisfaction; otherwise stated, high job satisfaction is associated with low employee turnover. Moreover, research shows that the relationship between job satisfaction and actual employee turnover is moderated by *intentions*. Schwepker (2001) noted that positive and statistically significant relationships have been reported in dozens of studies exploring leaving intentions and actual leaving behavior. In other words, intention to leave a job is an immediate precursor to actually leaving. For this reason,

turnover intention has been incorporated into most employee turnover models in the published literature. Turnover intention is defined as an employee's intent to find a new job with another employer within the next year. Generally, it is accepted that job satisfaction and employee turnover *intention* are inversely related.

The established, inverse relationship between job satisfaction and employee turnover intention is very important to research in organizational behavior. One of the main goals of turnover research is to measure actual employee turnover, however, employee turnover data is often inaccessible to researchers. Frequently, this data is unavailable because it is not accurately or consistently collected. Thus, researchers must rely employee turnover *intention* as a proxy for actual employee turnover. After all, stated Lambert et al. (2001), measuring turnover intention is the next best method, because it is the variable that consistently and immediately precedes actual employee turnover. Throughout this paper, employee turnover and turnover intention will be used interchangeably.

### *Job Satisfaction and Culture*

Now that the relationship between job satisfaction and turnover intention has been discussed, the relationship between job satisfaction and organizational culture will be explored. The conceptual model presented herein proposes that satisfaction with organizational culture moderates the relationship between job satisfaction and employee turnover intention (see Figure 1). In other words, if there are two employees with equal job satisfaction but one employee has high workplace cultural satisfaction and the other has low workplace cultural satisfaction, then the employee with high workplace cultural satisfaction will have lower turnover intention. Since no strong consensus has been formed on a definition of job satisfaction or organizational culture, these concepts are first defined and discussed.

Job satisfaction has been defined as “an employee’s affective reactions to a job based on comparing desired outcomes with actual outcomes (Egan et al., 2004, Pg. 5).” To an extent, employee job satisfaction is a reflection of how well an employee’s expectations of a job are aligned with the reality of their work (Lund, 2003). Employees assess job satisfaction based on intrinsic job elements, such as feelings of purpose at work, and extrinsic job elements, such as compensation. The level of employee job satisfaction reflects the cumulative level of fulfilled job expectations. That is, employees expect their job to provide a mix of these elements, for which each employee has distinct preferential values (Egan et al., 2004). While the range and importance of these preferences vary across employees, when the accumulation of unsatisfied expectations reaches a critical threshold there is less job satisfaction and greater possibility of dissatisfied employees, which results in greater employee turnover.

Organizational culture has been identified as an important aspect of organizational behavior and it is useful in elucidating how organizations function (Silverthorne, 2004). There exists a consensus regarding the existence of "culture" in every organization, although, the concept of culture connotes a certain degree of imprecision and it is difficult to find a measure of agreement (Schrodt, 2002; Schein, 1990). Organizational psychologist, Edgar Schein (1996), suggested: “A culture is a set of basic tacit assumptions about how the world is and ought to be that a group of people share and that determines their perceptions, thoughts, feelings, and to some degree, their overt behavior (Pg. 3).” Organizational culture is the values, beliefs and principles underpinning an organization’s management structure, as well as the customs and conduct that represent and reinforce those basic principles (Adkins & Caldwell, 2004; Lee & Yu, 2004). Culture is represented through an organization’s internal and external correspondence, strategy and decision-making, and daily work practices. The content of a company newsletter,

participation in employer sponsored events, and interaction of employees in meetings and e-mail exchanges all represent and create the culture of a workplace. In short, workplace culture is the established norms of behavior and shared ideals within an organization.

Culture is based on perceptions and feelings, rather than facts, making it different from other organizational processes. The complex, and somewhat intangible nature of organizational culture makes it difficult to operationalize; however, it is a powerful and pervasive force in all organizations (Deery & Shaw, 1999; Silverthorne, 2004). Scholars of organizational behavior have studied organizational culture with many different definitions and paradigms and have yet to find a unanimous measure of agreement. In the model proposed herein, culture is operationally defined by: respectful treatment at work, trust in management, productivity at work, smooth working environment and pride in employer. It is posited that the strength of the relationship between job satisfaction and turnover intention is dependent of the level of cultural satisfaction in the workplace.<sup>1</sup>

Employees are likely to assess elements of job satisfaction, especially intrinsic elements, more precisely when the workplace culture is harmonious and supportive. In this way, the components of culture, such as respectful treatment at work, are viewed by some researchers as antecedents to job satisfaction (Johnson & McIntye, 1998; Knudsen, Johnson & Roman 2003; Lund, 2003). A study by MacIntosh and Doherty (2010) showed that job satisfaction strongly and inversely influenced intention to leave the organization for employees in the fitness industry; furthermore, the authors found that that, of the dimensions shown to impact job satisfaction, atmosphere appeared to be most meaningful. A positive and friendly workplace was an important indicator of job satisfaction in the study. Similarly, Schwegker (2001) found a

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<sup>1</sup> Satisfaction with workplace culture is similar to the definition of job satisfaction presented earlier, in that, workplace cultural satisfaction is a reflection of how well an employee's expectations of workplace culture are aligned with the reality of the office culture.

positive relationship between professionalism in the workplace and job satisfaction. In his research, Schwepker (2001) also noted that statistically significant, negative relationships have been found between turnover intention and climates that are innovative, as well as pleasant. In researching various types of organizational cultures, Silverthorne (2004) found that, “involvement in an organization that had a bureaucratic organizational culture resulted in the lowest levels of job satisfaction and organizational commitment,” relative to innovative cultures and supportive cultures. It is easy to imagine that a workplace with a culture of respect, harmony, trust, pride and productivity, lends itself to an environment hospitable to job satisfaction.

#### *Job Satisfaction, Culture and Turnover Intention*

In the United States there are a variety of industries, employers and jobs, and organizational culture varies across all of them. Culture is important in all organizations because high performing cultures produce consistently excellent results, attract, motivate, and retain talented employees, and adapt readily to change. Often, a company will find that several candidates are at least minimally qualified for a position that they desire to fill. When faced with comparably qualified candidates, the team will generally choose the single candidate who is the “best fit” for the position and team. Silverthorne (2004) found that the better the fit an employee is within the organization, the higher the job satisfaction, the higher the organizational commitment and the lower the turnover rate. While cultural “fit” may vary across employers and even within departments, culture is important in all working environments.

Due to the practical implications and potential to impact worker productivity, researchers in a variety of disciplines have explored the relationship between job satisfaction, turnover intention and productivity. Organizational scholars have shown that job satisfaction is positively

associated with worker productivity and negatively associated with employee turnover (Egan et al., 2004; Silverthorne, 2004). In other words, greater job satisfaction is associated with greater productivity, so more satisfied employees ought to be more productive, relative to lesser-satisfied employees (Silverthorne, 2004). These findings are aligned with research showing that job satisfaction is positively related to employee engagement. Research has shown that more satisfied employees are more engaged in their work, while less satisfied employees are less engaged. Lower levels of engagement are associated with employee withdrawal, particularly in terms of voluntary turnover (Lambert et al., 2001). Therefore, it is accepted that job satisfaction and employee turnover intention are inversely related. For practical and performance reasons, it is essential that organizations identify specific factors associated with employees' job satisfaction, especially in competitive, fast-paced environments (Benko & Weisberg, 2007; Becker, 2007).

As Egan et al. (2004) noted, decreases in turnover led to increases in organizational performance and a reduction in costs associated with losses of firm and job-specific knowledge, hiring, and retraining of replacement employees. Furthermore, turnover is associated with many indirect costs such as lower new employee productivity, additional time needed by managers in support of new employees, and diminished productivity of established employees as they serve as mentors to new employees. Similarly, Silverthorne (2004) noted that, "turnover causes significant expense to an organization," including direct costs of replacing an employee and indirect cost related to loss of experience and lowered productivity. These costs have important implications for an organization, noted Silverthorne, and anything that can be done to reduce turnover will lead to significant benefits to an organization.

## ***Summary***

Organizational culture has been identified as an important aspect of organizational behavior and as a concept that is useful in helping to understand how organizations function (Silverthorne, 2004). Culture permeates every aspect of an organization, therefore, understanding an organizations' culture is only fully appreciated when explored from multiple angles (Schrodt, 2002). Scholars of organizational behavior have studied organizational culture with many different definitions and paradigms, and from a variety of employee related variables. Organizational culture has been explored as it relates to job satisfaction, organizational commitment, productivity, and turnover intention (Lund, 2003; Sims, 2002). The purpose of this paper is to contribute to the literature by exploring organizational culture in the context of job satisfaction and employee turnover intention.

## **Data**

### ***Sample and Data Collection***

The data used herein are from the General Social Survey (GSS), a sociological survey used to collect data on demographic characteristics and attitudes of residents of the United States. The GSS is a biannual, nationally representative survey of non-institutionalized adults, aged 18 and older. The survey is conducted by the National Opinion Research Center by phone or in person. The Quality of Work Life (QWL) module, a special interest section in the GSS, assesses the quality of work life and work experience, as well as, organizational issues and characteristics of Americans. The QWL was administered to approximately 4,717 participants as

part of the GSS special-interest modules during 2002, 2006 and 2010.<sup>2</sup> Though the participants in each cohort differ each year, the GSS is a comprehensive and representative sample, so findings are expected to be similar, regardless of period or cohort effects.

This study uses respondents' self-reported intent to leave one's current employer as an indicator for *turnover intention*, the dependent variable. Higher scores on the *turnover intention* scale indicate greater intent to leave one's current place of employment. Respondents' self-reported *job satisfaction* is the independent variable and higher scores on this scale indicate greater job satisfaction. This study aims to explore *culture* in the context of *job satisfaction* and employee *turnover intention*. It is proposed that employees scoring high on *job satisfaction* have greater job satisfaction, and this is associated with lower *turnover intention*. In other words, the greater job satisfaction reported, the less likely an employee intends to leave his or her current employer. Moreover, high satisfaction with workplace culture will mediate the relationship between job satisfaction and turnover intention; an individual with high cultural satisfaction will be less likely to intend to leave compared to an individual with low cultural satisfaction.

### ***Descriptive Statistics***

The sample is almost equally male (48 percent) and female (52 percent), and the mean and median age of survey respondents is 42 years, with standard deviation of about 13 years. The sample is 76 percent white and 31 percent have at least a bachelor's degree. The median income of respondents is \$28,668 (USD) and, of the 4,717 surveyed, 97.5 percent are part of the labor force and 81.5 percent of these people are working full time.

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<sup>2</sup> The "replicating core" of the GSS was administered to approximately 9,319 Americans during 2002, 2006 and 2012; therefore, approximately half of respondents were surveyed to participate on the QWL special-interest modules across the three years.

## *Labor force*

The majority of respondents are working and of those, 81.5 percent are working full time, while 17.5 percent are working part time; about 2.5 percent of respondents are temporarily not working. Exploring labor force status by sex reveals that 88 percent of men work full time, compared to 76 percent of women, indicating that a greater portion of men work full time, compared to women; however, the gender ratio is almost equal amongst full time workers (see Table 1, below).

Sex			
	Male	1,958	52%
	Female	1,800	48%
	Total	3,758	

Exploring labor force status by race reveals that 81.5 percent of whites work full time, compared to 83.7 percent of non-whites, indicating that a greater percentage of non-whites work full time, compared to whites; however, the majority of those who work full time are white (see Table 2, below).

Race			
	White	2,874	76.5%
	Non-White	884	23.5%
	Total	3,758	

Exploring labor force status by age reveals that 81.6 percent of mature adults (ages 36-88) and 82.6 percent of young adults (ages 18-35) work full time; however, 65 percent of those who work full time are mature adults. The average age of people who work full time is 41.5 years, compared to 45 years for people who do not work full time. Graphing labor force status by age illustrates trends in work status among the age groups (see Graph 1). The three age categories between 28 and 57 (ages 28-37, 38-47 and 48-57) have the greatest percentage of workers in the full time labor force. People between the ages of 68 and 88, lead the part time

labor force; and, with 62.5 percent working part time, it the most popular category for this age group.

*Higher Education*

Exploring level of education reveals that 31 percent of respondents have at least a bachelor’s degree and higher education is divided almost equally between genders. Exploring education by race reveals that 33.6 percent of whites have at least a bachelor’s degree, compared to 23 percent of non-whites, indicating that a greater percentage of whites have obtained higher education. The mean and median age of those who have at least a bachelor’s degree tend to be slightly higher (by two years) than those who have not obtained higher education. Exploring level of education by age reveals that 33 percent of mature adults (ages 36-88) and 27 percent of young adults (ages 18-35) have obtained at least a bachelor’s degree; and, 69 percent of those who have higher education are between the ages of 36 and 88. Of individuals holding a bachelor’s degree or higher, 85 percent report working full time, while only 80.5 percent of individuals without higher education report working full time. In the same vein, part-time work is most popular among those without higher education, while full time work is most popular among those individuals holding bachelor’s degrees or higher. However, the majority of those who work full time do not have a bachelor’s degree (see Table 3, below).

Degree	Count	Percentage
Below Bachelor's	2,536	67.5%
Bachelor's and Above	1,220	32.5%
Total	3,756	

Interestingly, almost 32 percent of people with higher education (*somewhat* or *strongly*) agree that satisfaction comes from work, compared to 26.7 percent of people without higher education. While it is plausible that people with higher education have a positive affective reaction from

working and therefore feel more satisfaction from their job compared to those without, this seems unlikely. Analysis of the association between higher education and job satisfaction reveals that 50 percent of those with higher education are (*somewhat* or *very*) satisfied with their job, compared to 45.5 percent of those without a bachelor’s degree.

### *Income*

Income ranges from \$486 (USD) to \$235,707 (USD), with 25 percent of observations in the sample falling below \$15,056 (USD) and 75 percent falling below \$48,516 (USD). The median income of respondents is \$28,668 (USD) with a mean income of \$37,684 (USD) (see Chart 1). Time at current job ranges from 3 months to 60 years, with 25 percent of observations in the sample falling below 1 year. The median time the respondents spent and their current job is 4 years, with a mean of 7.4 years and a standard deviation of 8.5 years (see Table 5, below).

Mean	7.40
Standard Deviation	8.55
Lower Quartile (25%)	1
Second Quartile (50%)	4
Third Quartile (75%)	10
Observations	4,645

As expected, income increases with each additional year spent working and with level of education, and full time workers report higher income than part time workers.

### *Turnover intention*

People in the lowest income quartile, with income less than \$15,056 (USD) have the highest reported (66 percent) intent to try a new job (see Chart 1). It seems logical that 24 percent of bottom earners are *very likely* to seek new job opportunities, compared to 9 percent of top earners. Analyzing job satisfaction by income reveals similar findings, only 43 percent of earners in the lowest income quartile report that they are very satisfied with their jobs, compared

to 55 percent of people in upper income quartile. In the same vein, 64.7 percent of people with higher education (which is also associated with higher earnings) report that they are *not at all likely* to look for a new job, compared to 59 percent of those without higher education. It makes intuitive sense that people who are very satisfied with their work and belong to the upper income quartile are less intent on seeking a new job.

The 18-27 age group has the highest reported intent to try a new job (31.4 percent, followed by the 28-37 age group (31.4 percent, and 21 percent, respectively; see Graph 2). It makes sense that two groups containing the youngest employees, who have recently embarked on their careers, have the highest turnover intention. Young adults often have several jobs before committing to a company. Moreover, fewer young adults report that they are *somewhat* or *very satisfied* with their jobs compared older adults. The age group 68 and up has the lowest reported intent to try a new job (87.4 percent), followed by the 58-67 age group. Similarly, it makes sense that two groups containing the oldest employees, many of who are approaching retirement age, have the lowest turnover intention.

Turnover intention was compared across the three survey years to explore whether fluctuations in the economy during 2002 (recession year), 2006 (boom year) and 2010 (recession) influence people's intentions. The following questions guided this analysis:

- Does turnover intention decrease during periods of slow economic growth?
- Does increased level of education correlate with increased turnover intention during periods of rapid economic growth?
- Do increased level of education and/or male gender correlate with decreased turnover intention during periods of sluggish economic growth, perhaps due to the sectors (e.g.: financial, construction) affected?

Exploration down this line of thought revealed no interesting trends across survey years or statistically significant findings for sub-group demographics.

### *Culture*

Several variables were used to create a scale to proxy for workplace culture; for ease of interpretation, the variable is divided into two categories, high culture and low culture. High culture indicates strong satisfaction with workplace culture and low culture indicates poor satisfaction with workplace culture. Job satisfaction is measured on a 4-point ordinal scale ranging from *not at all satisfied* to *very satisfied*. Most respondents with high workplace culture indicate the highest level of job satisfaction and fewer indicate the second highest level, and so on, with the fewest people indicating the lowest level of job satisfaction. Graphing culture against job satisfaction illustrates the positive relationship between high culture and high job satisfaction (see Graph 3). Graphing low culture against job satisfaction illustrates the opposite relationship. Most respondents with low workplace culture indicate the lowest level of job satisfaction, and so on, with the fewest people indicating the highest level of job satisfaction. Similarly, turnover intention is measured on a 3-point ordinal scale ranging from *not at all likely* to *very likely*. Most respondents with low workplace culture indicate the highest level of turnover intention, and fewer indicate the next level, and so on, with the fewest people indicating the lowest level of turnover intention. Graphing culture against turnover intention illustrates a positive relationship between low culture and high turnover intention (see Graph 4). Graphing high culture against turnover intention illustrates the opposite relationship.

## Methodology and Results

### *Initial Model*<sup>3</sup>

Running correlation matrices on variables from the Quality of Work Life module, confirmed that, comparatively, *job satisfaction* is the variable most strongly correlated with *turnover intention*.<sup>4</sup> In response to the question, “All in all, how satisfied would you say you are with your job?” participants select: (1) Not At All Satisfied, (2) Not Too Satisfied (3) Somewhat Satisfied, or (4) Very Satisfied. As respondents’ job satisfaction increases, there is a corresponding decrease in turnover intention, which asks, “Taking everything into consideration, how likely is it you will make a genuine effort to find a new job with another employer within the next year?” with scale ordered: (1) Not at all likely, (2) Somewhat likely, and (3) Very likely. The negative correlation coefficient indicates that participants scoring high on the job satisfaction scale tend to be less inclined to try to find a new job. Therefore, the relationship between job satisfaction and turnover intention was further explored, using a linear regression model.

### *Results: Model 1*<sup>5</sup>

First, I ran a regression of my dependent variable, (turnover intention), on my independent variable, (job satisfaction); this simple regression illustrates the magnitude, the direction and the statistical significance of the bivariate linear model. Results show that a one-unit increase in *job satisfaction* corresponds with a 0.423-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> In other words, respondents with very high job satisfaction score (almost a half-point) less on intention to find a new job, compared to those with only somewhat high job

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<sup>3</sup> See Results Table 1

<sup>4</sup> Pearson’s correlation coefficient between *turnover intention* and *job satisfaction* is -0.409.

<sup>5</sup> Equation for Model 1:  $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + v_i$

satisfaction. The R-squared of the model is 0.167, indicating that *job satisfaction* accounts for almost 17 percent of the variation in *turnover intention*.

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Next, I re-ran the model with control variables. Controlling for variables that may influence the relationship between job satisfaction and turnover intention helps to minimize confounding effects. Furthermore, it is interesting to study whether the relationship between employee turnover intention and job satisfaction differs between groups, for example: men and women, and full time and part time workers. Iterations leading up to this model included various demographic and work characteristics observable in the GSS, such as age, gender, race, marital status, income and education. But, for simplicity, the model described below includes a reduced number of control variables: *Working Full Time*, *Years on Job*, *Satisfaction Comes from Work*, *Socio-Economic Index (SEI)*, *Higher Education*, *Income (Lowest Quartile)*, *White*, *Male*, *Age* and *Survey Year (2006)*.

*Results: Model 2<sup>6</sup>*

The results of the multiple regression show that job satisfaction is a strong indicator of turnover intention; although the coefficient in the new model is smaller than it was in the prior model, it is still larger than the covariates' coefficients. Each additional unit increase in *job satisfaction* corresponds with a 0.375-point decrease (-) in *turnover intention*.\*\*\* In other words, a person moving up one level on the job satisfaction scale scores fewer points on the turnover intention scale, expressing decreasing intention to find a new job. *Working Full Time*, as opposed to working part time, is associated with a 0.145-point decrease (-) in *turnover*

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<sup>6</sup> Equation for Linear Model 2:  $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Working\ Full\ Time_i + \beta_3 Years\ on\ Job_i + \beta_4 Satisfaction\ Comes\ From\ Work_i + \beta_5 Socio-Economic\ Index\ (SEI)_i + \beta_6 Higher\ Education_i + \beta_7 Income\ (Lowest\ Quartile)_i + \beta_8 White_i + \beta_9 Male_i + \beta_{10} Age_i + \beta_{11} Survey\ Year\ (2006)_i + v_i$

*intention*.<sup>\*\*\*</sup> *Years on Job*, a numeric variable, is associated with a 0.011-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Satisfaction Comes from Work*, which is ordered on a scale from (1) Strongly Disagree to (4) Strongly Agree, is associated with a 0.039-point increase (+) in *turnover intention*.<sup>\*\*\*</sup> *Socio-Economic Index (SEI)*<sup>7</sup> is associated with a small, decrease (-) in *turnover intention* (not statistically significant).<sup>+</sup> *Higher Education*, in other words, holding a bachelor's or master's degree, is associated with a 0.034-point increase (+) in *turnover intention* (not statistically significant).<sup>+</sup> *Income*, a binary variable indicating membership to the lowest income quartile, is associated with a 0.101-point increase (+) in *turnover intention*.<sup>\*\*\*</sup> *White* race, as opposed to non-white race, is associated with a 0.209-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Male*, a binary variable indicating male gender, is associated with a 0.028-point increase (+) in *turnover intention* (not statistically significant).<sup>+</sup> *Age*, a numeric variable, is associated with a 0.008-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Survey Year*, a binary variable indicating that the respondent was interviewed in 2006,<sup>8</sup> is associated with a 0.018-point decrease (-) in *turnover intention* (not statistically significant).<sup>+</sup> The adjusted R-squared of the model is 0.245, indicating that, *job satisfaction* and covariates, account for almost 25 percent of the variation in *turnover intention*.

### *Comparison of Results: Model 1 and Model 2*

In the multiple regression, the adjusted R-squared is 0.245, compared to 0.167 in the bivariate regression; indicating that, in the bivariate model, job satisfaction accounts for almost

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<sup>7</sup> Socio-Economic Index (SEI) scores were originally calculated by regressing prestige scores for 45 occupational titles on education and income to produce weights that would predict prestige. (The concept of prestige is defined as respondents' estimation of the social standing of occupations). This algorithm was then used to calculate SEI scores for all occupational categories employed in the 1950 Census.

(source: <http://publicdata.norc.org:41000/gss/.%5CDocuments%5CCodebook%5CG.pdf>)

<sup>8</sup> I constructed the *Survey Year (2006)* variable because I thought that fluctuations in the economy during 2002 (recession year), 2006 (boom year), and 2010 (recession year), might have influenced people's responses and outlook on the job market.

17 percent of the variation in turnover intention, whereas, in the multiple regression model, job satisfaction and covariates, account for almost 25 percent of the variation.<sup>9</sup> Thus, Model 2 is a slightly better fit for understanding the relationship between job satisfaction and turnover intention.<sup>10</sup>

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Next, I used variables from the Quality of Work Life module to construct a scale to measure satisfaction with workplace *culture*. Creating a scale allows multiple variables to approximate the concept of workplace culture, this, in turn, allows for a robust concept and mitigates measurement error. Furthermore, creating a scale for variables measuring the same underlying concept alleviates multicollinearity in regressions, and reduces the quantity of data. Running correlation matrices confirmed that being treated with *respect* at work, having *trust* in management at work, having *pride* in working for your employer, having work conditions that allow for *productivity*, and having a workplace that runs in a *smooth* manner are moderately to strongly correlated (see Results Table 2). Then, I used Cronbach's alpha to confirm that these items (*respect*, *trust*, *pride*, *productivity* and *smooth*) measure the same underlying construct. Cronbach's alpha is a tool for assessing the reliability of scales; in other words, it determines internal consistency of items in a survey-instrument to gauge its reliability. The alpha coefficient indicates the strength of correlation among these items, with a higher score indicating greater scale reliability. The alpha coefficient on *culture* is approximately 0.858, which indicates that the variables are highly correlated, and thus suitable for a scale. Finally, I tested the Pearson

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<sup>9</sup> It is worth noting that residuals for Models 1 and 2 were tested for homoscedasticity using the Breusch-Pagan test and both violate the homoscedasticity assumption; in other words, heteroscedasticity, or unequal error variance, was present. As economist Gregory Mankiw (1991) attests, heteroscedasticity has never been a reason to throw out an otherwise good model; thus, robustness tests were performed to give greater weight to "well-behaved" observations and very similar results were obtained.

<sup>10</sup> It is also worth noting that Model 2 was formally tested for multicollinearity, using the variance inflation factor, and multicollinearity did not appear to be an issue.

correlation coefficient between culture and job satisfaction to measure the strength of their linear dependence. Pearson's correlation coefficient is approximately 0.580, which indicates that *culture* and *job satisfaction* are moderately correlated.

For ease of interpretation, I created a binary variable to differentiate between high and low culture, which I called *culture (high)*.<sup>11</sup> Then, I explored the hypothesis that the relationship between job satisfaction and turnover intention varies according to level of culture. Initially, I ran a regression identical to Model 2, only I included culture (high). This intermediary model (not shown), revealed that high satisfaction with workplace culture is associated with a 0.281-point decrease (-) in turnover intention.<sup>\*\*\*</sup> In other words, respondents who scored high on workplace cultural satisfaction, scored statistically significantly fewer points on the turnover intention scale, expressing lower intention to find a new job than to those with low workplace cultural satisfaction. This finding prompted me to further pursue this idea by including the interaction term: *job satisfaction x culture (high)* in my next model; interactions terms are useful for exploring whether the affect of one independent variable depends on the magnitude of another independent variable.<sup>12</sup> I believe that the magnitude of the decrease in turnover intention, for each unit increase in job satisfaction will be greater for people with high workplace cultural satisfaction, compared to those with low cultural satisfaction. In addition, for my next model, I experimented with interaction terms for *other* pairs of independent variables whose relationship could potentially affect the magnitude of the dependent variable (not shown). For example, I

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<sup>11</sup> For all survey questions included on the *culture* scale (*respect, trust, pride, productivity* and *smooth*), participants select 1) Strongly Disagree, (2) Disagree, (3) Agree, or (4) Strongly Agree; to create the binary variable, *Culture (High)*, I labeled the first two categories (Strongly Disagree and Disagree) as low culture, and the last two categories (Agree and Strongly Agree) as high culture (0 and 1, respectively).

<sup>12</sup> A simplified moderation model is illustrated in the equation:  
 $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Culture\ (High)_i + \beta_3 (Job\ Satisfaction \times Culture\ (High))_i + v_i$

interacted *survey year (2006)* and *higher education* to understand whether the 2006 economic recession interacted with high level of education to predict turnover intention.<sup>13</sup>

Although I experimented with various interaction terms, for simplicity, Model 3, described below includes only two interactions: *job satisfaction* × *culture (high)*, and *job satisfaction* × *age*. I also removed several covariates, which were not statistically significant in Model 2, for example: *Socio-Economic Index (SEI)*, *Male* and *Survey Year (2006)*.<sup>14</sup>

### *Results: Model 3*<sup>15</sup>

The results of this multiple regression show that *job satisfaction* is still a strong indicator of *turnover intention*; the coefficient in this model is larger than in prior models and is larger than the coefficients of the covariates. Each additional unit increase in *job satisfaction* corresponds with a 0.425-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> In other words, a person moving up one level on the job satisfaction scale scores 0.425 fewer points on the turnover intention scale, expressing decreasing intention to find a new job. *Working Full Time*, is associated with a 0.148-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Years on Job*, is associated with a 0.010-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Satisfaction Comes from Work*, is associated with a 0.056-point increase (+) in *turnover intention*.<sup>\*\*</sup> *Higher Education*, is associated with a 0.100-point increase (+) in *turnover intention*.<sup>\*\*</sup> *Income (Lowest Quartile)*, is associated with a 0.121-point increase (+) in *turnover intention*.<sup>\*\*\*</sup> *White* race, is associated with

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<sup>13</sup> I interacted *Survey Year (2006)* and *Higher Education* because I thought that the economic boom in 2006 might have impacted higher educated people differently than lower educated people. For example, I thought that having higher education would statistically significantly impact the magnitude of *turnover intention*, during a boom year. This line of thinking made sense to me, as corporate recruitment increases during economic expansions, and many of the jobs added during 2006 required at least a bachelor's degree; thus, affording those with higher education more employment options.

<sup>14</sup> It is worth noting that *Higher Education* was not removed; yet, it was not statistically significant in Model 2. *Higher Education* was included in Model 3, because an iteration of Model 2 (not shown), that included *Culture (High)*, had similar coefficients to Model 2 and was statistically significant.

<sup>15</sup> Equation for Linear Model 3:  $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Working\ Full\ Time_i + \beta_3 Years\ on\ Job_i + \beta_4 Satisfaction\ Comes\ From\ Work_i + \beta_5 Higher\ Education_i + \beta_6 Income\ (Lowest\ Quartile)_i + \beta_7 White_i + \beta_8 Age_i + \beta_9 Culture\ (High)_i + \beta_{10} (Job\ Satisfaction\ x\ Culture\ (High))_i + \beta_{11} (Job\ Satisfaction\ x\ Age)_i + v_i$

a 0.283-point decrease (-) in *turnover intention*.<sup>\*\*\*</sup> *Age*, is associated with a 0.021-point decrease (-) in *turnover intention*.<sup>\*\*</sup> The interaction term, *Job Satisfaction* × *Age*, is associated with a 0.004-point increase (+) in *turnover intention*;<sup>\*</sup> the positive interaction indicates that as one variable increases (*age*), it amplifies the other (*job satisfaction*). *Culture (High)*, a binary variable indicating high satisfaction with workplace culture, is associated with a 0.059-point decrease (-) in *turnover intention*.<sup>+</sup> The interaction term, *Job Satisfaction* × *Culture (High)*, is associated with a 0.092-point decrease (-) in *turnover intention*.<sup>+</sup> In other words, high cultural satisfaction is associated with a 0.425-point decrease (-) in turnover intention with each unit increase in job satisfaction, compared to a 0.333-point decrease (-) for people with low cultural satisfaction.<sup>\*\*\*</sup> The adjusted R-squared of the model is 0.235, which indicates that, *job satisfaction* and covariates, account for almost 24 percent of the variation in *turnover intention*.

#### *Results: Model 4*<sup>16</sup>

Next, I ran an intermediary model with an interaction term for job satisfaction and age, with age cut into categories (not shown). The marginally statistically significant results on this interaction in Model 3 prompted me to explore further the idea that the relationship between job satisfaction and turnover intention varies by age group, for example, mature adults and young adults. Iterations of this idea led to Model 4, which includes the interaction term: *job satisfaction* × *young age (18-35)*, a binary variable indicating membership to the young adult (18-35) group, at the time of the survey response. This was the only statistically significant interaction found between a specific age group and job satisfaction.

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<sup>16</sup> Equation for Linear Model 4:  $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Working\ Full\ Time_i + \beta_3 Years\ on\ Job_i + \beta_4 Satisfaction\ Comes\ From\ Work_i + \beta_5 Higher\ Education_i + \beta_6 Income\ (Lowest\ Quartile)_i + \beta_7 White_i + \beta_8 Age_i + \beta_9 Culture\ (High)_i + \beta_{10} (Job\ Satisfaction\ \times\ Culture\ (High))_i + \beta_{11} (Job\ Satisfaction\ \times\ Young\ Age\ (18-35))_i + v_i$

The variables included in Model 4 are almost identical to those in Model 3, (with the exception of the new age category in the interaction term), as are the results (see Results Table 3); thus, only the results of the new term are discussed. The interaction term, *Job Satisfaction x Young Age (18-35)*, is associated with a 0.035-point decrease (-) in *turnover intention*.<sup>\*</sup> In other words, young age is associated with a 0.250-point decrease (-) in turnover intention with each unit increase in job satisfaction, compared to a 0.215-point decrease (-) in turnover intention for mature adults (36-88).<sup>\*</sup> This result is noteworthy because the young adults group has a larger decrease in turnover intention than the mature adults group. It is especially thought provoking, given that Model 3 revealed a positive interaction between job satisfaction and age. It seems that job satisfaction has a stronger impact on turnover intention for young adults, compared to mature adults. In other words, for each unit increase in job satisfaction, being a young adult is associated with a bigger decrease in turnover intention, compared to mature adults. The adjusted R-squared of the model is 0.228, which indicates that, *job satisfaction* and covariates, account for almost 23 percent of the variation in *turnover intention*.

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Use of linear regression models is limited in analyses where the dependent variable is measured on an ordinal scale (e.g.: Not at all likely, Somewhat likely, and Very likely). Linear regression models treat ordinal variables (e.g: *turnover intention*) as continuous, which can result in a biased model, with little explanatory power.<sup>17</sup> Furthermore, statistical inference from linear regression models is limited in cases where the assumptions (e.g.: homoscedasticity) of ordinary least squares regression are not explicitly tested and confirmed. For these reasons, ordinal logistic regression is used for the final model.

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<sup>17</sup> It is worth noting that the adjusted R-squared decreased one percentage point each between models 2 and 3, and models 3 and 4, respectively.

## ***Final Model***<sup>18</sup>

### *Results: Model 5*

<sup>19</sup>

Finally, I re-ran Model 4 as an ordinal logistic regression, the results show that for each additional unit increase in *job satisfaction*, the odds of moving up one category in *turnover intention*, decrease (-) by 0.550. <sup>\*\*</sup> *Working Full Time*, decreases (-) the odds of moving up one category in *turnover intention* by 0.641. <sup>\*\*\*</sup> *Years on Job*, decreases (-) the odds of moving up one category in *turnover intention* by 0.939. <sup>\*\*\*</sup> *Satisfaction Comes from Work*, increases (+) the odds of moving up one category in *turnover intention* by 1.179. <sup>\*\*</sup> *Higher Education*, increases (+) the odds of moving up one category in *turnover intention* by 1.340. <sup>\*</sup> *Income (Lowest Quartile)*, increases (+) the odds of moving up one category in *turnover intention* by 1.394. <sup>\*\*\*</sup> *White race*, decreases (-) the odds of moving up one category in *turnover intention* by 0.421. <sup>\*\*\*</sup> *Age*, decreases (-) the odds of moving up one category in *turnover intention* by 0.966. <sup>\*\*\*</sup> The interaction term, *Job Satisfaction x Culture (High)*, decreases the odds of moving up one category in *turnover intention* by 0.594. <sup>\*</sup> The interaction term, *Job Satisfaction x Young Age (18-35)*, decreases the odds of moving up one category in *turnover intention* by 0.859. <sup>\*\*</sup> McFadden's pseudo R-squared is 0.157, which indicates that, *job satisfaction* and covariates, account for almost 16 percent of the variation in *turnover intention*.

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<sup>18</sup> See Results Table 3

<sup>19</sup> Equation for Model 5:  $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Working\ Full\ Time_i + \beta_3 Years\ on\ Job_i + \beta_4 Satisfaction\ Comes\ From\ Work_i + \beta_5 Higher\ Education_i + \beta_6 Income\ (Lowest\ Quartile)_i + \beta_7 White_i + \beta_8 Age_i + \beta_9 Culture\ (High)_i + \beta_{10} (Job\ Satisfaction\ x\ Culture\ (High))_i + \beta_{11} (Job\ Satisfaction\ x\ Young\ Age\ (18-35))_i + v_i$

## Discussion

The final model used ordinal logistic regression to estimate simultaneous logistic equations between adjacent categories on the turnover intention scale. The equation for the final model is as follows:

- $Turnover\ Intention_i = \beta_0 + \beta_1 Job\ Satisfaction_i + \beta_2 Working\ Full\ Time_i + \beta_3 Years\ on\ Job_i + \beta_4 Satisfaction\ Comes\ From\ Work_i + \beta_5 Higher\ Education_i + \beta_6 Income\ (Lowest\ Quartile)_i + \beta_7 White_i + \beta_8 Age_i + \beta_9 Culture\ (High)_i + \beta_{10}(Job\ Satisfaction\ x\ Culture\ (High))_i + \beta_{11}(Job\ Satisfaction\ x\ Young\ Age\ (18-35))_i + v_i$

Given that, each additional unit of job satisfaction reported is associated with a decrease in turnover intention, then a one-unit increase in job satisfaction should correlate with a decrease in employees' intentions to leave his or her current employer. Results show that a person who is *not too satisfied* with their job is about 12.6 percentage points more likely to move from one level of turnover intention to the next level, compared to someone who is *somewhat satisfied* with their job. Moreover, the relationship between job satisfaction and employee turnover intention is moderated by level of satisfaction with workplace culture. High cultural satisfaction should have a bigger decrease in turnover intention with each unit increase in job satisfaction, compared to employees with low cultural satisfaction. Results show that, holding job satisfaction constant, employees with low cultural satisfaction workers are about 11 percentage points more likely to move from one level of turnover intention to the next level, compared employees with high cultural satisfaction; it is worth noting that this relationship is statistically significant at the 90% confidence interval. The results of this study confirm both of these hypotheses; in addition, the findings show that full time work, increased tenure of employment, increased age and being of white race is associated with statistically significant decreases in turnover intention, whereas, having higher education, increased life satisfaction from work and low income status is statistically significantly associated statistically significant increases in turnover intention.

### *Labor Force Status*

Part time workers are about 10 percentage points more likely to move from one level of turnover intention to the next level, compared to full time workers. On average, full time workers have higher income, and this may contribute to their decreased turnover intention. Moreover, full time employees usually enjoy more benefits from working than do part time employees; for example, full time employees typically have health insurance, life insurance and retirement savings plans. Further research may reveal that full time workers have more difficulty finding comparable work and have decreased turnover intentions as a result. Alternatively, job security may play a role in the lower turnover intention among full time workers. It is easy to imagine that full time workers have better job security than part time workers and are therefore less likely to intend to leave their employer.

### *Age*

Results show that young adults (18-35) are about 11 percentage points more likely to move from one level of turnover intention to the next level, compared to a mature adults (36-88). Moreover, it seems that job satisfaction has a stronger impact on turnover intention for young adults, compared to mature adults. For each unit increase in job satisfaction, being a young adult is associated with a bigger decrease in turnover intention, compared to mature adults. In other words, job satisfaction is more predictive of turnover intention for young adults than for mature adults. This finding has significant implications, as the composition of the workforce is changing due to the aging population. Further research is needed to understand the dynamic between job satisfaction and turnover intention for the increasing ratio of younger people entering the younger workforce.

A person who has spent 4 years (the median amount of time) at their current job is about 1 percentage point more likely to move from one level of turnover intention to the next level, compared to someone who has spent 5 years at their current job. Each additional year a person stays with their employer likely corresponds with increased income, better retirement benefits, more specialized institutional knowledge and skillset, and greater social status (e.g.: respect). Therefore, with each additional year spent with an employer, the transition to another employer becomes more risky, both financially and socially. Moreover, turnover intention decreases with each additional year older of age, and older age corresponds with longer tenure of employment.

### *Race*

A non-white person is about 20 percentage points more likely to move from one level of turnover intention to the next level, compared to someone who is white. Descriptive statistics show that 33.6 percent of whites have at least a bachelor's degree, compared to 23 percent of non-whites. The higher level of education completed by whites may correspond with specialized job training, which may contribute to the decreased likelihood of turnover intention. Nonetheless, no sufficient explanation is readily available to explain this dynamic and further research is needed to understand the relationship between race and turnover intention.

### *Satisfaction Comes from Work*

A person who *disagrees* that satisfaction comes from work is about 3.5 percentage points less likely to move from one level of turnover intention to the next level, compared to someone who *agrees*. It is plausible that people who *agree* that satisfaction comes from work have a stronger professional network compared to those who disagree, and these connections provide awareness and access to new opportunities, which corresponds with increased turnover intention.

Alternatively, people who *agree* that satisfaction comes from work may be more willing to deal with the risk of transitioning between employers.

### *Higher Education*

A person, who has not obtained higher education, is about 6 percentage points less likely to move from one level of turnover intention to the next level, compared to someone who has obtained higher education. It seems likely that a person who has higher education may have access to more work opportunities and be more aware opportunities through social and academic networks, compared to those who do not have higher education. Therefore, it is plausible that people who have at least a bachelor's degree have increased turnover intention, compared to those who do not. It is worth noting that the relationship between higher education and turnover intention is statistically significant at the 90% confidence interval.

### *Income*

A person who is not in the lowest quartile of income is about 7 percentage points less likely to move from one level of turnover intention to the next level, compared to someone who is in the lowest quartile of income. It is completely logical that being in the bottom 25 percent of earners corresponds with increased turnover intention. People in this group likely intend to find a new, better-paying job.

## **Conclusion**

This paper supports the hypotheses that (1) job satisfaction is inversely associated with turnover intention and (2) the relationship between job satisfaction and employee turnover intention is moderated by satisfaction with workplace culture. Results show that, each additional unit increase in job satisfaction is associated with a decrease in turnover intention; and, holding

job satisfaction constant, employees with high workplace cultural satisfaction have lower turnover intention compared to employees with low workplace cultural satisfaction. Although the findings of this study confirmed the research hypotheses and these findings have both theoretical and practical implications, several methodological limitations should be acknowledged.

First, a causal relationship cannot be established from this analysis. The study did not meet the basic requirements of a true experiment, such as random assignment and a dedicated control group. Thus, it is possible, and in fact it is likely, that there were unobserved variables mediating both job satisfaction and turnover intention. In practice, this type of study would be difficult to implement in a controlled, experimental environment due to many factors, the most concerning being research ethics. Second, the variables chosen to comprise the scale on which culture is measured were only proxies. For example, pride in working for an employer was self-reported by interviewees, but this variable in itself can reflect a variety of attitudes that a person has towards working in general. Furthermore, the scale on which culture was measured was constructed using only questions asked in the GSS. It is likely that some important factors of culture were omitted from the scale because they were not included in the GSS. Third, a self-reported measure was used for turnover intention, the dependent variable. Further examination is needed to determine whether this variable truly measures an employee's intent to stay at his or her current job. It is possible that people reported that they were likely to remain with their current employer because it was less cognitively demanding than thinking about finding a new job.

As I alluded to, this model was also subject to selectivity, on a few different fronts. To begin, people who are employed in the workforce are often less likely to move, due to financial and other constraints (e.g.: vested interest, pension, retirement and health benefits), regardless of

job satisfaction, especially during times of economic downturn. Furthermore, research shows that people who have been employed with the same company for an extended period (about 5 years) are less likely to move. In addition, expectations of workplace culture vary widely by industry and employer, and a participant's cognitive weight on the variables that comprise the culture scale may vary in unknown ways. Although future studies are needed to confirm and extend the findings of this study, these findings are in alignment with the emerging field of research identifying the important contributions of strong organizational culture on employee and organizational success.

### Notes

\*\*\* Statistically significant at the 99% confidence interval ( $p < 0.01$ ), *ceteris paribus*.

\*\* Statistically significant at the 95% confidence interval ( $p < 0.05$ ), *ceteris paribus*.

\*\* Statistically significant at the 90% confidence interval ( $p < 0.10$ ), *ceteris paribus*.

+ *ceteris paribus*

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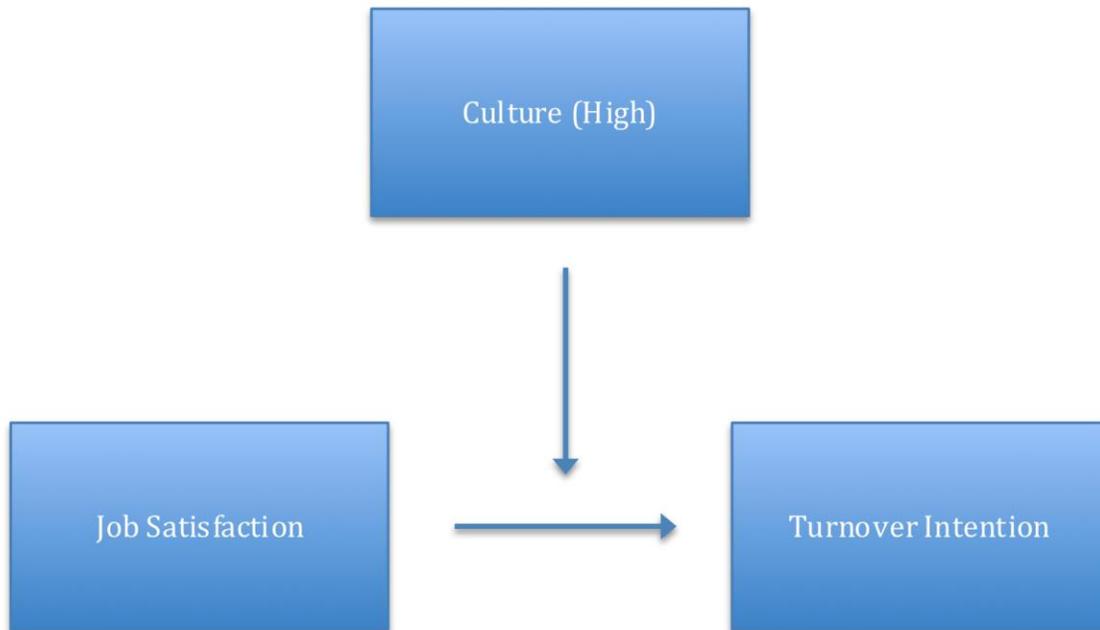
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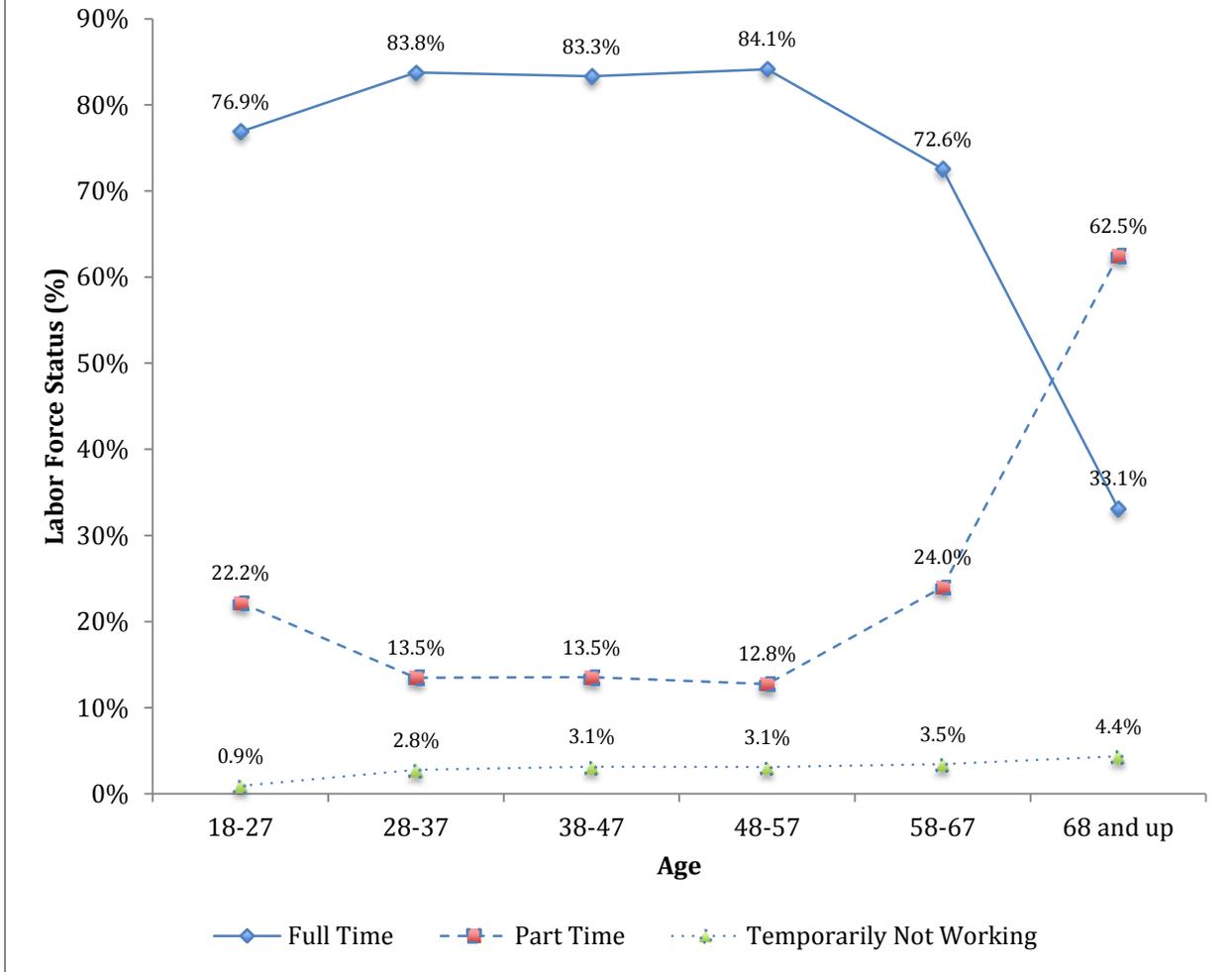
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## Appendix

Figure 1: Conceptual Model of Relationship between Job Satisfaction and Culture



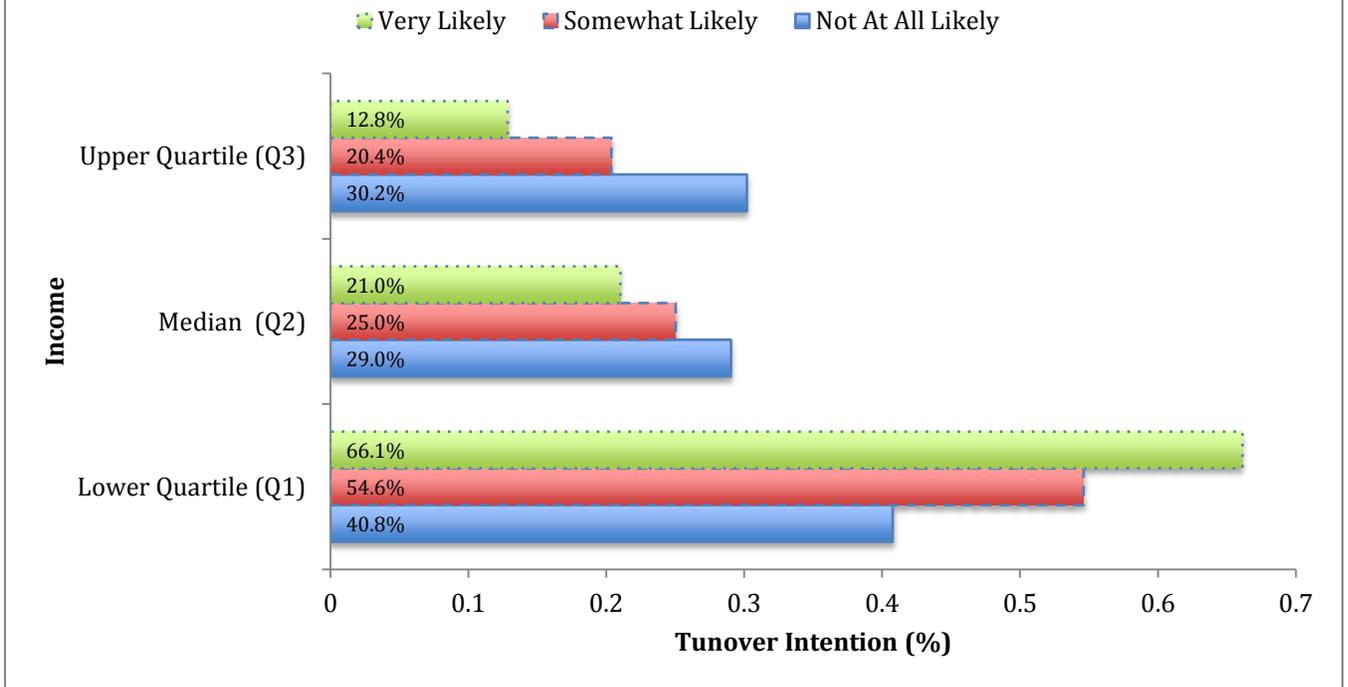
### Graph 1: Labor Force Status (%) by Age



Raw Data for Graph 1

Labor Force Status by Age				
Age	Full Time	Part Time	Temporarily Not Working	Total
18-27	579	167	7	753
28-37	938	151	31	1,120
38-47	979	159	37	1,175
48-57	838	127	31	996
58-67	357	118	17	492
68 and up	53	100	7	160
<b>Total</b>	<b>3,744</b>	<b>822</b>	<b>130</b>	<b>4,696</b>

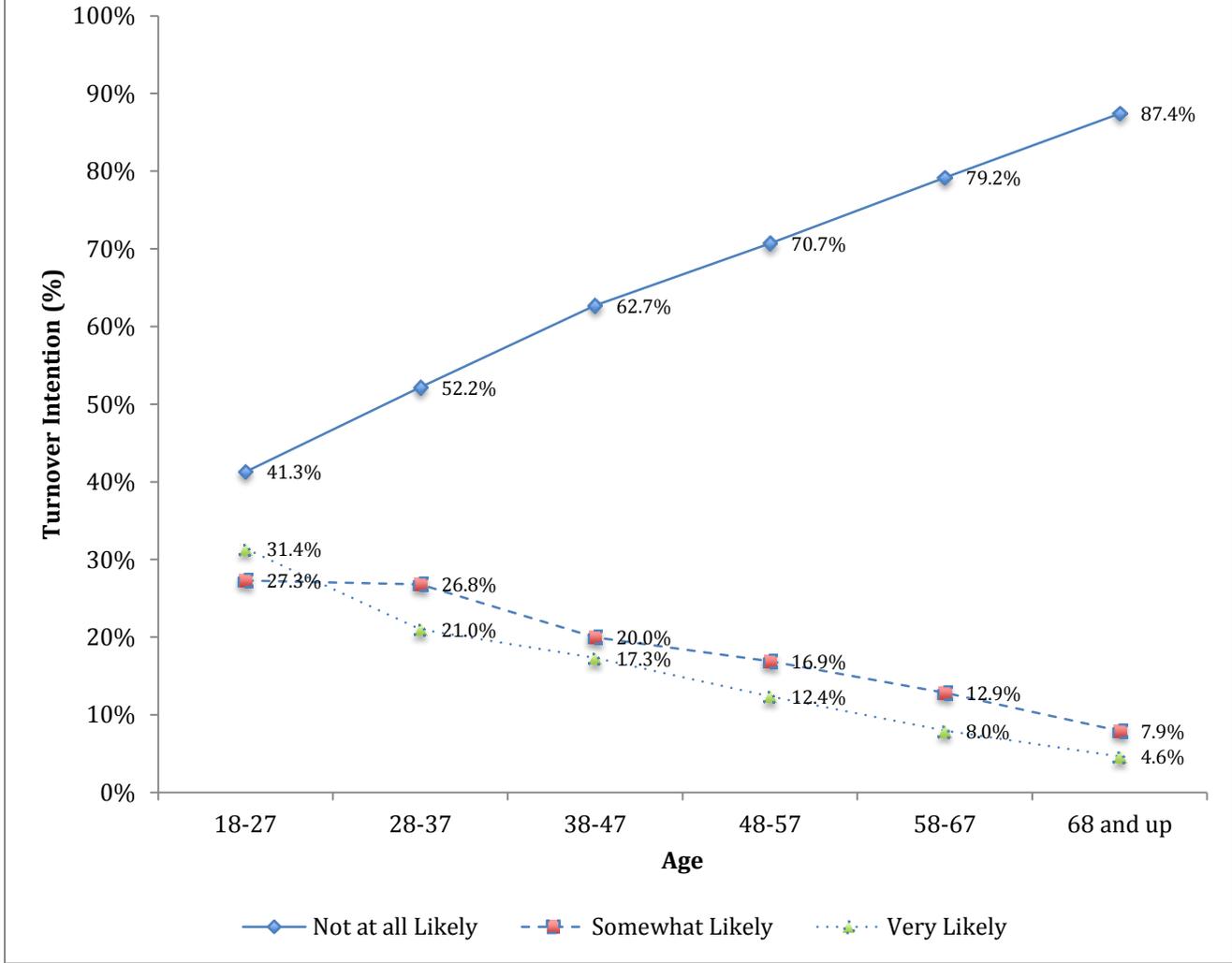
### Chart 1: Turnover Intention (%) by Income



Raw Data for Chart 1

Turnover Intention by Income				
Income	Not At All Likely	Somewhat Likely	Very Likely	Total
Lower Quartile (Q1)	991	445	453	1889
Median (Q2)	706	204	144	1054
Upper Quartile (Q3)	734	166	88	988
<b>Total</b>	<b>2431</b>	<b>815</b>	<b>685</b>	<b>3,931</b>

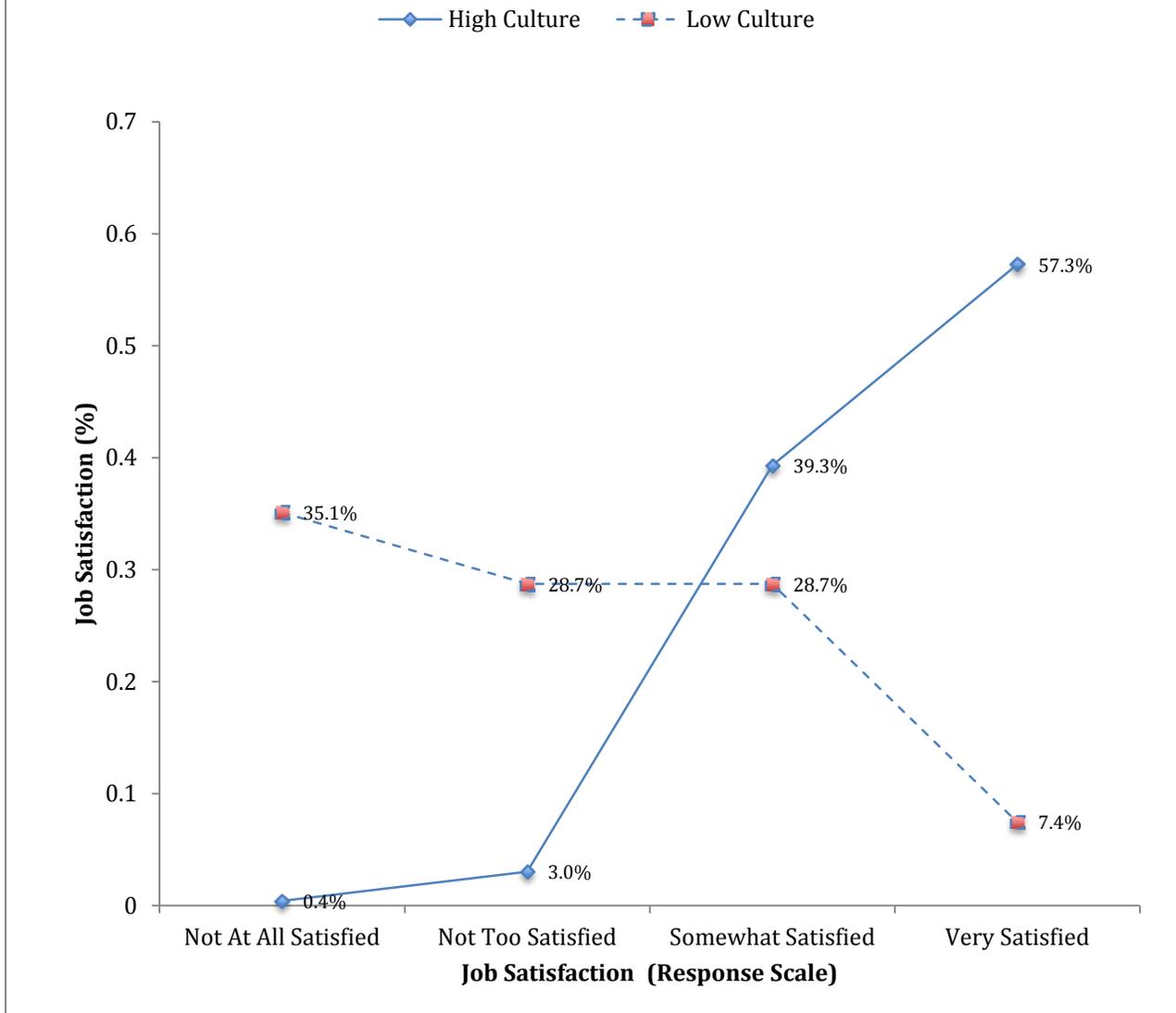
**Graph 2: Turnover Intention (%) by Age**



Raw Data for Graph 2

Turnover Intention by Age				
Age	Not at all Likely	Somewhat Likely	Very Likely	Total
18-27	304	201	231	736
28-37	576	296	232	1,104
38-47	728	232	201	1,161
48-57	690	165	121	976
58-67	388	63	39	490
68 and up	132	12	7	151
<b>Total</b>	<b>2,818</b>	<b>969</b>	<b>831</b>	<b>4,618</b>

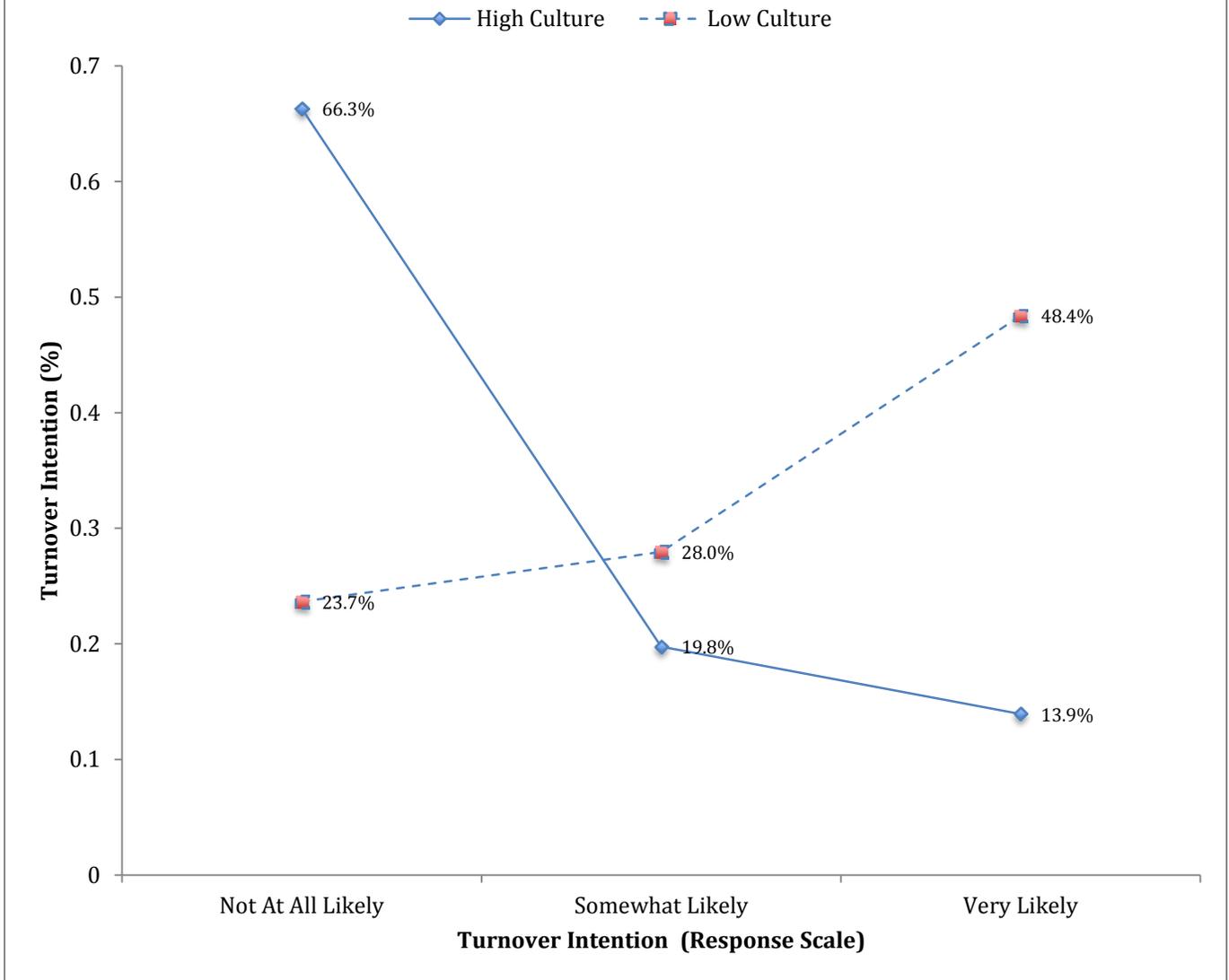
### Graph 3: Job Satisfaction (%) by Culture



Raw Data for Graph 3

Job Satisfaction by Culture					
Culture	Not At All Satisfied	Not Too Satisfied	Somewhat Satisfied	Very Satisfied	Total
High Culture	7	51	663	966	1,687
Low Culture	33	27	27	7	94
<b>Total</b>	<b>40</b>	<b>78</b>	<b>690</b>	<b>973</b>	<b>1,781</b>

### Graph 4: Turnover Intention (%) by Culture



Raw Data for Graph 4

Turnover Intention by Culture				
Culture	Not At All Likely	Somewhat Likely	Very Likely	Total
High Culture	22	26	45	93
Low Culture	1,114	332	234	1,680
<b>Total</b>	<b>1,136</b>	<b>358</b>	<b>279</b>	<b>1,773</b>

Results Table 1: Comparison of Initial Models on *Turnover Intention*

Variables	Model 1	Model 2	Model 3
	Simple Regression <i>Turnover Intention</i>	Multiple Regression <i>Turnover Intention</i>	Multiple Regression <i>Turnover Intention</i>
<i>Job Satisfaction</i>	-0.423*** (0.014)	-0.375*** (0.017)	-0.425*** (0.126)
Working Full Time		-0.145*** (0.033)	-0.148*** (0.051)
Years on Job		-0.011*** (0.002)	-0.010*** (0.003)
Satisfaction Comes from Work		0.039*** (0.015)	0.056** (0.024)
Socio-Economic Index (SEI)		-0.000 (0.001)	
Higher Education		0.034 (0.031)	0.100** (0.044)
Income (Lowest Quartile)		0.101*** (0.027)	0.121*** (0.041)
White		-0.209*** (0.029)	-0.283*** (0.046)
Male		0.028 (0.024)	
Age		-0.008*** (0.001)	-0.021** (0.008)
Survey Year (2006)		-0.018 (0.024)	
Culture (High)			-0.059 (0.247)
Job Satisfaction × Culture (High)			-0.092 (0.094)
Job Satisfaction × Age			0.004* (0.002)
Constant	2.978*** (0.047)	3.401*** (0.084)	3.841*** (0.391)
Observations (N)	4,626	3,307	1,226
R-squared	0.167	0.245	0.235

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Results Table 2:  
Correlation Matrix and Alpha Coefficients for Variables on *Culture* Scale

Pearson's Correlation Coefficients					
	Respect	Trust	Pride	Productivity	Smooth
Respect	-				
Trust	0.588	-			
Pride	0.546	0.608	-		
Productivity	0.445	0.490	0.575	-	
Smooth	0.488	0.624	0.563	0.563	-
Observations (N)	4,539				

Variables	Observations	Sign	Cronbach's Alpha Coefficients
Respect	4,539	+	0.839
Trust	4,539	+	0.818
Pride	4,539	+	0.820
Productivity	4,539	+	0.839
Smooth	4,539	+	0.823
Test Scale			0.858

Results Table 3: Comparison of Final Models on *Turnover Intention*

Variables	Model 4	Model 5
	Multiple Regression <i>Turnover Intention</i>	Ordinal Logistic Regression <i>Turnover Intention</i>
<i>Job Satisfaction</i>	-0.250*** (0.089)	-0.598** (0.263)
Working Full Time	-0.165*** (0.051)	-0.444*** (0.165)
Years on Job	-0.010*** (0.003)	-0.063*** (0.012)
Satisfaction Comes from Work	0.062** (0.024)	0.164** (0.083)
Higher Education	0.094** (0.044)	0.292* (0.150)
Income (Lowest Quartile)	0.125*** (0.041)	0.332** (0.136)
White	-0.280*** (0.046)	-0.866*** (0.144)
Age	-0.001*** (0.002)	-0.034*** (0.009)
Culture (High)	-0.067 (0.247)	0.616 (0.765)
Job Satisfaction × Culture (High)	-0.094 (0.094)	-0.521* (0.285)
Job Satisfaction × Young Age (18-35)	-0.035* (0.018)	-0.152** (0.064)
Constant (cut 1)	3.421*** (0.244)	-4.931*** (0.791)
Constant (cut 2)		-3.621*** (0.783)
Observations (N)	1,226	1,226
R-squared	0.228	0.157

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1