Job Satisfaction and Its Relationships with Age, Gender and Educational Background in a Vietnamese Context

A thesis presented in partial fulfilment of the requirement for the degree of

Master of Business Studies (Management)

at

Massey University, Manawatu

New Zealand

Minh Quang Pham

2016

ABSTRACT

The present study aims at examining the reliability and validity of a Vietnamese version of the Job Satisfaction Survey (JSS) which was developed by Spector (1997). It also reveals the current overall job satisfaction and investigates the relationship between job satisfaction and age, gender, and educational background among a specific community, the auditors and ex-auditors in Vietnam. With these goals, a quantitative cross-sectional design has been employed for the research.

A pilot study with 68 Vietnamese respondents establishes a solid foundation for the final Vietnamese-translated version of the JSS. In the main study, a sample of 202 Vietnamese auditors and ex-auditors is recruited. The JSS in Vietnamese demonstrates a high internal consistency with the Cronbach's alpha coefficient of α = .91. Moreover, an exploratory factor analysis reports an underlying construct of nine dimensions, which is similar to the original version of the JSS. The convergent and divergent validity of the scale are also analysed and return satisfactory results. The present research suggests that the auditors and ex-auditors in Vietnam are generally satisfied with their jobs and, surprisingly, the auditors are reported to be happier than their ex-colleagues in every job aspect. There is no relationship found between the overall job satisfaction and age or gender for this specific community, while a significant correlation between job satisfaction and educational background is confirmed. However, the women of this community are reported to be more likely to experience a lower level of job satisfaction when they get older or when they have a better educational background.

The present study provides audit companies in Vietnam with recommendations for improving the job satisfaction of their employees. Its findings suggest that these firms should pay more attention to their older female employees as well as the ones with higher educational backgrounds due to their vulnerability to a lower level of job satisfaction than the opposite gender. Furthermore, directions and indications for future research are also offered in the present dissertation.

Keywords: Job satisfaction, Vietnam, Job Satisfaction Survey, JSS, Audit.

ACKNOWLEDGEMENTS

Firstly, I would like to express my gratitude to the New Zealand Government as well as the New Zealand Embassy in Hanoi, Vietnam, for their prestigious scholarship, the New Zealand ASEAN Scholar Program. Without the scholarship, I probably would not have been able to explore such a wonderful country and enjoy the world-class education of New Zealand. Furthermore, the research fund provided by Massey's School of Business has also been very helpful in my progress to complete the present dissertation.

A simple thank you note would not be enough for my kind supervisors, Ms. Beth Tootell and Associate Professor Paul Toulson. I am indebted to them for their invaluable guidance and support during the last one-year period. They have played a huge role in helping me to comprehend complicated matters and granting me the ability to complete the present dissertation.

I would like to thank the great team at Massey's International Student Support Office, especially Mr. Jamie Hooper, for their thoughtful support and attention to international students' needs. They have made my life here much easier and more enjoyable. In addition, it is also important to acknowledge Ms. Brigit Eames at the Massey School of Business for her assistance along the way.

I wish to send my sincerest thanks to my ex-colleagues and friends in Vietnam who helped me a lot in bringing my Vietnamese version of the Job Satisfaction Survey to life and in recruiting respondents for this research. Their contribution has played a crucial part in the present study.

Simultaneously, I am grateful to my friends here in Palmerston North, especially my colleagues in the PhD lab at Massey's School of Business. They have always been at my side through all the ups and downs in the past year.

Last but not least, I would like to say thank you to my family and my twin daughters. Their love has been an enormous source of strength and motivation for me to complete this dissertation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

GNS	Growth Need Strength
JDS	Job Diagnostic Survey
JSS	Job Satisfaction Survey
SPSS	Statistical Package for the Social Sciences

CHAPTER 1 – INTRODUCTION

Work plays a large part in the lives of millions of people. Indeed, most working people nowadays spend about one third of their day at their work places, five days a week. That amount of time has actually decreased in comparison with the past after many historical changes in working policies all over the world. Therefore, people's attitudes towards their work are actually very important in their perception of their life happiness (Cranny, Smith, & Stone, 1992).

Job satisfaction is the "affective orientations on the part of individuals toward work roles which they are presently occupying" (Vroom, 1982, p. 99). Job satisfaction has been among the main research topics of all time in the social sciences (Gruneberg, 1979; Herzberg, Mausner, Peterson, & Capwell, 1987; Herzberg, Mausner, & Snyderman, 1959; Spector, 1997). Many studies on this particular topic have been conducted all over the world. Nonetheless, it seems that the attraction of the subject has never waned, and it would be fair to say that as long as human beings are still doing work, job satisfaction will still be researched.

The question here is why this topic is such a prevalent and attractive one in the world of social science. Studying job satisfaction is suggested to be of help to many parties, which includes not only the companies, but also people as individuals and for the community as well (Herzberg et al., 1959). Herzberg et al. (1959) have provided a summary of the advantages of understanding job satisfaction for each of those three parties. According to these researchers, the benefits for studying job satisfaction to industry are improvement in productivity, lower turnover and absenteeism, and smoother working relations. These gains would all contribute to better profits, the bottom-line of production. For individuals, an understanding and knowledge of forces that lead to higher morale would help them in achieving happiness and self-actualization. For the community, understanding work attitudes could help decrease the need for psychological treatment caused by work stress, which would, in turn, lead to a healthier and happier community. Moreover, Cranny et al. (1992) have added that work contentment plays a big role in overall satisfaction with life. Many studies have lent support to these viewpoints (Bopp, Wigley, & Eddosary, 2015; Chi, Hughen, Lin, & Lisic, 2013; Harrell, Chewning, & Taylor, 1986; Ironson, 1992; Katzell, Thompson, & Guzzo, 1992; Lance, Lautenschlage, Sloan, & Varca, 1989; Larson, Meier, Poznanski, & Murff, 2004; Organ & Ryan, 1995; Roznowski & Hulin, 1992). In addition,

work is changing continuously (Cole, Oliver, & Blaviesciunaite, 2014; Dastmalchian & Blyton, 2001; Dyer, Humphries, Fitzgibbons, & Hurd, 2014; Tietjen & Myers, 1998); therefore, there should always be a necessity to pay attention to what makes people happy or unhappy in their jobs.

However, in contrast with the extensive attention on the topic in developed countries, including Western countries like the United States of America (US), the picture in developing countries is not equally bright. There has been a scarcity of literature on job satisfaction among developing countries (Duong, 2013; Evans & Olumide-Aluko, 2010; Le, 2012; Montero & Rau, 2015; Montero & Vásquez, 2015; Pham, 2014). The situation is even worse when it comes to a specific country like Vietnam, where only a very limited amount of research into job satisfaction can be found. Given the benefits of understanding work attitudes, there is a need to explore and further develop the topic in developing countries. This is especially the case for Vietnam where the cultural aspects and characteristics of the people are totally different from those of Western countries and the US, so a better understanding of job satisfaction would inarguably be valuable to many.

In Vietnam, the lack of academic literature on job satisfaction is severe (Duong, 2013; Le, 2012; Pham, 2014). As such, the problem with an essential component of social research, the measuring instrument, is also in a critically short supply. Therefore, the present research has been undertaken with the aim of providing a validated measurement of job satisfaction for future studies' use. Along with that, the present study will focus on revealing the overall satisfaction level with work in Vietnam and on discussing the relationships between job satisfaction and several demographic factors, including age, gender, and educational background.

During three years of working as an auditor in an audit department of a company, which is among the Big 4 accounting firms in the world (Pricewaterhouse Coopers, Ernst &Young, KPMG, and Deloitte), the researcher had an impression of a very high turnover rate among the auditors, approximately from 70 to 80 % of recruited freshmen would drop out over a period of three years. Despite that, these four firms have been consistently placed in the Top 100 Employers list by Fortune for many years (Fortune, 2016), yet the turnover rate does not seem to decrease over time. Being triggered by the interesting, observed paradox, the researcher has decided to select the community of Vietnamese people who are currently auditors or have been auditors in the past as the target population for the present research. Moreover, in Vietnam, audit is regarded as one of the professions that have a very high set of requirements to fresh employees. Indeed, having a Bachelor degree is a must for people who

want to enter the audit profession. In addition, freshmen would have to undertake many compulsory internal training courses organized by the companies in order to be effective and productive in the job. Therefore, expenses for recruitment and training are significant to the audit firms. Being able to limit these expenses would be very valuable for the industry. For that reason, taking an in-depth analysis at the job satisfaction of the current and ex-auditors in Vietnam might provide recommendations for the audit firms.

Having targeted that specific community, the present study aims at investigating the general research question: Is there any reliable instrument for measuring job satisfaction in Vietnam and what is the general job satisfaction of auditors and ex-auditors in Vietnam?. By answering these research questions, the present dissertation would add insights into the underdeveloped body of knowledge on job satisfaction in developing countries as well as in Vietnam. Furthermore, the findings and suggestions of the present research could also be beneficial to both the audit firms in Vietnam and the Vietnamese auditing community.

This dissertation starts with a brief synopsis of the main theories in the field of job satisfaction, which will be followed by the literature review on different factors in the ecosystem of job satisfaction in Chapter 2. As the result of the literature review, two research questions and four hypotheses are carefully postulated. Afterwards, a detailed discussion on methodology and the progress of the pilot study as well as the main study are elaborated on in the following chapter, Chapter 3. The fourth chapter presents an analysis of the dataset and the achieved results, both of which would be the material for the discussion in Chapter 5. Finally, conclusions are put forward together with important implications and recommendations drawn from the findings of the present research in Chapter 6.

CHAPTER 2 – LITERATURE REVIEW

This chapter presents the literature review on the main topic of the present dissertation, job satisfaction. At first, a short discussion on the definition of job satisfaction is followed by the main theories in the field. Afterwards, antecedents and outcomes of job satisfaction are discussed and then the measuring instrument of choice is elaborated. Subsequently, the relationship between job satisfaction and age, gender and educational background are reviewed. Concrete research questions and hypotheses are postulated after these discussions, respectively.

2.1. Job Satisfaction

2.1.1. Definition

Job satisfaction is a topic that has attracted researchers from around the world. Decades ago, Locke (1976) estimated that more than 3,300 articles and dissertations had been done on job satisfaction by 1976. Later, by 1992, Cranny et al. (1992) predicted that more than 5,000 of such works had been completed. By the present time, that number should have increased several-fold.

Many definitions from different researchers have been given to the term 'job satisfaction'; however, none of them is considered as an officially agreed definition in general (Gruneberg, 1979). For example, Locke (1969, p. 316) has defined job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values". In contrast, according to Spector (1997), job satisfaction is "the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs" (p. 2). There is a clear difference between these two definitions. The one defined by Locke (1969) includes only the positive emotional states (satisfaction), while Spector's definition (1997) embraces both positive (satisfaction) and negative (dissatisfaction) forms of job satisfaction. However, according to Gruneberg (1979), most writers seem to agree on one thing, that job satisfaction is different from job morale. Gruneberg notes that while job satisfaction could be referred to as the attitude of people towards their profession and its various aspects, job morale refers to group wellbeing (1979).

Furthermore, Spector (1997) suggests that job satisfaction can either be presented as a general feeling about a job or as a group of separate attitudes towards many aspects of a job. Usually, the first form of job satisfaction is used in the research where only the bottom-line

attitude is attended to and there is no need to reach to deeper layers of job satisfaction. Spector (1997) regards the latter form as a more comprehensive picture of job satisfaction since a single person may hold different or even contradictory attitudes towards different aspects of their jobs. He has listed the 14 most common facets of job satisfaction that have been utilized by different researchers in various ways. They are appreciations, communication, co-workers, fringe benefits, job conditions, nature of the work itself, the organization itself, the organization's policies and procedures, pay, personal growth, promotion opportunities, recognition, security, and supervision.

2.1.2. Theories of job satisfaction

Naturally, different definitions are shaped from different theoretical standpoints. In the present dissertation, four main theories of job satisfaction will be discussed, including Maslow's hierarchy of needs (1976); Herzberg's Motivator-Hygiene theory (1976); Hackman and Oldham's Job Characteristic Model (1976); and the dispositional approach (Judge, 1992).

Maslow's Needs Hierarchy Theory

Among these theories, Maslow's hierarchy of needs is arguably one of the earliest and most widespread theories to explore the structure of factors contributing to job satisfaction (Hassard, Teoh, & Cox, 2016). Being written in 1942 (Healy, 2016) and published in 1943 (Maslow, 1943), the theory suggests that humans' needs can be classified into five categories, which are arranged from the most basic to the most advanced needs. From lower to higher orders, they are (1) basic physiological needs; (2) safety and security needs; (3) social (affection) needs; (4) self-esteem needs; and (5) self-actualization needs (Maslow, 1976). Maslow argues that only when the lower levels of needs are fulfilled can people think of satisfying the higher levels. However, he also points out that under some special circumstances, a person can partly have a sense of satisfaction with higher need levels while not acquiring 100 percent of contentment with lower need levels (Maslow, 1976).

Initially, the needs hierarchical theory was not postulated by Maslow in relation to job satisfaction, but many theorists have utilized it to explore job satisfaction (Gruneberg, 1979). According to Maslow's theory, people will move on to seek satisfaction at higher levels in their jobs, including social affection, self-esteem, and self-actualization when they are satisfied with the basic needs in their jobs, namely payment and security. This interpretation has largely gained its reputation due to its great intuitive appeal (Gruneberg, 1979). However, some researchers have revealed weaknesses of this theory. Firstly, there is actually

very little empirical evidence for the existence of such a hierarchy (Hassard et al., 2016; Locke, 1976; Spector, 1997). Secondly, the satisfaction with certain needs could lead to a stronger state of those needs rather than making people content with them and enabling them to achieve higher needs (Gruneberg, 1979). Gruneberg (1979) also argues that there would always be some physiological needs to be satisfied. Nonetheless, despite these critiques, it is undeniable that Maslow's theory has a role to play in the domain of job satisfaction. The theory can be used in studies on occupational level and job satisfaction where it is reported that people in different occupational levels seek different kinds of satisfaction in their jobs. Centers and Bugental (1966) found that people in lower level jobs are likely to be motivated by satisfying lower need levels, namely pay and security, whereas those in higher occupational levels, with their basic requirements fulfilled, are more concerned with higher order needs.

Herzberg Two-Factor Theory

Similar to Maslow's theory of needs, Herzberg's two-factor theory has also gained significant status in the field. Herzberg introduced his famous two-factor theory, also known as Motivator-Hygiene theory, in 1957 (Herzberg, Mausner, Peterson, & Capwell, 1957). He suggests that job satisfaction and dissatisfaction are not only non-related, but they might be two very independent notions (Herzberg, 1976). According to him, there are two distinguished groups of factors that contribute to job satisfaction and dissatisfaction. The first group, known as the motivators, includes the factors that stimulate satisfaction if present at work, but their absence would not cause dissatisfaction. Achievement, recognition, and the intrinsic values of the job are the factors that belong to this group. The second group consists of hygiene factors, which would lead to dissatisfaction when they are not satisfied, but may not trigger satisfaction even if adequate. The word 'hygiene' has been used as "an analogy to the medical use of the term meaning preventative and environmental" (Herzberg, 1976, p. 78). Such hygiene factors are pay, security, and working conditions. Gruneberg (1979) has adapted a very simple yet highly understandable metaphor of these two factor groups: they are separate and distinct as are the concepts of pleasure and pain. To a healthy person, having no pain cannot be considered as a pleasure itself, but the relief from pain in the short-term is a kind of happiness. Using the same logic, the hygiene factors when adequate are not necessarily the reasons for contentment in work, but will impair employees' job satisfaction if they are bad. An exception would be when such factors are recently improved; they might be considered as the cause of job satisfaction, but for a short time only (Gruneberg, 1979).

In comparison with Maslow's theory of needs hierarchy, Herzberg's motivators are equivalent with the higher order needs, including self-esteem and self-actualization needs. On the other hand, Herzberg's hygiene factors correspond with Maslow's lower ranked needs. However, the significance of the two-factor theory are, firstly, that the contextual factors, such as pay, security, and working conditions, are necessary but not sufficient to create job satisfaction in themselves. Secondly, the motivators, which are more related to psychological aspects, are the actual causes of job satisfaction and in circumstances where they are not fulfilled at work; they would not trigger dissatisfaction but only fail to generate satisfaction.

The two-factor theory has been established from his own study, detailed in the book *The Motivation to Work* (Herzberg et al., 1959). Herzberg (1976) used the critical incident technique to collect data, where participants were asked to think of the events encountered at work that made them feel exceptionally good or exceptionally bad then deeper probing questions would follow. According to Gruneberg (1979), a number of studies have succeeded in using the same method and arrived at conclusions that support the theory. Nonetheless, there have been a large number of theorists who challenged Herzberg's Motivation-Hygiene theory in many aspects (Gruneberg, 1979). The most outstanding issue with the theory is that it has been proven to be method-bound, which means that if other techniques of data collection are used instead of the critical incident technique, then the results often fail to confirm the theory (Gruneberg, 1979). Therefore, the two-factor theory has gained relatively little empirical support (Spector, 1997). Despite all of these critiques, it is still undeniable that Herzberg's theory is recognized for its pioneering and critical role in distinguishing dissatisfaction from satisfaction in work (Hassard et al., 2016).

Job Characteristics Theory

No matter what problems the two-factor theory might entail, Herzberg's (1976) theory has emphasized the crucial role of analyzing job characteristics in gaining an understanding of job satisfaction (Gruneberg, 1979). Job characteristics can be conceived of as the nature and traits of the job itself. Hackman and Oldham's (1976) Job Characteristics Theory has emerged as the most influential theory in revealing how job characteristics can affect people's mood (Spector, 1997). The core concept of the Job Characteristics Theory is that people can be motivated by contentment with aspects of their jobs (Hackman & Oldham, 1976). In other words, when people feel that their jobs are enjoyable and meaningful, they will like their jobs and that will generate motivation for them to carry out their tasks well

(Spector, 1997). Hackman and Oldham's (1976) model suggests that there are five core characteristics that can be applied to any type of job: (1) Skill variety; (2) Task identity; (3) Task significance; (4) Autonomy; and (5) Job feedback. A concise explanation for these five core characteristics are presented in Table 1.

Table 1

Five Core Job Characteristics

Name of Characteristic	**Description**
Skill variety	The number of different skills necessary to do a job
Task identity	Whether or not an employee does an entire job or a part of a job
Task significance	The impact a job has on other people
Autonomy	The freedom entitled to the employees in doing their job
Job feedback	The extent to which it is obvious to employees that they are doing their jobs correctly

Source: Adapted from Spector (1997, p. 33).

These five core traits are the starting points of psychological states which, consequently, will lead to outcomes including job performance, job satisfaction, motivation, and turnover. There are three psychological states that are influenced by the core characteristics, and the first three core characteristics, in combination, lead to the perception of meaningfulness of work. Autonomy generates feelings of responsibility, and feedback turns into knowledge of the results about the products of work. Good or bad outcomes are the result of high or low levels of happiness with the corresponding core characteristics. The mechanism of this model is illustrated in Figure 1. In addition, Hackman and Oldham (1976) has included Growth Need Strength (GNS) as a personality variable in their model. The GNS variable refers to the desire of an individual to fulfil their higher order needs, including autonomy or personal growth. The GNS is hypothesized to be a moderating variable, which influences the effect of core characteristics on the outcomes. With the presence of the personality variable, Job Characteristics Theory suggests that people with an appetite for challenging and interesting jobs will have higher satisfaction and motivation in complex jobs as defined by the five core characteristics (Hackman & Oldham, 1976).

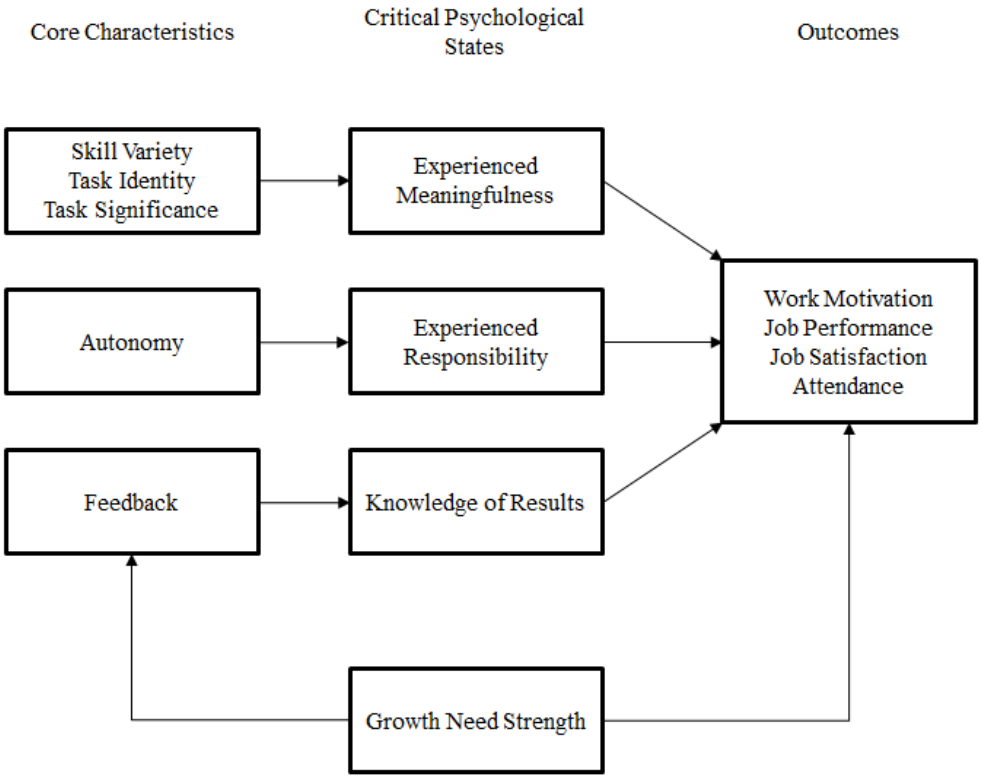

Figure 1. Hackman and Oldham's (1976) job characteristics model.

In contrast with the prior two theories of Maslow and Herzberg, Job Characteristics Theory has gained much more empirical support. Hackman and Oldham's (1976) theory has been the foundation of several popular measuring instruments of job characteristics, including their own measures, the Job Diagnostic Survey (JDS) (1976) and the Job Characteristics Inventory (JCI) as developed by Sims Jr., Szilagyi, and Keller (1976). JDS is regarded as the most popular measure of job characteristics, while the latter is considered as the best alternative instrument for the JDS (Spector, 1997). The Job Characteristics Theory has been supported by many researchers, including the two meta-analyses of Fried and Ferris (1987) and Loher, Noe, Moeller, and Fitzgerald (1985). These studies have lent further strength to the theory and, especially, the hypothesized moderating role of the Growth Need Strength in the relationship between the five core characteristics of work and the outcomes. Both meta-analyses report a higher correlation between job satisfaction and job characteristics for people with high GNS. Nonetheless, the research, which employed JDS to test the hypotheses of Job Characteristics Theory also faces criticism (Roberts & Glick, 1981; Taber & Taylor, 1990). Much of the criticism focuses on the fact that in the JDS-based research, only the correlation between job characteristics and job satisfaction is shown, and there is no direction of the

relationship or any causality (Spector, 1997). Moreover, according to Spector (1997), some people are happy with their jobs just because they like them and they would hold a positive image of their jobs in comparison with their fellow workers who dislike their jobs. This gap is where the dispositional approach would fit in perfectly.

Dispositional Perspective

Judge (1992) suggests that job satisfaction has a strong correlation with personality. From the dispositional perspective, any person has their own predisposition towards the perception of job satisfaction, and it is durable across time (Judge, Locke, & Durham, 1997). Many studies have shown formidable links between personality traits and job satisfaction (Arvey, Bouchard, Segal, & Abraham, 1989; Avery, Smillie, & Fife-Schaw, 2015; Christiansen, Sliter, & Frost, 2014; Dabke, 2014; Roethlisberger, 1941; Schneider & Dachler, 1978; Staw, Bell, & Clausen, 1986; Zhai, Willis, O'Shea, Zhai, & Yang, 2013). However, according to Spector (1997), not much theoretical explanation has been provided for this relationship. Among the traits, locus of control and negativity affectivity have gained significant attention from scholars. Moreover, these two traits appear to be not only significantly correlated with job satisfaction, but also to contribute to the development of job satisfaction (Spector, 1997).

There have been two sources of empirical support for the dispositional approach that are direct and indirect studies on job satisfaction and personality. Indirect studies are those in which personality is not measured explicitly, while it is assessed directly in direct studies. Indirect studies have received criticism for neglecting the contribution of other factors to job satisfaction (Hassard et al., 2016). Meanwhile, among the direct studies, Judge et al. (1997) have provided evidence that self-esteem, self-efficacy, emotional stability, and the locus of control are four parts of a broad personality construct which would affect the way people see themselves. Furthermore, Judge and Bono (2001) have shown in their meta-analysis of 274 correlations between each of these affective constructs and job satisfaction that the self-reported levels of these four traits are positively correlated with job satisfaction. They suggest that self-esteem, self-efficacy, emotional stability, and locus of control "are among the best dispositional predictors of job satisfaction and job performance" (Judge & Bono, 2001, p. 80). Nonetheless, the underlying mechanisms by which these traits affect the outcomes are yet to be confirmed and still demand further research (Judge & Bono, 2001; Spector, 1997).

2.1.3. Antecedents of job satisfaction

The antecedents of job satisfaction are revealed by the theories in the field. The factors contributing to job satisfaction could be classified into two major groups: environmental, and individual or personal (Spector, 1997). The former group, namely environmental antecedents of job satisfaction, consists of many factors that are related to the job itself and circumstantial factors surrounding the employees. The five job characteristics defined by Hackman and Oldham's (1976) theory are included in this group and so are the motivator and hygiene factors defined by Herzberg's two-factor theory (1959). In addition, there are also other agents that are listed under this group, such as organization culture, job constraints, work-family conflict, job stress, workload, and work schedule (Spector, 1997). According to Spector (1997), these factors can pose direct influences on job satisfaction or they can interact with each other and create indirect impacts on employees' happiness at work.

Further, the first antecedent group can be categorized differently into two subgroups: intrinsic and extrinsic aspects of the job (Herzberg et al., 1987). Intrinsic job aspects include the characteristics of itself, which are the five core job characteristics, and the rest of the factors form the extrinsic job aspects. The link between job satisfaction and environmental antecedents has been supported by a wide range of empirical evidence (Bateh & Heyliger, 2014; Dimitrios, Kastanioti, Maria, & Dimitris, 2014; Giri & Kumar, 2010; Hosie, Jayashree, Tchantchane, & Lee, 2013; Saiti & Papadopoulos, 2015; Tewari, 2009; Top, Akdere, & Tarcan, 2015; Top, Tarcan, Tekingunduz, & Hikmet, 2013).

The second group of job satisfaction antecedents entails individual characteristics (Spector, 1997), which are facilitated by the Growth Need Strength variable in Herzberg's (1959) Job Characteristics Model and Judge's (1992) dispositional perspective. Studies by Schneider and Dachler (1978), Staw and Ross (1985), and Staw et al. (1986) report a consistency in people's attitudes towards their jobs. To a further extent, Arvey et al. (1989) have suggested that genes could play as a predisposition that would make a person satisfied or dissatisfied with their jobs. Interestingly, through the research on twins' job attitudes, Arvey et al. (1989) found that genetic factors accounted for up to 30% of the fluctuation of job satisfaction. Arvey et al. (1989) have also noted that some people were constantly unhappy with their jobs in the Hawthorne Studies (conducted by Roethlisberger, 1941). In addition, recent researchers have also suggested that individual personality plays an important role in predicting job satisfaction (Avery et al., 2015; Dabke, 2014; Zhai et al., 2013).

Among the personality traits, locus of control and negativity affectivity have gained a large amount of attention for their relevance with job satisfaction (Spector, 1997). Locus of control is a cognitive factor which stands for the ability of an individual to cope with the ups and downs in their life. It is found to have causal effects on job satisfaction and, eventually, could be a predictor for the level of job satisfaction in the studies of Judge et al. (1997) and Judge and Bono (2001). On the other hand, negativity affectivity represents a personal variable that measures a person's tendency to suffer from their emotional negativity, such as anxiety or depression (Spector, 1997). Many scholars have declared that negativity affectivity and job satisfaction are negatively correlated, which means that people who possess high negativity affectivity are associated with low job satisfaction (Brief, Burke, George, Robinson, & Webster, 1988; Cropanzano, James, & Konovsky, 1993; Judge, 1993; Schaubroeck, Ganster, & Fox, 1992). Moyle (1995) hypothesized that people with high negativity affectivity are more sensitive and vulnerable to the environmental stressing factors than their counterparts with low negativity affectivity. As such, high negativity affectivity people tend to have a lower job satisfaction level than others with low negativity affectivity.

2.1.4. Potential outcomes of job satisfaction

Many behaviours and attitudes of employees have been proved to be the outcomes of job satisfaction (Gruneberg, 1979; Herzberg et al., 1987; Spector, 1997). A high level of job satisfaction is generally suggested to improve the positive mood and enthusiasm of employees at work, with their companies and with their co-workers (Spector, 1997). One of the most extensively researched linkages of job satisfaction and its consequences is the job satisfaction–job performance relationship or, in other words, how job satisfaction affects productivity and proficiency at work (Herzberg et al., 1987; Katzell et al., 1992; Spector, 1997). According to Spector (1997), job satisfaction and performance are correlated with and influenced by each other. Sharing the same view on the reciprocal relationship between these two variables, Katzell et al. (1992) have established a model between them where they influence each other in a positively correlated fashion.

Besides job performance, there are a number of different outcomes, including organizational citizenship behaviours (helping co-workers and the organization); withdrawal behaviours (absenteeism and turnover); burnout; physical health and psychological well-being; counterproductive behaviours (sabotage, theft, and bad temper against colleagues and supervisors) (Chi et al., 2013; Harrell et al., 1986; Ironson, 1992; Larson et al., 2004; Organ

& Ryan, 1995; Roznowski & Hulin, 1992; Spector, 1997). A positive attitude is indicated to correlate with various positive outcomes, which are beneficial for both organizations and the employees (Herzberg et al., 1987). More importantly, the life happiness, psychological well-being, and even physical health of people are also proved to be related to job satisfaction (Bopp et al., 2015; Cranny et al., 1992; Judge & Watanabe, 1993; Lance et al., 1989). In their research, Lance et al. (1989) reported evidence supporting the existence of a bilateral relationship between job satisfaction and life satisfaction. By and large, these impacts are among the most critical reasons why job satisfaction has attracted such great attention from scientists and researchers.

2.2. Measurement of Job Satisfaction

2.2.1. Instruments

Attitudes towards work are assessed through interviewing or administering questionnaires. Because of the costly and time-demanding nature of interviews, the latter one is more prevalent (Spector, 1997). Similar to the definition of job satisfaction provided by Spector (1997) where job satisfaction can either be presented as a general feeling about the job or as a group of separate attitudes towards many aspects of the job, there are several types of questionnaires for measuring job satisfaction as well. Questionnaires can be classified into three categories: single question, global measurement, and facet measurement (Mitchell, Levine, & Pozzebon, 1990). The first two forms are more appropriate for the studies where only the global or overall job satisfaction is examined. On the other hand, the last form of questionnaires, multi-facet measurement, is a proper choice for in-depth research on job satisfaction.

In an extensive analysis by van Saane, Sluiter, Verbeek, and Frings-Dresen (2003), a total of 29 instruments for measuring job satisfaction are identified. Van Saane and his colleagues have examined the validity and reliability of all these questionnaires. It turns out that not all of these scales possess desirable validity and reliability. Out of 29 measuring instruments, only seven questionnaires satisfy widely accepted criteria for reliability and validity. They are: ‘the Job in General Scale’ (JIG) (Ironson, Smith, Brannick, Gibson, & Paul, 1989); ‘the Andrew and Withey Job Satisfaction Questionnaire’ (Rentsch & Steel, 1992); ‘the Job Satisfaction Survey’ (Spector, 1985); ‘the Emergency Physician Job Satisfaction Instrument’ (EPJS) (Lloyd, Streiner, Hahn, & Shannon, 1994); ‘the McCloskey/Mueller Satisfaction Scale’ (MMSS) (Mueller & McCloskey, 1990); ‘the

Measure of Job Satisfaction' (MJS) (Traynor & Wade, 1993); and 'the Nurse Satisfaction Scale' (NSS; Ng, 1993).

Among these seven quality instruments, the Job Satisfaction Survey (JSS; Spector, 1997), which was developed by Spector (1985), emerges as one of the most versatile scales. It can be used for different professions and in different contexts (Spector, 1997; van Saane et al., 2003). In the study of van Saane et al. (2003), JSS's (Spector, 1997) validity facets, including face validity, and convergent and construct validity, are well assured. These researchers have also regarded JSS (Spector, 1997) as one of the most extensively used measuring tools for job satisfaction around the world. Furthermore, it can be accessed easily and is free to use for non-commercial education and research purposes (stated by Spector himself in his book, 1997) while other scales are not. Considering all of its advantages and the limit financial resource available to the researcher, Job Satisfaction Survey (Spector, 1997) has been selected as the measuring instrument for this research.

The reliability and validity of JSS has been assessed by its author (Spector, 1997) and many other researchers (Anari, 2012; Bateh & Heyliger, 2014; Bokti & Talib, 2009; Chin-Siang, Talib, Juhari, & Madon, 2014; Claiborne, Auerbach, Lawrence, & Schudrich, 2013; Dimitrios et al., 2014; Giri & Kumar, 2010; Top et al., 2015; Top et al., 2013). Spector (1997) has demonstrated that JSS has a very strong overall internal consistency of α = .91 across a huge population of 2,870 people. In other research, such as the studies of Anari (2012), Bateh and Heyliger (2014), Bokti and Talib (2009), Chin-Siang et al. (2014), Claiborne et al. (2013), Dimitrios et al. (2014), Top et al. (2013), and Top et al. (2015), which were carried out across various contexts and in different languages, JSS (Spector, 1997) has also maintained its strong reliability of α-values that are well over the standard value of α = .70 (established by Nunally, 1978). According to Spector (1997), the Cronbach's alpha values of JSS's subscales are generally high and in the range from .60 to .82. He also reports a remarkable test–retest reliability of JSS over an 18-month span, where the test–retest reliability values of the subscales and overall scale range from .37 to .74. Furthermore, JSS's validity is also confirmed by a good correspondence with one of the most rigorously validated scales, the Job Descriptive Index (JDI, Smith, Kendall, & Hulin, 1969). Five subscales of the scale (pay, promotion, supervision, co-workers, and nature of work) were found to have correlated well with respective subscales of the JDI by values of r from .61 to .80 (Spector, 1997).

2.2.2. Job Satisfaction Survey and its usage in developing countries and Vietnam

The Job Satisfaction Survey (JSS; Spector, 1985) is not a very long set of questions, and the questions themselves are simple to understand and easy to answer. The scale consists of 36 items which cover nine different job facets (or subscales) that are pay, promotion, supervision, fringe benefits, contingent rewards, operating condition, co-workers, nature of work, and communication. A Likert-scale from 1 to 6 forms the answers to every item, ranging from 'Disagree very much' as 1 to 'Agree very much' as 6. The score of participants is the level of agreement for positively worded items, and where the question is worded negatively, the score will be reversed. Due to its structure, JSS (Spector, 1997) can yield a total of 10 scores, comprising nine facet scores and the total job satisfaction score. Its nine job dimensions are explained in Table 2. Detailed information will be discussed further in the Chapter 3, Methodology.

Table 2

Facets of Job Satisfaction Survey (Spector, 1997)

Facet	**Description**
Pay	Satisfaction with pay and pay raises
Promotion	Satisfaction with promotion opportunities
Supervision	Satisfaction with the person's immediate supervisor
Fringe benefits	Satisfaction with fringe benefits
Contingent rewards	Satisfaction with rewards (not necessarily monetary) given for good performance
Operating conditions	Satisfaction with rules and procedures
Co-workers	Satisfaction with co-workers
Nature of Work	Satisfaction with the type of work done
Communication	Satisfaction with communication within the organization

Source: Adapted from Spector (1997, p. 8).

JSS in Developing Countries and in Vietnam

A number of studies have utilized the Job Satisfaction Survey in developing countries (Anari, 2012; Bokti & Talib, 2009; Chin-Siang et al., 2014; Dimitrios et al., 2014; Giri & Kumar, 2010; Khan & Ahmed, 2013; Saiti & Papadopoulos, 2015; Shahzad & Begum, 2011; Tewari, 2009; Top et al., 2015; Top et al., 2013). Most of them have reported that JSS (Spector, 1997) possesses a high reliability with Cronbach's alpha higher than .7, which is

acceptable (Nunally, 1978). In these studies, an acceptable level of inter-correlation between its subscales is also demonstrated consistently.

All of the research mentioned above employed cross-sectional designs with quantitative approaches for data collection through self-administered questionnaires. They were carried out in various countries, including Greece (Dimitrios et al., 2014; Saiti & Papadopoulos, 2015); India (Giri & Kumar, 2010; Tewari, 2009); Iran (Anari, 2012); Malaysia (Bokti & Talib, 2009; Chin-Siang et al., 2014); Pakistan (Khan & Ahmed, 2013; Shahzad & Begum, 2011); and Turkey (Top et al., 2015; Top et al., 2013). These countries are both developing and non-native, English-speaking countries. The targeted populations of these studies are different, including school teachers (Anari, 2012; Saiti & Papadopoulos, 2015; Shahzad & Begum, 2011); university librarians (Khan & Ahmed, 2013); employees at hospitals (Dimitrios et al., 2014; Top et al., 2015; Top et al., 2013); military personnel (Bokti & Talib, 2009; Chin-Siang et al., 2014); and people who work in government-owned organizations (Giri & Kumar, 2010; Tewari, 2009).

JSS (Spector, 1997) has been utilized as the sole or main measuring instrument in these studies. Among them, there were only three studies in which the authors have described the procedure of translating and retranslating the scale for its usage in their native languages (Anari, 2012; Chin-Siang et al., 2014; Shahzad & Begum, 2011). Interestingly, two of them were carried out with the purpose of verifying the reliability and validity of JSS (Spector, 1997) in non-native, English-speaking contexts (Chin-Siang et al., 2014; Shahzad & Begum, 2011). In the work of Chin-Siang et al. (2014), they have presented a thorough description of the translation–retranslation process between the English and Malaysian versions with the involvement of language experts. Chin-Siang et al. (2014) have made use of a pilot study for the validation of the instrument. On the other hand, a more detailed report was compiled by Shahzad and Begum (2011) in their study to examine the reliability and validity of the Urdu version of JSS for further usage in Pakistan. Shahzad and Begum (2011) have carefully administered the back and forth translation process with two separate expert groups, where the experts translated the scale from the Urdu version back to English without knowing and pre-reading the English version. In their study, they concluded that the Urdu version of JSS is a reliable measuring instrument in Pakistan whereas the Malaysian version of JSS did not succeed due to low internal consistency among its subscales. According to the authors (Chin-Siang et al., 2014), this could be caused by the speciality of the target population—military personnel. In Chin-Siang et al. (2014) study, because of the poor model fit of the Malaysian translated JSS, the authors have come up with a new instrument that was

derived from JSS (Spector, 1997). The new instrument consists of five aspects including recognition, affection, fairness, expectation, and workload, which are stretched through 28 items. Having done another sub-study, Chin-Siang et al. (2014) have concluded that their newly devised instrument has a good model fit and is reliable for usage among military personnel in Malaysia.

Several modifications to JSS (Spector, 1997) were observed; however, supporting evidence was not adequately provided in these studies. In the studies of Khan and Ahmed (2013) and Giri and Kumar (2010), a different version of JSS was used. This version of JSS contains only 28 items and covers only seven job facets, while the original scale entails nine job facets and 36 items. There was no evidence of this type of JSS, even in the referred literature of their studies. In contrast, there is a very interesting work done by Tewari (2009), where small modifications were made to the original JSS (Spector, 1997). Tewari (2009) had a preliminary meeting with research participants in which the questionnaires were carefully explained. Based on the participants' feedback, wording modifications were made to the original JSS (Spector, 1997) to make it easier to understand without changing the meaning of the items.

On the contrary, JSS (Spector, 1997) has been applied very sparingly in the Vietnamese context. Only one article using JSS was found from the official academic sources that are provided by Massey University. Pham et al. (2012) have utilized JSS as a framework for a qualitative research on facets of job satisfaction among a very special community, the workers in an HIV aid community. As such, there is not much supporting evidence for the success of implementing JSS in a Vietnamese context. However, as mentioned above, many researchers have confirmed the versatility of JSS across various contexts and cultures where its reliability and validity are maintained. Therefore, the present dissertation aims at bringing JSS (Spector, 1997) into use in a Vietnamese context and exploring the reliability and validity of the scale after being translated into Vietnamese. Thus, the first research question is postulated as follows:

Research Question 1: Is the Vietnamese-translated version of the Job Satisfaction Survey a reliable measuring instrument for job satisfaction in Vietnam?

2.3. Job Satisfaction among Auditors and Ex-auditors in Vietnam

There has been a lot of research done on job satisfaction and its relationship with its antecedents and outcomes (Cranny et al., 1992; Locke, 1969, 1976; Spector, 1997). However, most of the studies are carried out in developed countries across the globe. In

contrast, a severe scarcity of academic studies on job satisfaction in developing countries has been observed (Duong, 2013; Evans & Olumide-Aluko, 2010; Le, 2012; Montero & Rau, 2015; Montero & Vásquez, 2015; Pham, 2014). Particularly in Vietnam, the quantity of creditable academic research is very modest.

Only seven academic studies on job satisfaction in Vietnam were found (Duong, 2013; Le, 2012; Nguyen, 2008, 2009; Nguyen & Nguyen, 2011; Pham et al., 2012; Pham, 2014) Among them, the general level of job satisfaction is anticipated in only two studies of Nguyen (2008) and Duong (2013). They both suggest that people are generally satisfied with their jobs. However, these studies' targeted populations are different and scattered. None of them aims at the white collar workers in the financial service sectors of Vietnam, let alone the audit profession. Therefore, the present dissertation intends to make a contribution to the regional literature by purposively focusing on the job satisfaction of current and ex-auditors in Vietnam.

Auditing and accounting are among the oldest professions (Salehi, Gahderi, & Rostami, 2012). Auditors are reported to usually have very busy work schedules, long working hours, and high levels of job stress (Fisher, 2001; Kalbers & Fogarty, 2005; Larson et al., 2004; Larson & Murff, 2006; Salehi et al., 2012; Snead & Harrell, 1991). Auditing is also known for its high turnover rate (Chi et al., 2013). Despite all that, auditors are suggested to be relatively satisfied with their jobs (Larson & Murff, 2006; Oxner & Oxner, 2006) and their job dissatisfactions even seem to decrease when job stress gets higher (Larson et al., 2004). Nonetheless, there is no empirical evidence for the situation in Vietnam. Thus, the second research question is articulated as follows:

Research Question 2: What is the level of job satisfaction among Vietnamese current and ex-auditors in general?

Moreover, as the present research aims at two different groups that are people who are currently working as auditors and people who have been auditors previously, it would be interesting to find out whether there is any difference between their levels of job satisfaction. Based on that, the first hypothesis is postulated as:

Hypothesis 1 (H_1): The mean score of overall job satisfaction of current Vietnamese auditors is significantly different from that of ex-auditors in Vietnam.

2.4. Job Satisfaction and Age

The relationship between job satisfaction and age has been a perennial debate among scholars around the world. Two types of relationship that have received a great deal of

empirical support are the U-shaped and positive linear (Altimus & Tersine, 1973). Among the first studies that reported the former type, Herzberg et al. (1957) suggest a U-shaped relationship between these two variables based on an exhaustive review of other studies. This relationship type is also backed up by many succeeding researchers, including Kacmar and Ferris (1989), Clark, Oswald, and Warr (1996), and Hosie et al. (2013). They believe that people's job satisfaction is high at the beginning of their careers and will decrease gradually in mid-life, then will rise again later (Gruneberg, 1979).

The second type of age – job satisfaction relationship is a positive linear correlation. There have been many researchers who back up this type of relationship, among which are Hulin and Smith (1965), Altimus and Tersine (1973), Hunt and Saul (1975), and Janson and Martin (1982). These researchers conclude that the general level of job satisfaction will increase in a linear fashion when the employees get older. However, that trend might not be the same for all the components of job satisfaction. For example, a positive linear relationship is reported for the 'work content' aspect, but 'financial rewards', 'promotion', 'co-workers', and 'supervision' are related to job satisfaction in a curvilinear fashion (U-shaped) (Kacmar & Ferris, 1989).

In contrast, some scholars have suggested that no correlation exists between age and job satisfaction (Anari, 2012; Dimitrios et al., 2014; Ghazzawi, 2011; Le, 2012; Saiti & Papadopoulos, 2015), or the correlation is not significant and varies with gender (Chaudhuri, Reilly, & Spencer, 2015). Furthermore, even a negative correlation exists among private sector employees (Jung, Moon, & Sung Deuk, 2007). A similar trait that could be extracted from these studies is that the conclusions were drawn from more recent datasets, and most of these studies were carried out in developing or less developed countries. Regarding this relationship, the second hypothesis is stated as:

Hypothesis 2 (H_2): The overall level of job satisfaction of current and ex-auditors in Vietnam is correlated with age.

2.5. Job Satisfaction and Gender

The relationship between job satisfaction and gender is very controversial due to inconsistent conclusions across studies (Gruneberg, 1979; Spector, 1997). Many researchers have found female employees tend to be more satisfied with their jobs than their male counterparts in certain contexts (Aguilar & Vlosky, 2010; Aletraris, 2010; Linz & Semykina, 2013; Sousa-Poza & Sousa-Poza, 2000, 2003). A common explanation for this phenomenon

is that women have a tendency to possess lower financial demands or lower expectations of their jobs (Aletraris, 2010; Sousa-Poza & Sousa-Poza, 2003).

On the other hand, a number of studies have arrived at a contradictory conclusion, where men are suggested to have higher levels of satisfaction at work (Bönte & Krabel, 2014; Huang & Gamble, 2015; Kara, Uysal, & Magnini, 2012; Sabharwal & Corley, 2009; Singhapakdi et al., 2014). More specifically, Singhapakdi et al. (2014) have argued that there is a clear difference between Western and Asian social settings, where Asian female managers are more vulnerable to a higher possibility of lower job satisfaction due to inequalities in the workplace. Sharing the same viewpoint, Huang and Gamble (2015) and Kara et al. (2012) have also pointed out that female employees in China and Turkey are less satisfied with their jobs than the opposite gender. According to Huang and Gamble (2015), Asian women, especially Chinese women, are perceived to have greater responsibility for the family and, therefore, they are exposed to a higher work–family pressure.

Vietnam is an Asian country and, furthermore, it has been influenced by China for centuries in the past. Therefore, Vietnam and China share many similarities in social culture. Based on the results revealed by Huang and Gamble (2015), the third hypothesis is generated as:

Hypothesis 3 (H_3): Among Vietnamese current and ex-auditors, the overall job satisfaction of men is significantly different from that of their female counterparts.

2.6. Job Satisfaction and Educational Background

Job satisfaction level is likely to have a relationship with the level of education (Gruneberg, 1979). As Herzberg et al. (1987) have pointed out in their review of 13 studies on the education–job satisfaction relationship, a correlation was found in most of the research. Nevertheless, the correlation might be either positive or negative. In other words, people with a higher education background might feel more satisfied or dissatisfied with their jobs.

Herzberg et al. (1987) have detected a common trait among the studies where a negative correlation was found (in the works of Mann, 1953; Mossin, 1949; Neilson, 1951; Scott & Hayes, 1921 as cited in Herzberg et al., 1987) that people with higher education levels are likely to experience lower satisfaction in routine professions. Mottaz (1984) also discusses the problem in his study. He suggests that the dissatisfaction in work among people with better education might be the consequence of being unable to acquire the expected

intrinsic rewards of their jobs. This is the problem of over-education or underemployment (Mottaz, 1984).

On the other hand, more recent research has backed up a positive correlation between job satisfaction and education (Berk, 1985; Duong, 2013; Glenn & Weaver, 1982; Gordon & Arvey, 1975; Martin & Shehan, 1989; Mottaz, 1984; Ross & Reskin, 1992). This kind of relationship is based on several explanations, including: people with a higher education background are likely to have higher levels of control at work (Ross & Reskin, 1992), and higher education levels might lead to jobs with better intrinsic rewards (Mottaz, 1984) or extrinsic factors (Glenn & Weaver, 1982). Taking into account the information provided by these findings, the fourth hypothesis is as follows:

Hypothesis 4 (H_4): The overall job satisfaction of Vietnamese current and ex-auditors is correlated with their education backgrounds.

2.7. Summary of Research Questions and Hypotheses

After reviewing the literature on job satisfaction including main theories in the field, measuring methods and instruments, and its linkages with age, gender, and educational background, Job Satisfaction Survey (Spector, 1997) is selected as the sole measuring equipment for the present research. In summary, there have been two research questions and four hypotheses postulated. They are gathered in this part for a better overview.

Research Question 1: Is the Vietnamese-translated version of the Job Satisfaction Survey a reliable measuring instrument for job satisfaction Vietnam?

Research Question 2: What is the level of job satisfaction among Vietnamese current and ex-auditors in general?

Hypothesis 1 (H_1): The mean score of overall job satisfaction of current Vietnamese auditors is significantly different from that of ex-auditors in Vietnam.

Hypothesis 2 (H_2): The overall level of job satisfaction of current and ex-auditors in Vietnam is correlated with age.

Hypothesis 3 (H_3): Among Vietnamese current and ex-auditors, the overall job satisfaction of men is significantly different from that of their female counterparts.

Hypothesis 4 (H_4): The overall job satisfaction of Vietnamese current and ex-auditors is correlated with their education backgrounds.

A conceptual framework of the present study is illustrated in Figure 2. It describes the construct of job satisfaction, which consists of nine facets that are pay, promotion, supervision, fringe benefit, contingent rewards, operating conditions, co-workers, nature of

work and communication. Possible relationships between job satisfaction and demographic variables including age, gender and education background are illustrated by the dashed lines between them. This conceptual model is actualized by detailed procedures introduced in Chapter 3 – Methodology.

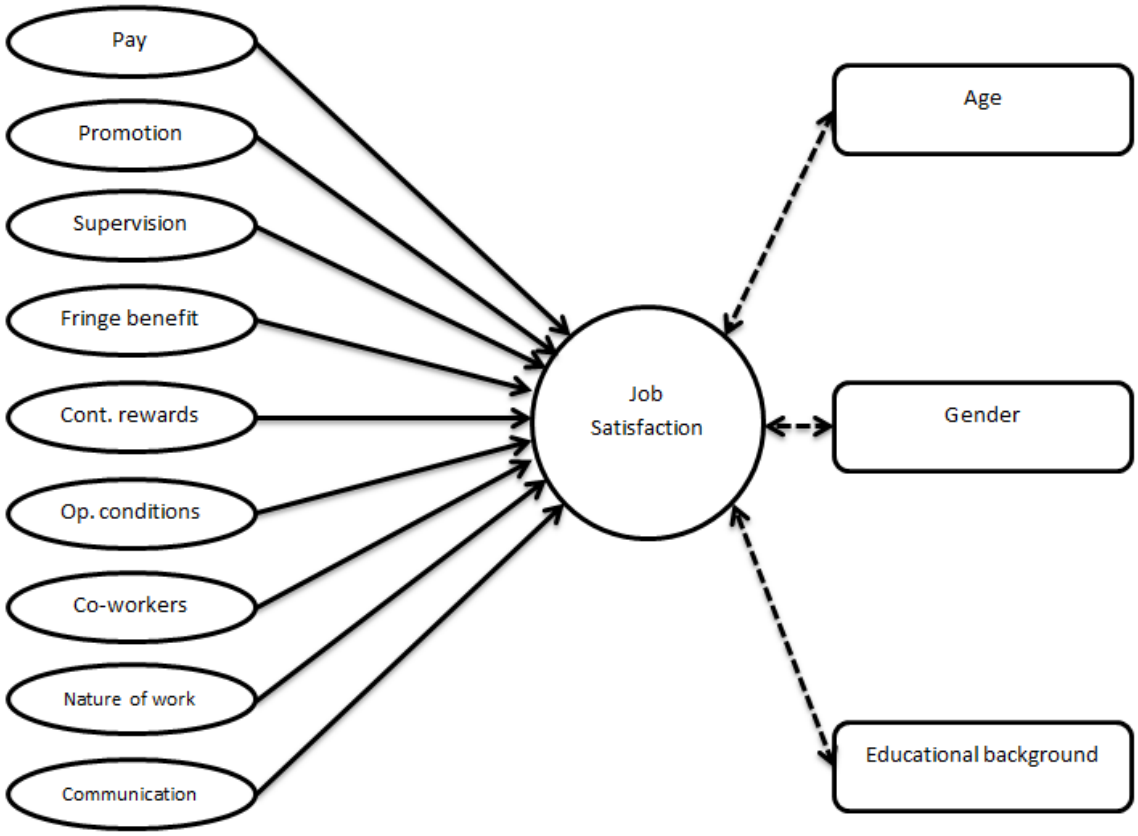

Figure 2. Conceptual framework of the present study.

CHAPTER 3 – METHODOLOGY

This chapter discusses the details of the methods and techniques that have been utilized for the purpose of answering the research questions and examining the hypotheses noted in the previous chapter. Information on research design, participants, measurement, and procedures of the study, the translation process, the pilot study, and the main study will be discussed in this chapter.

3.1. Research Design Overview

Most of the studies that have employed Job Satisfaction Survey are quantitative, and this present dissertation is no exception. A quantitative approach with a cross-sectional design has been selected for this present study. The Job Satisfaction Survey (JSS; Spector, 1985; Spector, 1997) serves as the main instrument for gauging the overall level of job satisfaction and its different facets. In addition, questions on demographic variables are also included in the survey's questionnaires. The questionnaires are distributed and collected wholly through internet-based platforms comprised of online survey services and different communication tools. The data are handled and analyzed using the Statistical Package for the Social Sciences (SPSS).

3.2. Participants

There are two groups of respondents that participated in the present research. The first group are the people who took part in the pilot study, and people who responded to the main study are the second group. These two groups of participants differ from each other in many aspects. Each of them is discussed thoroughly in the sub-chapters 3.6 and 3.7 for the pilot and main studies.

3.3. Measurement

Job Satisfaction Survey (Spector, 1985, 1997) consists of 36 questions, which are allocated evenly into nine categories of job dimensions. There are four questions in each dimension. These job facets have been explained previously in Table 2 (p. 15). The original version of JSS (Spector, 1997) is in English and is shown in Appendix A.

For each question, the respondent would be asked about their satisfaction with a particular matter related to their job. All of the 36 questions have the same multiple choice

answers, ranging from 1 to 6, where 1 means 'Disagree very much' and 6 equals 'Agree very much'. As such, a respondent can score from 1 to 6 for each item.

However, not all of the questions are worded in a positive way. Within the scale, a number of negatively worded items are included. The order of positively and negatively worded items of the original version of JSS (Spector, 1997) is presented in Table 3. As stressed earlier, the scale can yield ten scores, including nine different facet scores, by summing up the scores of items of each facet, and the overall level of job satisfaction as the sum of all 36 items. The score for each job dimension could range from 4 to 24, and one respondent can score anywhere from 36 to 216 for overall job satisfaction.

Table 3

Subscale Contents of the Original JSS

Subscale	**Item number**
Pay	1, 10r, 19r, 28
Promotion	2r, 11, 20, 33
Supervision	3, 12r, 21r, 30
Fringe benefits	4r, 13, 22, 29r
Contingent rewards	5, 14r, 23r, 32r
Operating conditions	6r, 15, 24r, 31r
Co-workers	7, 16r, 25, 34r
Nature of work	8r, 17, 27, 35
Communication	9, 18r, 26r, 36r

Note. Items marked with "r" are negatively worded items.

Source: Adapted from Spector (1997, p. 9).

In the present study, reliability and validity of the scale are also scrutinized. Besides Cronbach's alpha, the standard coefficient for internal reliability, the Guttman split-half coefficient, is also calculated for the present study in order to further foster the conclusion on JSS's (Spector, 1997) internal consistency. Regarding the validity of the scale, the present research has analyzed its discriminant validity and convergent validity. Overall, JSS (Spector, 1997) has showcased acceptable values for reliability and validity. Further details will be provided in-depth in the Results and Discussion chapters.

3.4. Procedures Overview

This part aims to provide an overview of the whole process that the present research has been adhered to. Firstly, a rigorous translation technique was employed to translate the original English version of JSS (Spector, 1997) into Vietnamese. This translation included the translation–retranslation technique with several steps and the involvement of external experts. An initial Vietnamese version was crafted with all the suggestions from the experts carefully taken into consideration. This first Vietnamese draft was used as the material for a pilot study in order to further validate the translation of the scale. Subsequently, information and data from the pilot study were thoroughly analyzed with SPSS and amendments to the initial Vietnamese version of JSS are made where necessary. The final version of JSS in Vietnamese then became the measuring instrument of job satisfaction for the main study of this present dissertation (Appendix B). Afterwards, statistical analyses drawn from the main study were used for discussion inferences. Detailed procedures are presented step by step in the following subchapters.

3.5. Translation

The original Job Satisfaction Survey designed by Spector (1997, 1985) is in English and has been translated into many languages. Several Vietnamese translated versions of JSS have been found, and Spector himself has also placed a Vietnamese-translated version on the website for JSS (Spector, 2011). However, there was no evidence of validation of these translated scales as well as no information on its usage in any credible source. Therefore, an independent translation–retranslation procedure has been adopted for the present study.

According to Kavanagh and Duffy (1978), the retranslation technique was first introduced by Smith and Kendall (1963). Smith and Kendall (1963) suggest that: "Material is translated into a foreign language, and then, by an independent translator, retranslated into the original. Where 'slippage' occurs, translations are corrected" (p. 151). They believed that this technique is generally appropriate for the development of scales to address people's judgement on something. Furthermore, this method has been extensively employed successfully in many studies involving translating measuring instruments into non-original languages (Anari, 2012; Chin-Siang et al., 2014; Erdvik, Øverby, & Haugen, 2015; Fesharaki, Talebiyan, Aghamiri, & Mohammadian, 2012; Johari, Kirana, & Omar, 2011; Kavanagh & Duffy, 1978; Shahzad & Begum, 2011). Thus, the application of the retranslation technique in this study appears justifiable.

The translation–retranslation process consists of the following steps:

1. Translation of the original scale into Vietnamese;
2. Retranslation from the Vietnamese version into English by different independent experts;
3. Collection and consolidation of all retranslated versions of JSS;
4. Making amendments to the Vietnamese version (if necessary);
5. Comparison with the Vietnamese version of JSS posted on website of JSS's author – Spector; and
6. Finalization of the Vietnamese version of JSS for the pilot study.

Firstly, the original version of JSS was carefully translated into Vietnamese by the researcher. Being a person who can utilize both English and Vietnamese fluently, the researcher has made the translation himself and reviewed it several times with references to advanced English–Vietnamese dictionaries in order to make sure that not only were the words interpreted precisely, but also that the whole meaning of every item made sense in Vietnamese. Afterwards, the Vietnamese version of JSS was sent to three independent experts for retranslation. All three translators are Vietnamese and are highly capable of using both English and Vietnamese. The first one was a colleague of the author at the Hanoi School of Business in Vietnam; the second translator is a Fulbright Scholarship holder at The George Washington University in the US; and the third one is a holder of the Prime Minister's Australia Asia Postgraduate Scholarship, who is doing her PhD at Monash University in Australia. She has had a history of teaching in translation and interpretation at the Vietnam National University and works as a professional translator and interpreter, as well as being an editor of the Women's Publishing House in Hanoi, Vietnam. These independent experts were asked to retranslate the Vietnamese version of JSS back into English without prior reading of the original scale and to point out any ambiguities or vague meanings of the items.

Subsequently, all three retranslated versions of JSS were collected, along with the feedback on the content of the Vietnamese-translated version. Retranslated versions of JSS were consolidated and compared with the original instrument in order to identify the differences in interpretations and meanings of every item and the Likert rating scale. The Likert rating scale of JSS consists of six levels, ranging from 'Disagree Very Much' as 1 to 'Agree Very Much' as 6. Special attention was paid to the Likert rating scale due to its importance as a measuring instrument. A crucial characteristic of the Likert scale is the

balance of positive and negative options (Case Western Reserve University (CWRU), 2015), which has been maintained in all retranslated versions as shown in Table 4. The translations from all experts did not vary much from the original JSS; therefore, the Vietnamese translated answers remained unchanged.

Table 4

Back-translation of the Answers

No	Original Version	Expert 1	Expert 2	Expert 3
1	Disagree very much	Strongly Disagree	Definitely disagree	Strongly Disagree
2	Disagree moderately	Relatively Disagree	Somewhat disagree	Relatively Disagree
3	Disagree slightly	Slightly Disagree	Slightly disagree	Slightly Disagree
4	Agree slightly	Slightly Agree	Slightly agree	Slightly Agree
5	Agree moderately	Relatively Agree	Somewhat agree	Relatively Agree
6	Agree very much	Strongly agree	Definitely agree	Strongly agree

The majority of Vietnamese-translated items (31 items) are retranslated without any problem, and all retranslations are either absolutely the same with or very close to the original ones. Four items were retranslated with slight differences among the three translators. They are items 2, 6, 10, and 11 (as presented in Table 5). For item number 2, a notable difference is that translator number 3 has introduced two words, 'In fact', that are not seen from the other two experts' translations. However, as can be seen, these words do not make much impact on the whole meaning of the item and, in general, all retranslated versions are very close to the original one. Thus, this item was kept unchanged. Similar reasoning was adapted for items 6, 10, and 11, and, as a result, all of these four items were not changed in the Vietnamese version of JSS.

Table 5

Items with Slight Differences in Retranslation

No	Original	Expert 1	Expert 2	Expert 3
2	There is really too little chance for promotion on my job.	There are too few promotion opportunities at my work.	There are a few chances to get promotion in my job.	In fact, there are too few promotion opportunities in my job.
6	Many of our rules and procedures make doing a good job difficult.	There are many provisions and procedures in the company that make the task implementation more difficult.	Many rules and procedures within the company cause difficulties in carrying out a task.	Many regulations and procedures in the company constrain effective completion of tasks.
10	Raises are too few and far between.	The wage increases are insignificant and rare.	Pay raises are too little and sparse.	Salary increases are too few and scarce.
11	Those who do well on the job stand a fair chance of being promoted.	People who work well will have equal promotion opportunities.	Who has done his job well deserves an unbiased promotion.	Whoever performs well at work has fair opportunities for being promoted.

Finally, a little ambiguity was identified by the third expert for item number 25. The original item 25 is 'I enjoy my co-workers', and was retranslated as 'I find my colleagues interesting', 'I enjoy my colleagues', and 'I am amused by my colleagues' by the first, second, and third translators, respectively. Besides the exception of the second retranslation, item 25 was differently interpreted by the first and third experts, who gave different meanings from the original. After being investigated, the matter was found to be caused by a translation error in the initial Vietnamese version. Items 25 and 7 ('I like the people I work with') share the same meaning with different verbs that are 'enjoy' and 'like'. However, these two verbs can normally be interpreted by one Vietnamese word, as 'thích', which has been used for the translation of the seventh item. A slightly different Vietnamese verb was used for the 25th item. In this case, it caused the misunderstanding. Thus, a modification

was made to the 25th item in the Vietnamese version: to change the verb back to 'thích' due to the fact that no problem was identified for the retranslation of the seventh item.

After the consolidation and correction of the first draft of the Vietnamese-translated Job Satisfaction Survey, six questions were added for the collection of demographic variables (Appendix D). Moreover, questions about the time spent to complete the survey and whether the participant found any ambiguity or difficulty in understanding the questions were also included in the handout. Demographic variables that were collected are as follows:

37. Name of participants
38. Age of participants
39. Gender of participants (Female/Male)
40. Educational background of participants:
    - 40.1. College Degree(s) or lower
    - 40.2. Professional Certificate(s) only (For example, ACCA, CFA, CPA, or VNCPA)
    - 40.3. Undergraduate (Bachelor Degree) only
    - 40.4. Undergraduate (Bachelor Degree) and Professional Certificate (For example, ACCA, CFA, CPA, or VNCPA)
    - 40.5. Master Degree only
    - 40.6. Master Degree and Professional Certificate (For example, ACCA, CFA, CPA, or VNCPA)
    - 40.7. PhD only
    - 40.8. PhD and Professional Certificate (For example, ACCA, CFA, CPA, or VNCPA)
41. Current status of participants (Auditor/Ex-auditor/Other)
42. City that participants are working in (Hanoi/Vinh/Ho Chi Minh City/Other)
43. Participant's email address

Additional questions to address any possible ambiguities or difficulties, as well as the time that was taken for completing the questionnaires, are:

44. How many minutes did it take you to finish the questionnaires?
45. Did you find any question or phrase that was difficult to understand or was ambiguous? If yes, please specify. (Yes/No)

For additional items, including numbers 37, 38, 43, and 44, participants were provided with empty spaces to fill in their answers. On other questions, people were asked to choose from a list of variants as specified or in brackets. The last additional item was for collecting further information on the reaction of participants to the questionnaires' clarity and comprehensibility. Participants were provided with blank spaces for filling in their findings in case they answered 'yes'.

3.6. Research Ethics

The JSS questionnaires are available for free for academic and non-commercial purposes for purchasers of Spector's book (Spector, 1997). The purchasers of this book are also allowed to modify the content of JSS. Therefore, there is no legal infringement here. A clear and concise information sheet with a clearly stated security declaration and consent for using the data for academic research purposes was provided for the participants. As long as the personal information was kept confidential, there would be no consideration of either 'lack of informed consent' or 'invasion of privacy' (Bryman & Bell, 2011) in this study. Moreover, there was neither a viable indication of any harm to participants nor deception in the present research.

The present research has also received a Low Risk Notification from the Massey University Human Ethics Committees on 7 August, 2015, prior to the research's initiation (Appendix C). The application for the Low Risk Notification is strictly abided by the protocols and guidelines of Massey University. Firstly, ethical aspects of the present research are discussed with colleagues of the researchers and the supervisors. Then, a screening questionnaire must be fully answered for the determination of the approval process. This questionnaire covers different types of research's ethical issues including risk of harm, informed and voluntary consent, privacy and confidentiality issues, deception, conflict of interest, compensation to participants, and procedural issue. After confirming that the present study is free of those ethical risks, an application for the Low Risk Notification is prepared and sent to the Massey University Human Ethics Committees. The notification is accepted and is valid for a maximum of three years. The present project is also recorded on the Low Risk Database reported in the Annual Report of the Massey University Human Ethics Committees.

3.7. Pilot Study

As stated by van Teijlingen and Hundley (2001), there are two types of pilot studies in social science research. The first form is also referred to as 'feasibility studies', which represent the preparation for major studies but on smaller scales or in trial modes (Polit & Beck, 2014). The second type of pilot study is the one that is employed for the pre-testing or assessment of a particular research instrument (Baker, 1999). Pilot studies are supposed to help researchers in establishing a preliminary understanding of how fit the planned study, its characteristics, or its instruments are in a given situation and context (Moore, Carter, Nietert, & Stewart, 2011). For the present dissertation, due to the lack of validation information on the use of a Vietnamese-translated version of the Job Satisfaction Survey (Spector, 1985, 1997), a pilot study is organized for assessing the appropriateness and comprehensiveness of the Vietnamese version of JSS. In addition, this pilot study is also planned with the aim of determining the necessary time for survey completion and to gauge the ability of inviting people to participate in the research.

Peat, Mellis, Williams, and Xuan (2002) have made a very concise guide for improving the internal validity of questionnaires in a pilot study that includes the following steps:

- Administer the questionnaire to pilot subjects in exactly the same way as it will be administered in the main study;
- Ask the subjects for feedback to identify ambiguities and difficult questions;
- Record the time taken to complete the questionnaire and decide whether it is reasonable;
- Discard all unnecessary, difficult, or ambiguous questions;
- Assess whether each question gives an adequate range of responses;
- Establish that replies can be interpreted in terms of the information that is required;
- Check that all questions are answered;
- Reword or rescale any questions that are not answered as expected; and
- Shorten, revise, and, if possible, pilot again. (p. 123).

This guide is adopted for the present pilot study and its details are stressed in subsequent sections.

3.7.1. Procedures

After finishing the translation–retranslation process, the pilot study is performed with the consolidated JSS's Vietnamese version. Typeform is selected as the platform for the online survey because there are not many choices with an interface that fully supports the Vietnamese language. The pilot study's online survey can be accessed at the following link: https://minhpqhsb.typeform.com/to/QxsOoW. Firstly, an introduction page is presented to the participant to welcome them to the research. On this page, a link to the online version of the information sheet in Vietnamese is provided for participants' convenience (Appendix H). The Vietnamese information sheet is translated from its English version, which is available in the Appendix G. Guidance on how to answer the questions is clearly shown on the next page of the online survey.

Before launching the pilot study, further minor changes were applied to the Vietnamese-translated version of JSS. Three potential participants were asked to look at the online survey and try to finish it. All of them returned similar feedback on the sequence of the items. Initially, the numbering of the questions was kept the same as the original English version of JSS (Spector, 1997) in which the items were not grouped into sub-scales but rather scattered. According to the trial respondents' observations, this sequence could potentially make the respondents lose focus and become bored with the questionnaire. After taking these suggestions into consideration, the order of the questions was changed so that items of the same subscale are displayed continuously (see Table 6 and Appendix B). Spector (1997) himself did not mention any matter related to changing the item order of JSS, and no evidence has been found in related literature either. Thus, there should be no problem with changing the JSS's sequence of questions. The original order column in Table 6 shows the actual order of items in the scale's original English version (Appendix A).

Table 6

Changes in Order of the Questions

Original Order	New Order	Negatively worded question	Subscale
1	1		Pay
10	2	r	Pay
19	3	r	Pay
28	4		Pay
2	5	r	Promotion
11	6		Promotion
20	7		Promotion
33	8		Promotion
3	9		Supervision
12	10	r	Supervision
21	11	r	Supervision
30	12		Supervision
4	13	r	Fringe benefit
13	14		Fringe benefit
22	15		Fringe benefit
29	16	r	Fringe benefit
5	17		Contingent rewards
14	18	r	Contingent rewards
23	19	r	Contingent rewards
32	20	r	Contingent rewards
6	21	r	Operating conditions
15	22		Operating conditions
24	23	r	Operating conditions
31	24	r	Operating conditions
7	25		Coworkers
16	26	r	Coworkers
25	27		Coworkers
34	28	r	Coworkers
8	29	r	Nature of work
17	30		Nature of work
27	31		Nature of work
35	32		Nature of work
9	33		Communication
18	34	r	Communication
26	35	r	Communication
36	36	r	Communication

The main purpose of the pilot study is to make sure that the Vietnamese-translated version of JSS is understandable and reliable for its usage in the main study among Vietnamese people. Convenience sampling is chosen as the sampling method for the pilot study. A list of potential participants is prepared based on the people known by the researcher. Then, the link to the online survey is sent to potential participants through multiple channels, including email and messaging applications. These participants are also asked to introduce the questionnaire to their colleagues.

The survey for the pilot study remains open for two weeks, from 3 November, 2015 to 18 November, 2015. Submitted responses are recorded online by Typeform and could be accessed any time by the researcher. Furthermore, every time a new response is submitted successfully, a notification email (Appendix I) will be sent to the researcher's email address. After closing the pilot study, the data are downloaded in Microsoft Office Excel format. Subsequently, the data are reorganized and sanitized into a proper format with Excel before being imported to SPSS.

3.7.2. Participants

Participants in the pilot study should not include the people who would be invited to participate in the main study (Lancaster, Dodd, & Williamson, 2004). Therefore, the pilot study aims at people who are outside the targeted population of the main study. All the people invited to take part in the pilot study are neither auditors nor ex-auditors in Vietnam. They, then, are asked to invite their friends to take the pilot survey. The pilot study attracts 68 respondents with valid responses. All of the participants are Vietnamese and belong to the white-collar worker group. Among them, 31 are women and 35 are men, which in turn accounts for 45.6% and 51.5% of the sample, respectively. There are only two out of the 68 people who do not provide gender information (2.9%). More in-depth details are available in Appendix E.

3.7.3. Summary of the pilot study

The pilot study is successful in achieving its ultimate goal, which is to make sure that the Vietnamese version was comprehensible and can be used for the main study of the present research. Statistical analyses for the pilot study are presented in Appendix E. There is only a small amount of missing data in the collected dataset in the pilot study. The dataset of the pilot study shows a normal distribution for the overall satisfaction scores. Through the

pilot study, the data collected by the Vietnamese version of JSS demonstrate a high internal consistency (α = .93).

Some minor issues are detected with the scale, and amendments are also been made to the instrument accordingly. Several respondents have given feedback on the comprehensibility and possible ambiguity of the questionnaires used in the pilot study including feedback on the repetition of the same thing in different questions, and the possible confusion of reverse questions. Nevertheless, both of them are inherent features of Job Satisfaction Survey; therefore, no change would be made in regard to these comments. A notable response has pointed out that in the subscale 'Supervision', the Vietnamese translated word for 'supervisor' is rather ambiguous if the participant had several seniors above them. A fix for this matter has been introduced into the Vietnamese version of JSS, where the word 'supervisor' would be translated into Vietnamese as 'direct supervisor' for clarification. Tweaks for these issues are illustrated in the next part, Main Study Procedures. Furthermore, the pilot study confirms that the survey would take less than 20 minutes to complete, which is useful in limiting the number of people that may drop out of the survey because of time constraints. Additionally, the chosen online platform 'Typeform' demonstrates that it has very good accessibility and is compatible with a wide range of electronic devices, which is an advantage and would definitely help in reaching more potential respondents.

3.8. Main Study Procedures

Several adjustments are made to the Vietnamese version of Job Satisfaction Survey based on the pilot study's findings. Firstly, the translated word for 'my supervisor' is modified slightly into the equivalent meaning in Vietnamese of 'my direct supervisor' for questions 9, 10, 11, and 12. Secondly, the questions on completion time and comprehensibility of the questionnaires are removed. Thirdly, as the main study only aims at the auditor and ex-auditor community, the 'Other' option is removed from the question on participants' current occupation (number 41). Similarly, only three variances — 'Hanoi', 'Ho Chi Minh City', and 'Other' — are retained as the answers for the question on participants' working location. Finally, in order to make sure that respondents would complete every question of the questionnaire, all the JSS's (Spector, 1997) items are made compulsory. The participant will not be able to submit the questionnaires if the first 36 questions are not entirely answered. Unanswered items will be highlighted and the survey screen will be navigated automatically to the outstanding questions in order to assist the

respondents in completing the survey. Questions related to personal information are maintained as not mandatory.

3.8.1. Sampling

The present study is designed with a focus on the white-collar workers who had previously been auditors or are currently auditors. Due to its nature, it is very difficult to compile a comprehensive list of people in the targeted population. Moreover, the present research is under pressure of a predefined timeframe and the researcher has neither contacts nor access to any viable database of the target population. Therefore, again, convenience sampling technique is employed for the main study. The initial invitations to answering the survey are firstly sent to people who belong to the defined population within the social circles of the researcher. Then, these participants are asked to introduce the survey to their friends and relatives that fit within the population's definition.

3.8.2. Communication and survey distribution

Similar to the pilot study, the potential respondents are contacted through online platforms, including emails (Appendix J), communication applications, and telephone. In addition, in-person meetings are also an important part of the recruitment process. The researcher came back to Vietnam in order to facilitate and monitor the recruitment phase. Travels between the cities in Vietnam are necessary for improving the heterogeneity of the sample in terms of geography. Every source of the researcher's personal relation is utilized.

The participants are also provided with brief information on the purpose of the research. A link to full information sheet in Vietnamese is also placed on the welcoming page of the survey for people who would like to find out more about the research (Appendix H). Every time a respondent submits their answered survey, a thank you email will be sent to their email address as provided by themselves in the online survey powered by Typeform. Simultaneously, a notification email is dispatched to the researcher's email address (Appendix I). The main study survey was left open for two months before being closed at the beginning of February, 2016.

3.8.3. Data collection

There is no difference between the pilot study and the main study regarding data collection. The responses are recorded automatically by Typeform, and the researcher is able

to access the database any time. During the process, several backups are done manually by the researcher for safety reasons.

3.8.4. Participants

With a great effort put into the recruitment process, the present study manages to acquire a sample of 202 respondents, of which most are young people with an age range from 21 to 45 years of age (M = 27.73, SD = 4.23). Almost two thirds of the whole sample are from 20 to 29 years of age (64.9%, n = 131). Among the participants who provide their ages, only five people belong to the 40 to 49 years old group, and about one fifth of the sample's population are from 30 to 39 years old (2.5% and 22.8%, respectively; see Table 7).

Table 7

Distribution of Sample by Age (Main Study)

Age range	**Frequency**	**Percent (%)**
20-29 years old	131	64.9
30-39 years old	46	22.8
40-49 years old	5	2.5
Total valid	182	90.1
Missing	20	9.9
Grand Total	202	100.0

Among participants with valid responses for the variable 'Sex', 99 are women and 95 are men, which respectively accounts for 49% and 47% of the sample size. Only four percent of the responses are omitted (n = 8). There is little difference between the mean ages of the female and male participants: M = 27.77 years old (SD = 4.33) for women and M = 27.54 years old (SD = 4.14) for men. The reported 5% Trimmed Means for both women and men do not deviate much from the actual means ($M_{Trimmed}$ = 27.34 and 27.17 years old, respectively); therefore, extreme values insignificantly affect the means of both groups (Pallant, 2011) and they are not examined further.

More than half of the participants possess a Bachelor's degree (n = 112, 55.4%), and there are fewer people with higher educational qualifications. An interesting fact is that the number of people who have Master's degrees is relatively equal to the number of people who have both Bachelor's degrees and professional certificates. These two groups account for 16.8% and 16.3% of the total sample (n = 33 and 34, respectively). There is only one

respondent with a PhD degree and one with both a PhD degree and professional certificates. Ten participants do not provide answers for their education background (Table 8).

Table 8

Distribution by Education Background (Main Study)

Education background	**Frequency**	**Percent (%)**
Bachelor Degree(s)	112	55.4
Bachelor Degree(s) and Professional Certificate(s)	33	16.3
Master Degree(s)	34	16.8
Master Degree(s) and Professional Certificate(s)	11	5.4
Ph.D. Degree(s)	1	.5
Ph.D. Degree(s) and Professional Certificate(s)	1	.5
Total valid	192	95.0
Missing	10	5.0
Grand total	202	100.0

The main study gathers 109 current auditors and 83 ex-auditors (54% and 41%, respectively). Only ten people do not answer this question (5%). Most of the participants in the main study are working in Hanoi, the capital city of Vietnam. A number of 177 people fall into this category, which accounts for 87.6% of the whole sample size. There are 12 participants working in Ho Chi Minh City, the busiest city in Vietnam, and only ten respondents work in other regions of Vietnam. Due to this skewed distribution of the sample size, it appears that its representativeness for the community of current and ex-auditors in Vietnam is relatively weak.

CHAPTER 4 – DATA ANALYSIS AND RESULTS

This chapter depicts sequenced analyses executed for the present study and their results. The dataset is downloaded from the online survey service, Typeform, in MS Excel format. Firstly, a backup version of the data file is made and encrypted for safety reasons. The dataset is thoroughly scrutinized and sanitized into an appropriate format before being imported into SPSS. Random variables are examined in order to guarantee the accuracy of the imported dataset. Reverse scores are calculated for negatively-worded items. Sub-sums and a grand total are also computed for subscales as well as a total job satisfaction score.

All of the 202 responses are usable and, since the main 36 questions are compulsory, there are no missing data for the first 36 items of the survey. Among the first 36 items of the questionnaires, the original scores of almost every item are in the range from 1 to 6. The only exception is the third item under the subscale 'Co-workers' with a minimum score of 2 and a maximum score of 6. Furthermore, for almost every question, from the first to the 36th, answers are generally diverse. In other words, there is no inherent bias in the questions where people would tend to select a particular answer. Since there is no missing data for the items of JSS (Spector, 1997), missing data and imputation take part only after analyses of the measuring instrument.

4.1. Preliminary Analysis on Demographic Variables

In preliminary analyses for demographic variables (see Table 7, p. 37 and Table 8, p. 38), a common pattern is detected between the distribution of the sample over the age factor and the educational background factor. More than half of the respondents are young with less educational background. It appears that the younger the people are, the less equipped they are with qualifications. Correlation tests are worked out between the two variables on the original data set. A statistically significant positive correlation with medium strength is found between the two variables, namely age and educational background (ρ =.33, n = 174, p < .001, 11% of variance explained (Table 9).

Table 9

Correlation between Age and Education Background (Main Study)

Spearman's rho (ρ)		Age	Educational background
Age	Spearman's rho (ρ)	1.000	.332**
	Sig. (2-tailed)	-	.000
	N	182	174
Educational background	Spearman's rho (ρ)	.332**	1.000
	Sig. (2-tailed)	.000	-
	N	174	192

Note. **. Correlation is significant at the 0.01 level (2-tailed).

Similar results are reported when the test was computed for males and females separately (Table 10). For male current and ex-auditors in Vietnam, the correlation between age and education background is not very strong with Spearman's $\rho = .29$, $n = 82$, $p = .009$ and share 8.4% of variance explained. For their female counterparts, the relationship is stronger with Spearman's $\rho = .38$, $n = 89$, $p < .001$ and the two variables share 14.4% of variance explained.

Table 10

Correlations between Age and Educational Background Separated by Gender (Main Study)

	Spearman's rho (ρ)		Age	Educational background
Woman	Age	Spearman's rho (ρ)	1.000	.377**
		Sig. (2-tailed)	-	.000
		N	91	89
	Educational background	Spearman's rho (ρ)	.377**	1.000
		Sig. (2-tailed)	.000	-
		N	89	96
Man	Age	Spearman's rho (ρ)	1.000	.287**
		Sig. (2-tailed)	-	.009
		N	87	82
	Educational background	Spearman's rho (ρ)	.287**	1.000
		Sig. (2-tailed)	.009	-
		N	82	89

Note. ** Correlation is significant at the 0.01 level (2-tailed).

The statistical significance of the difference between these two correlation coefficients is calculated by the formula (adapted from Pallant, 2013, p. 146):

$$z_{obs} = \frac{z_1 - z_2}{\sqrt{\frac{1}{N_1 - 3} + \frac{1}{N_2 - 3}}}$$

where z_1 and z_2 are z-scores of respective rho values, and N_1 and N_2 are populations of respective groups. The value is calculated $z_{obs} = 0.63$, outside the range from -1.96 to +1.96 (Pallant, 2013); therefore, there is no statistically significant difference between these two correlation coefficients between male and female current and ex-auditors in Vietnam.

When the sample is separated by job status, a different view is revealed (Table 11). Among the current auditors, there is a relatively strong statistically significant positive correlation between their ages and their education backgrounds with Spearman's ρ = .49, n = 90, p < .001, 24% of variance explained. Meanwhile, no significant correlation is reported for the ex-auditors (ρ = .08, n = 75, p = .47).

Table 11

Correlation between Age and Education Background Separated by Job Status (Main Study)

	Spearman's rho (ρ)		Age	Educational background
Auditor	Age	Spearman's rho (ρ)	1.000	.491**
		Sig. (2-tailed)	-	.000
		N	95	90
	Educational background	Spearman's rho (ρ)	.491**	1.000
		Sig. (2-tailed)	.000	-
		N	90	103
Ex-Auditor	Age	Spearman's rho (ρ)	1.000	.084
		Sig. (2-tailed)	-	.473
		N	78	75
	Educational background	Spearman's rho (ρ)	.084	1.000
		Sig. (2-tailed)	.473	-
		N	75	79

Note. **. Correlation is significant at the 0.01 level (2-tailed).

4.2. Assessing Normality of the Data

Hypothesis testing relies on the assumption that the data are normally distributed (Field, 2013). Therefore, the normality of the data is analyzed first. The overall score of job satisfaction is calculated as the sum of all 36 items after the recalculation of all the scores for reverse questions. The total satisfaction score can range from 36 to 216 (Spector, 1985, 1997). The total job satisfaction level has a mean score of M = 137.77 and standard deviation of SD = 21.70 (Table 12). Reported 5% Trimmed Mean is $M_{trimmed}$ = 137.65, which is only slightly different from the normal mean score; therefore, the extreme cases do not pose a significant influence on the mean of the dataset and do not require further investigation. The skewness score of .167 suggests that the collected dataset is approximately asymmetric and that is a good sign for the normality of the overall job satisfaction score.

Table 12

Descriptive Statistics of Overall Job Satisfaction Score (Main Study)

Overall job satisfaction score		**Statistic**	**Std. Error**
Mean		137.77	1.53
95% Confidence Interval for Mean	Lower Bound	134.76	
	Upper Bound	140.78	
5% Trimmed Mean		137.65	
Median		136.00	
Std. Deviation		21.70	
Minimum		78.00	
Maximum		201.00	
Skewness		.167	.171
Kurtosis		.501	.341

The normality tests consist of a Kolmogorov-Smirnov (K-S) test and a Shapiro-Wilk (S-W) test. They have returned insignificant results, as $D(202) = 0.06$, $p = .07$ for the K-S test and $D(202) = 0.99$, $p = .11$ for the S-W test (Table 13). These results show that the total job satisfaction score does not deviate significantly from normal. Furthermore, the histogram and Q-Q plot are also examined (Figure 3 and Figure 4). It can be seen that the total satisfaction score is reasonably normal on the histogram, and the normality is also supported by the Q-Q plot as most of the scores do not deviate much from the straight line. Therefore, the assumption that the data are normally distributed is confirmed.

Table 13

Test of Normality for Overall Job Satisfaction Score (Main Study)

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
Overall Job satisfaction score	.06	202	.07	.99	202	.11

a. Lilliefors Significance Correction

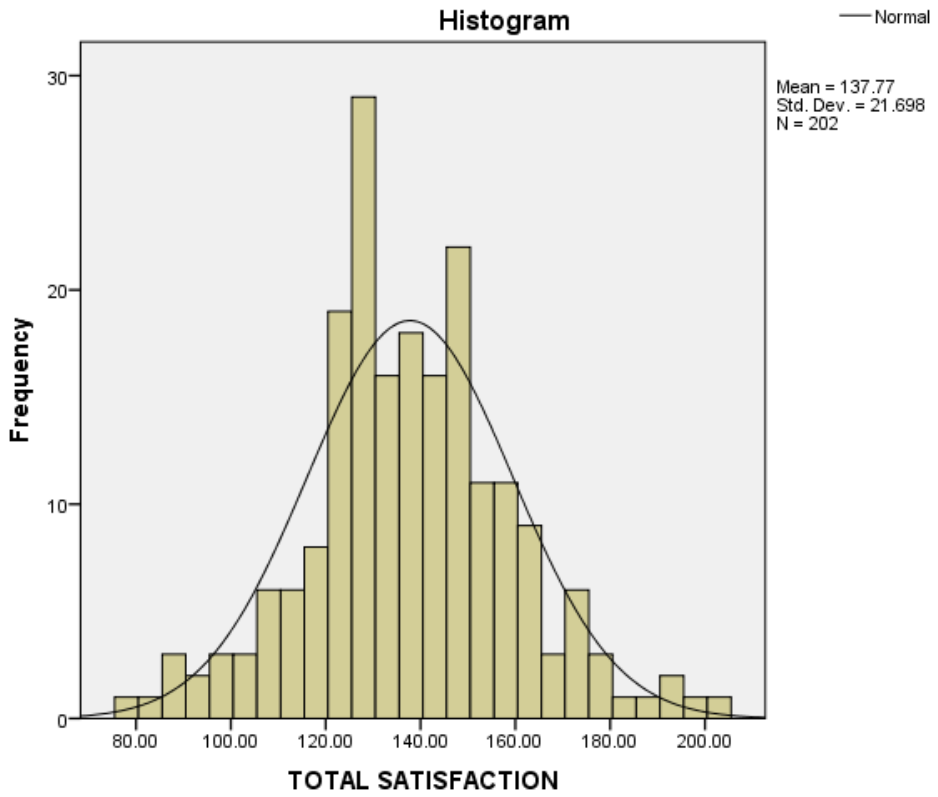

Figure 3. Histogram of overall job satisfaction score (Main study).

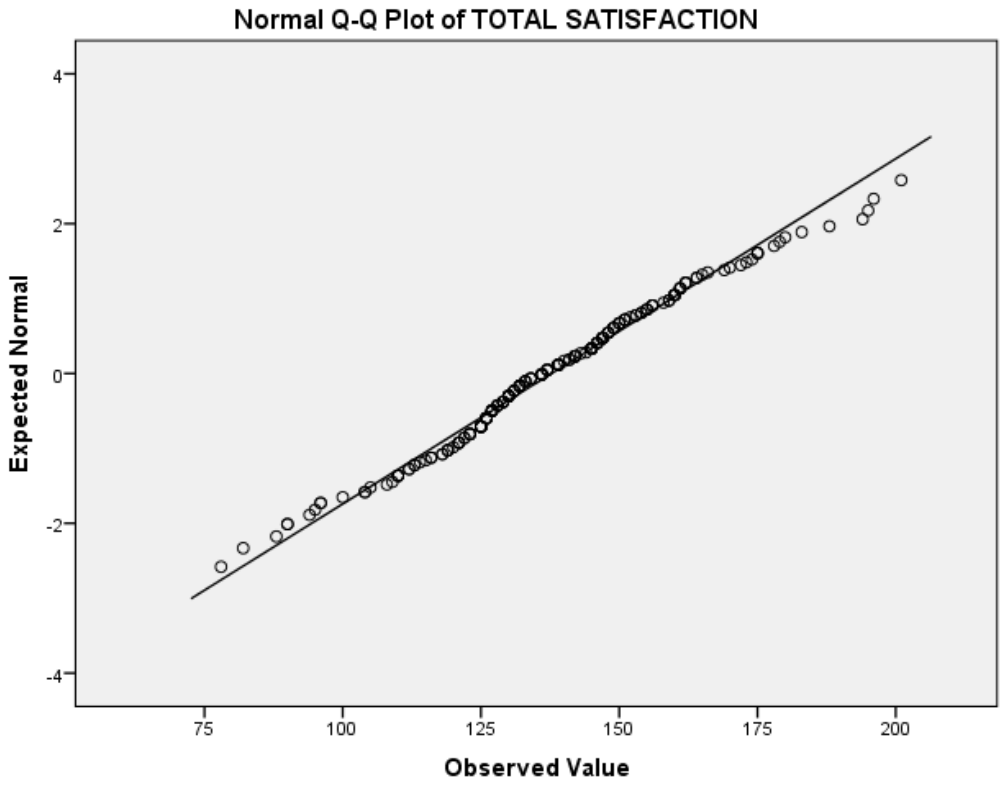

Figure 4. Q-Q plot of total job satisfaction score (Main study)

4.3. Reliability

The internal consistencies are calculated for every facet of job satisfaction and for the overall job satisfaction as a whole. These alpha coefficients are compared to values presented by Spector (1997) in Table 14. The internal consistency values of each subscale of Spector's Job Satisfaction Survey (1997) range from .43 to .82. According to Kline (1999), generally, a Cronbach's alpha value of α = .70 or .80 is appropriate for scales used in cognitive or ability tests. However, in some cases, where diverse psychological constructs are being measured, values below .7 can be expected (Kline, 1999) or even a value as low as .5 could be appropriate (Nunally, 1978). In the present study, three subscales, including 'Promotion', 'Supervision', and 'Nature of work' possess alpha values in the range of .74 to .82, and five other subscales have the alpha values slightly lower than the mark of α = .70. Exceptionally, the subscale 'Operating conditions' reports an outstandingly low value of Cronbach's alpha (α = .43). A low value indicates that there is some potential problem with the reliability of the items of this subscale. This subscale also reported a very low internal consistency in the pilot study (.16). Despite that, the whole Spector's Job Satisfaction Survey showcases a very high level of internal consistency (α = .91), similar to the value achieved by Spector himself (Spector, 1997).

Table 14

Reliability Analysis for Overall Job Satisfaction Score and Subscales (Main Study)

Subscales	**Cronbach's Alpha**	**Spector's JSS[a]**
PAY Subscale 'Pay'	.61	.75
PRO Subscale 'Promotion'	.74	.73
SUV Subscale 'Supervision'	.74	.82
FB Subscale 'Fringe benefits'	.66	.73
CRE Subscale 'Contingent rewards'	.65	.76
OPC Subscale 'Operating bonditions'	.43	.62
COW Subscale 'Coworkers'	.64	.60
NAT Subscale 'Nature of work'	.82	.78
COM Subscale 'Communication'	.63	.71
Overall job satisfaction	.91	.91

Source: Adapted from Spector (1997, p. 10).

In a further analysis, the correlations between each item with the total score of the scale is considered (column 'Corrected Item-Total Correlation' in Table 15). According to Field (2013), a value lower than .30 indicates that the item does not correlate well with the scale overall. Five items show that the Total Correlation values lower than .3 are PAY2, OPC2, OPC3, OPC4, and COM4, and the Cronbach's alpha coefficient of the scale would slightly improve when they are deleted (column 'Cronbach alpha if Item deleted' in Table 15, the alpha value of overall job satisfaction score is .907). Among them, three items belong to the subscale 'Operating conditions'. These three items do not have good correlation with the whole scale and, together with OPC1, they form a subscale 'Operating conditions' with a low internal consistency. By and large, these results expose questionable internal consistency of the subscale 'Operating conditions' and reveal that these five items are potential problems.

Table 15

Item-total Statistics (Main Study)

Items	**Scale Mean if Item Deleted**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
PAY2**	134.51	.291	.909
OPC2**	133.62	.286	.908
OPC3**	135.28	.140	.910
OPC4**	134.91	.130	.911
COM4**	133.68	.226	.909

Note. **. These items are the ones with a 'Corrected Item-total Correlation' value below .30. Other items have been filtered.

The Guttman split-half coefficient is also computed for the whole scale. In this reliability test, the whole scale is divided into two equal parts with 18 items in each part. Details of the division are provided at the bottom of Table 16. A value of 0.70 reports a reasonable level of internal consistency (Field, 2013; Pallant, 2011).

Table 16

Guttman Split-half Test (Main Study)

Cronbach's Alpha	Part 1	Value	.89
		N of Items	18[a]
	Part 2	Value	.85
		N of Items	18[b]
	Total N of Items		36
Correlation Between Forms			.54
Spearman-Brown Coefficient	Equal Length		.70
	Unequal Length		.70
Guttman Split-Half Coefficient			.70

Note:

a. The items are: PAY1, PAY4, PRO2, PRO3, SUV1, PRO4, SUV4, FB2, FB3, CRE1, OPC2, COW1, COW3, NAT2, NAT3, NAT4, COM1, and PAY2.

b. The items are: PAY3, PRO1, SUV2, SUV3, FB1, FB4, CRE2, CRE3, CRE4, OPC1, OPC3, OPC4, COW2, COW4, NAT1, COM2, COM3, and COM4.

4.4. Intra-correlations among Subscales

The intra-correlation among subscales and the overall score are shown in Table 17. All the subscales display statistically significant correlations with the total score of the JSS, with the Pearson correlation coefficients ranging from .48 to .78 ($p < .001$). Among the subscales themselves, they show statistically significant correlations with each other ($r = .22$ - .65, $p < .05$). Again, the subscale 'Operating conditions' reports the lowest correlation with the scale as a whole, and it also demonstrates a lower level of correlation with other subscales. In particular, the relationship between 'Operating conditions' and 'Promotion' is reported as non-significant ($r = .09$, $p = .19 > .05$). This analysis once more shows that there might be potential problems with the subscale 'Operating conditions'. However, due to the high level of internal consistency of the 36-item scale as a whole, these less correlated items are still kept for consequent statistical analyses. Furthermore, in order to take a deeper look into the reliability and validity of the Spector's Job Satisfaction Survey within this study, an exploratory factor analysis is performed next.

Table 17

Intra-correlations among Subscales (Main study)

			Intra-correlations									
			1	2	3	4	5	6	7	8	9	10
1	Pay	Pearson *r*	1	.42**	.39**	.63**	.59**	.20**	.33**	.49**	.46**	.73**
		Sig. (2-tailed)		.000	.000	.000	.000	.005	.000	.000	.000	.000
2	Promotion	Pearson *r*		1	.42**	.39**	.39**	.09	.46**	.45**	.44**	.67**
		Sig. (2-tailed)			.000	.000	.000	.186	.000	.000	.000	.000
3	Supervision	Pearson *r*			1	.46**	.56**	.32**	.48**	.39**	.35**	.71**
		Sig. (2-tailed)				.000	.000	.000	.000	.000	.000	.000
4	Fringe benefits	Pearson *r*				1	.65**	.36**	.35**	.42**	.33**	.73**
		Sig. (2-tailed)					.000	.000	.000	.000	.000	.000
5	Contingent rewards	Pearson *r*					1	.34**	.46**	.48**	.39**	.78**
		Sig. (2-tailed)						.000	.000	.000	.000	.000
6	Operating conditions	Pearson *r*						1	.30**	.22**	.26**	.48**
		Sig. (2-tailed)							.000	.002	.000	.000
7	Co-workers	Pearson *r*							1	.40**	.53**	.69**
		Sig. (2-tailed)								.000	.000	.000
8	Nature of work	Pearson *r*								1	.48**	.71**
		Sig. (2-tailed)									.000	.000
9	Communication	Pearson *r*									1	.68**
		Sig. (2-tailed)										.000
10	Total satisfaction	Pearson *r*										1

**. Correlation is significant at the 0.01 level (2-tailed).

N = 202

4.5. Exploratory Factor Analysis

A principal axis factoring extraction is performed for 36 items of the Spector's Job Satisfaction Survey with both orthogonal (varimax) and oblique rotations. Principal axis factoring (PAF) is chosen as an extraction method instead of principal component analysis (PCA) for two reasons. Firstly, PAF is the more widely used (Warner, 2007) and preferable one (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999). Secondly and, more importantly, PAF reveals the underlying constructs of the under-scrutiny items while getting rid of the unique and error variability (Costello & Osborne, 2005; Johari et al., 2011; Tabachnick & Fidel, 2013).

Regarding the sample size, this study includes 202 cases, which appears somewhat of a shortcoming for a factor analysis. According to Tabachnick and Fidel (2013, p. 618), "at least 300 cases are needed" for an appropriate sample size. Similarly, Comrey and Lee (1992) rank the sample size from 100 as poor and 1000 as excellent; they also state that a good sample size should be 300. However, with communalities in the .5 range, samples in the range of 100–200 cases are acceptable (MacCallum, Widaman, Zhang, & Hong, 1999). The communalities extracted in this study are around .5 for the majority of the variables (see Table 18); therefore, the sample size of 202 in this study can be deemed as appropriate for a factor analysis according to the criterion of MacCallum et al. (1999). Furthermore, Allen and Bennett (2012) also suggest that, in general, a sample size of at least 100 should be adequate for a reliable factor analysis.

Table 18

Communalities

Communalities					
Item	Initial	Extraction	Item	Initial	Extraction
PAY1	0.55	0.54	CRE3	0.44	0.51
PAY2	0.31	0.31	CRE4	0.51	0.49
PAY3	0.51	0.49	OPC1	0.46	0.47
PAY4	0.52	0.55	OPC2	0.39	0.40
PRO1	0.43	0.41	OPC3	0.60	0.81
PRO2	0.55	0.54	OPC4	0.42	0.39
PRO3	0.42	0.47	COW1	0.58	0.82
PRO4	0.61	0.65	COW2	0.43	0.38
SUV1	0.54	0.57	COW3	0.64	0.65
SUV2	0.49	0.52	COW4	0.50	0.49
SUV3	0.54	0.57	NAT1	0.61	0.62
SUV4	0.63	0.66	NAT2	0.53	0.49
FB1	0.46	0.40	NAT3	0.72	0.78
FB2	0.46	0.45	NAT4	0.68	0.70
FB3	0.61	0.65	COM1	0.44	0.44
FB4	0.54	0.56	COM2	0.54	0.56
CRE1	0.59	0.56	COM3	0.52	0.51
CRE2	0.35	0.31	COM4	0.31	0.26

Note. Extraction Method: Principal Axis Factoring.

As presented in Table 19, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett test are also computed: KMO = .86, which is 'Meritorious' according to Hutcheson and Sofroniou (1999). KMO measures for individual variables are best greater than .5 (Table 20), so there is no need to exclude any variable from the factor analysis (Field, 2013). Moreover, the Bartlett's test of sphericity reports a statistically significant result (Chi-Square of 3,172.81, $df = 630$, $p < .001$), which means that "the variables are correlated highly enough to provide a reasonable basis for the factor analysis" (Leech, Barrett, & Morgan, 2014, p. 73).

Table 19

KMO and Bartlett's Test

Bartlett's Test of Sphericity			**Kaiser-Meyer-Olkin Measure of Sampling Adequacy.**
Approx. Chi-Square	df	Sig.	
3172.81	630	.000	0.86

Table 20

KMO Values for Individual Items

Item	**KMO**	**Item**	**KMO**	**Item**	**KMO**
PAY1	0.85	FB1	0.89	COW1	0.77
PAY2	0.84	FB2	0.85	COW2	0.78
PAY3	0.92	FB3	0.89	COW3	0.81
PAY4	0.91	FB4	0.79	COW4	0.87
PRO1	0.84	CRE1	0.91	NAT1	0.81
PRO2	0.90	CRE2	0.90	NAT2	0.88
PRO3	0.87	CRE3	0.86	NAT3	0.87
PRO4	0.92	CRE4	0.92	NAT4	0.88
SUV1	0.89	OPC1	0.80	COM1	0.92
SUV2	0.85	OPC2	0.85	COM2	0.87
SUV3	0.80	OPC3	0.64	COM3	0.93
SUV4	0.84	OPC4	0.67	COM4	0.74

Note. The KMO values for individual items are extracted from the diagonal of the Anti-image Matrices.

Eigenvalues are computed for every factor in the data by an initial analysis. The eigenvalue of a factor represents "the amount of variance of the variables accounted for by that factor" (Norris & Lecavalier, 2010, p. 9). Before extraction, SPSS had identified 36 factors for the dataset, which is equal to the number of variables. The eigenvalues of each factor demonstrate the variance explained by that particular factor itself (Field, 2013). Nine factors are reported to have initial eigenvalues greater than 1 (Table 21). According to the Kaiser's criterion (also known as the K1 rule), only the factors with eigenvalues of 1.0 or more are retained for further analysis (Field, 2013; Pallant, 2011; Thompson, 2004). In combination, these nine factors accumulatively account for 64.10% of the variance.

Table 21

Extracted Eigenvalues

Factor	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.29	25.82	25.82	8.85	24.58	24.58	2.95	8.20	8.20
2	3.25	9.03	34.84	2.82	7.83	32.40	2.62	7.27	15.47
3	2.12	5.89	40.73	1.64	4.56	36.96	2.45	6.81	22.29
4	1.90	5.29	46.02	1.41	3.90	40.87	2.41	6.69	28.97
5	1.73	4.80	50.82	1.33	3.69	44.56	2.18	6.06	35.03
6	1.37	3.80	54.61	0.92	2.55	47.10	1.95	5.42	40.45
7	1.32	3.65	58.27	0.84	2.33	49.43	1.75	4.86	45.31
8	1.08	3.01	61.27	0.63	1.76	51.19	1.60	4.44	49.75
9	1.02	2.82	64.09	0.54	1.49	52.68	1.06	2.93	52.68
10	0.90	2.51	66.60						
11	0.90	2.49	69.09						
12	0.82	2.27	71.36						
…	…	…	…						
33	0.21	0.59	98.47						
34	0.20	0.57	99.04						
35	0.18	0.50	99.53						
36	0.17	0.47	100.00						

Note. Extraction Method: Principal Axis Factoring. The factors from the 13th to the 33rd are excluded.

A scree plot is also examined to decide on the number of factors to retain (Figure 5). According to the scree plot, there are two points of inflexion that are the 6th and 10th factors, which means that either five or nine factors should be retained. This is ambiguous for making a decision on how many factors should be retained. Considering that the Spector's JSS Spector (1997) is composed of nine facets of work, nine factors were thus retained as suggested by SPSS and also due to the convergence of the Kaiser's criterion and the scree plot. With nine retained factors, the Reproduced Correlations' table is generated, and it displays only 43 (6%) non-redundant residuals with absolute values greater than .05, which is an acceptable result in accordance with the 50% criterion set by Field (2013). Subsequently, rotations are performed to interpret the factors.

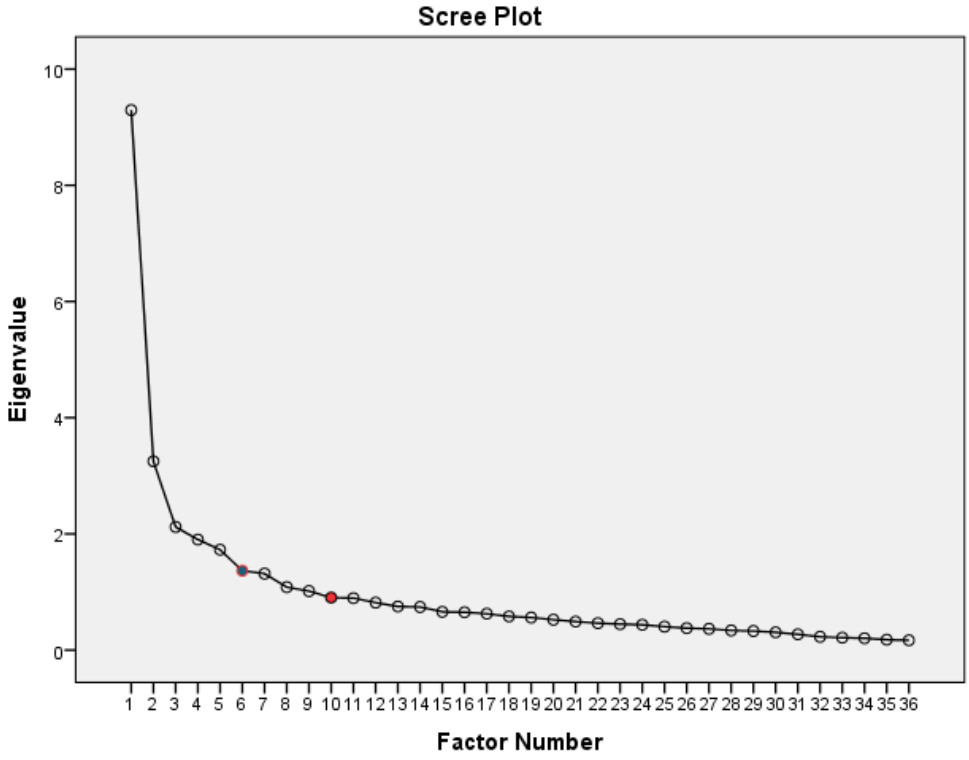

Figure 5. Scree plot.

In fact, both orthogonal (varimax) and oblique (oblimin) rotations were performed. The difference between varimax and oblimin rotations is that while oblimin rotation allows the factors to be correlated freely with each other, the inter-correlation among the factors is not allowed in the varimax rotation (Field, 2013). However, the results produced by the two rotation methods are generally similar to each other; therefore, the varimax rotation will be discussed in the present dissertation. Under the varimax rotation, the correlation between

factors is set to zero (no correlation between factors) (Allen & Bennett, 2012), and the Rotated Factor Matrix is presented in Table 22.

Table 22

Rotated Factor Matrix

	Factor								
	1	2	3	4	5	6	7	8	9
FB3	**.70**	.09	.18	.25	.08	.09	.05	.12	.12
PAY1	**.66**	.18	.00	.12	.12	.16	.08	.06	-.07
FB2	**.62**	.13	.09	.14	-.08	.05	.05	.00	.12
PAY4	**.54**	.22	.36	.14	.15	.03	-.14	.04	-.14
CRE1	**.51**	.21	.27	.00	.20	.30	.16	.19	.03
NAT3	.31	**.77**	.22	.12	.09	.06	-.06	.11	-.03
NAT4	.22	**.70**	.33	.10	.13	.07	.08	.10	-.06
NAT2	.20	**.59**	.20	.07	.06	.12	.00	.08	.16
NAT1	.00	**.54**	.04	.12	.45	.05	.32	.02	.08
PRO3	.06	.22	**.63**	.07	-.03	.02	-.13	.01	.02
PRO2	.21	.16	**.60**	.05	.14	.19	.06	.20	.07
PRO4	.29	.23	**.60**	.19	.20	.14	-.13	.16	-.13
OPC2	.17	.00	**.38**	-.24	.22	.00	-.01	.22	.26
COM1	.12	.29	**.35**	-.03	.15	.03	-.11	.32	.27
FB4	.05	.13	.07	**.68**	.10	.07	.20	-.08	.01
CRE3	.19	.09	-.04	**.65**	.01	.16	-.04	-.02	.13
CRE4	.26	.13	.14	**.47**	.17	.27	.13	.06	.20
PAY2	.15	-.02	.07	**.45**	.26	-.04	-.07	.03	-.08
PAY3	.24	.30	-.07	**.40**	.34	.17	.13	.03	.11
PRO1	-.04	.03	.35	**.38**	.28	.10	-.15	.18	.00
FB1	.26	.12	.08	**.37**	.10	.26	.29	.12	.04
COM2	.23	.19	.05	.19	**.63**	.11	-.05	.13	.08
COM3	.11	.24	.02	.06	**.62**	.12	.10	.13	.08
COM4	-.06	.01	.16	.12	**.45**	.01	-.03	-.10	.04
COW4	.06	-.03	.30	.14	**.45**	.18	.16	.26	.22
SUV3	.14	.10	.05	.26	.03	**.64**	.23	-.04	.03
SUV2	.05	-.04	.18	.16	.19	**.60**	.11	.22	.04
SUV4	.46	.19	.12	.03	.05	**.59**	-.05	.03	.21
SUV1	.21	.21	.40	-.19	.17	**.40**	-.04	.11	.28
CRE2	.17	.24	-.11	.21	.17	.27	.12	.19	.12
OPC3	.11	.01	-.10	.09	.02	.08	**.86**	-.15	-.04
OPC4	-.01	.04	-.09	.02	.03	.12	**.59**	-.04	.11
COW1	.07	.11	.25	.01	.06	.16	-.12	**.82**	.01
COW3	.26	.28	.15	.00	.07	.05	-.20	**.57**	.34
COW2	.00	.14	.04	.18	.18	.22	.11	.13	**.47**
OPC1	.12	-.14	.02	.32	.32	.07	.25	.06	**.40**
Eigenvalues	9.29	3.25	2.12	1.90	1.73	1.37	1.32	1.08	1.02
% of Variance	25.82	9.03	5.58	5.29	4.80	3.80	3.65	3.01	2.82

Note. Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.
b. Values >= .35 are in bold.

The rotated solution provides a simpler structure where items are explained or predicted by different underlying factors. With the varimax rotation, the patterns are identified as follows: the first five items load heavily on factor 1; the next four items load on factor 2; the next five items load on factor 3; the next seven items load on factor 4; the next four items load on factor 5; the next six items load on factor 6; the next two items load on factor 7; the next two items load on factor 8; and the last two factors load on factor 9. In particular, the variable CRE2 does not have any loading greater than .30 on any factor. It loads the most on the sixth factor. Based on the loadings of items on the factors, names could be given to these factors as follows: 1) Payment and recognition; 2) Nature of work; 3) Promotions; 4) Benefits and rewards; 5) Communication; 6) Supervision; 7) Workload; 8) Colleagues; and 9) Work obstacles.

4.6. Missing Data and Multiple Imputation

4.6.1. Missing data

Having analyzed the JSS's (Spector, 1997) reliability and validity, missing data and data imputation will be discussed in this section. A summary of the variables with missing data is presented in Table 23. As pointed out above, every item of the 36 questions of Job Satisfaction Survey (Spector, 1997) was successfully answered, so there is no missing data for these items. In contrast, all the rest of the variables contain some missing data, with the variable 'Age' being the one with the largest portion of missing data (n = 182 out of N = 202, 9.9% missing).

Table 23

Variables with Missing Data (Main Study)

Variables	Valid Count	Missing Count	Percent
Age	182	20	9.9
Sex	194	8	4.0
Education background	192	10	5.0
Work type	192	10	5.0
Work city	199	3	1.5

Separate variance t-tests are generated by SPSS for the identification of variables whose pattern of missing values may influence the interval variables (IBM, 2012). Age

appears as the only variable that contains more than 5% missing data, so it is the only indicator variable created. As reported in Table 24, all the mean values of JSS's (Spector, 1997) items when age is missing do not vary much from that when age is non-missing. This suggests that the missing data are either missing at random or completely random.

Table 24

Separate Variance t Tests

JSS's items	**Age**					
	t	df	# Present	# Missing	Mean(Present)	Mean(Missing)
PAY1	-.8	25.5	182	20	3.62	3.80
PAY2R	.5	25.8	182	20	3.75	3.60
PAY3R	1.0	31.0	182	20	3.20	3.00
PAY4	-.4	28.5	182	20	3.36	3.45
PRO1R	-.8	24.9	182	20	2.97	3.20
PRO2	.4	30.3	182	20	4.04	3.95
PRO3	.1	25.0	182	20	3.64	3.60
PRO4	.6	30.3	182	20	3.76	3.65
SUV1	1.3	23.7	182	20	4.60	4.25
SUV2R	.3	26.3	182	20	2.71	2.65
SUV3R	2.2	27.4	182	20	3.36	2.80
SUV4	-.1	24.9	182	20	3.88	3.90
FB1R	1.8	32.4	182	20	3.40	3.05
FB2	-1.9	30.4	182	20	3.41	3.75
FB3	1.1	31.1	182	20	3.51	3.30
FB4R	1.2	26.6	182	20	3.80	3.50
CRE1	-.8	28.1	182	20	3.79	3.95
CRE2R	.0	25.1	182	20	3.06	3.05
CRE3R	.1	26.7	182	20	3.72	3.70
CRE4R	1.6	30.3	182	20	3.37	3.05
OPC1R	-.7	28.6	182	20	3.38	3.55
OPC2	1.4	24.6	182	20	4.19	3.80
OPC3R	.5	26.0	182	20	4.52	4.40
OPC4R	.4	25.3	182	20	4.15	4.05
COW1	2.4	28.0	182	20	4.74	4.30
COW2R	1.7	27.1	182	20	3.03	2.65
COW3	1.9	25.8	182	20	4.62	4.25
COW4R	.8	27.2	182	20	2.70	2.50
NAT1R	.7	25.4	182	20	3.05	2.85
NAT2	.6	28.3	182	20	3.87	3.75
NAT3	1.4	33.1	182	20	4.09	3.85
NAT4	2.1	31.4	182	20	3.99	3.60
COM1	3.1	34.7	182	20	4.43	3.95
COM2R	1.8	29.2	182	20	2.85	2.45
COM3R	1.5	25.1	182	20	2.93	2.55
COM4R	1.8	29.1	182	20	2.95	2.55

Cross-tabulations of categorical variables versus indicator variables are also scanned through for differences in missing values across categories. A common trait in all these

cross-tabulations is that 'Age' acts as the sole indicator variable due to it being the only variable with more than 5% of missing data. The variable AGE is reported by 91.9% of female respondents and 91.6% for males (Table 25). The difference here is negligible and does not imply any non-randomness of the missing data.

Table 25

Crosstabulation of Gender and Age

			Total	**1.00 Woman**	**2.00 Man**	**Missing**
Age	Present	Count	182	91	87	4
		Percent	90.1	91.9	91.6	50.0
	Missing	Percent	9.9	8.1	8.4	50.0

Meanwhile, the chance of missing data of the variable AGE is greatest for the respondent group who possess Bachelor's degree(s) (89.9%), but the percentage of missing AGE for other groups is considerably similar (Table 26). The only exception belongs to the respondent group who have PhD degree(s), and PhD degree(s) and professional certificate(s). These groups have no missing data of the AGE variable; however, there is only one respondent in each group. As such, these traits indicate that the missing data are likely to be caused by chance.

Table 26

Cross-tabulation of Education Background and Age

	Age		
	Present		Missing
	Count	Percent	%
Total	182	90.1	9.9
3. Bachelor's Degree(s)	100	89.3	10.7
4. Bachelor's Degree(s) and Professional Certificate(s)	30	90.9	9.1
5. Master's Degree(s)	32	94.1	5.9
6. Master's Degree(s) and Professional Certificate(s)	10	90.9	9.1
7. PhD Degree(s)	1	100.0	.0
8. PhD Degree(s) and Professional Certificate(s)	1	100.0	.0
Missing	8	80.0	20.0

In contrast, the age variable is reported 87.2% of the time when the respondent is currently working as an auditor, while ex-auditors reported the variable 94% of the time (Table 27). This difference might suggest a greater tendency to not report age among current auditors. Additionally, a discrepancy is also noted between different geographically-based groups. There is no missing data of the AGE variable among respondents who are working in Ho Chi Minh City and in other regions of Vietnam; however, only 89.3% of the respondents who are working in Hanoi reported their age (Table 28). These two signs suggest that the data might not be missing completely at random.

Table 27

Cross-tabulation of Work Type and Age

			Work Type			
			Total	Auditors	Ex-Auditors	Missing
Age	Present	Count	182	95	78	9
		Percent	90.1	87.2	94.0	90.0
	Missing	Percent	9.9	12.8	6.0	10.0

Table 28

Cross-tabulation of Work City and Age

			Work City				
			Total	Hanoi	Ho Chi Minh City	Other	Missing
AGE	Present	Count	182	158	12	10	2
		Percent	90.1	89.3	100.0	100.0	66.7
	Missing	% .00	9.9	10.7	.0	.0	33.3

Furthermore, tabulated missing patterns are also examined to identify whether the data are jointly missing (IBM, 2012). Different patterns of missing data (with more than 1% of the cases) are presented in Table 29. Firstly, there is only one pattern of jointly missing data that occurs in more than 1% of the cases. The two variables, SEX and AGE, are missing together in only four out of 202 cases (2%). Secondly, where information of gender is missing, the mean age appears highest among the missing patterns. Nonetheless, only three out of the 202 cases share this pattern. According to the low popularity of these two missing patterns, they seem to not affect the missing data's randomness.

Table 29

Tabulated Patterns

Total	Missing patterns[a]				Complete if ...[b]	Age[c]	Sex[d]		Education background[d]					Work type[d]		Work city[d]		
Cases	Sex	Edu	Work type	Age			Woman	Man	3	4	5	6	7	8	Auditor	Ex-Auditor	Hanoi	Ho Chi Minh City	Other
161					161	27.40	82	79	93	29	29	9	0	1	86	75	141	11	9
7		X			168	30.43	2	5	0	0	0	0	0	0	4	3	6	1	0
3	X				164	32.00	0	0	2	0	1	0	0	0	3	0	3	0	0
4	X			X	181	-	0	0	3	1	0	0	0	0	3	1	4	0	0
13				X	174	-	7	6	8	2	2	1	0	0	10	3	13	0	0
8			X		169	28.75	5	3	4	1	1	1	1	0	0	0	7	0	1

Note. Patterns with less than 1% cases (2 or fewer) are not displayed.

a. Variables are sorted on missing patterns.

b. Number of complete cases if variables missing in that pattern (marked with X) are not used.

c. Means at each unique pattern

d. Frequency distribution at each unique pattern

These patterns are visualized by a grid-form chart and a bar graph with the help of SPSS program (Figure 6 and Figure 7). The Missing Value Patterns chart graphically displays existing patterns of missing values of all the variables, and the bar graph presents the frequency in percentages of the patterns. The most common pattern is when there is no missing data, roughly 4 in 5 (161 cases, 80.5%), and there are 12 patterns of missing values. The pattern numbered 11 appears as the one with the most involving variables, including work city, educational background, and age. However, it is not shown in the frequency bar-graph (Figure 7), which means that it occurs in less than 0.5% of the cases. This frequency is minimal, so, it is highly likely caused by chance. Furthermore, according to IBM in the manual guide for SPSS Missing Value 21 (IBM, 2012, p. 48):

> If the data are monotone, then all missing cells and non-missing cells in the chart will be contiguous; that is, there will be no "islands" of non-missing cells in the lower right portion of the chart and no "islands" of missing cells in the upper left portion of the chart.

As shown in Figure 6, clearly there is no cluster of non-missing cells in the lower right portion and no cluster of missing cells in the upper left portion of this chart. Therefore, the data for this study are monotonic, and it supports further the conclusion that the data are missing at completely random (McKnight, McKnight, Sidani, & Figueredo, 2007).

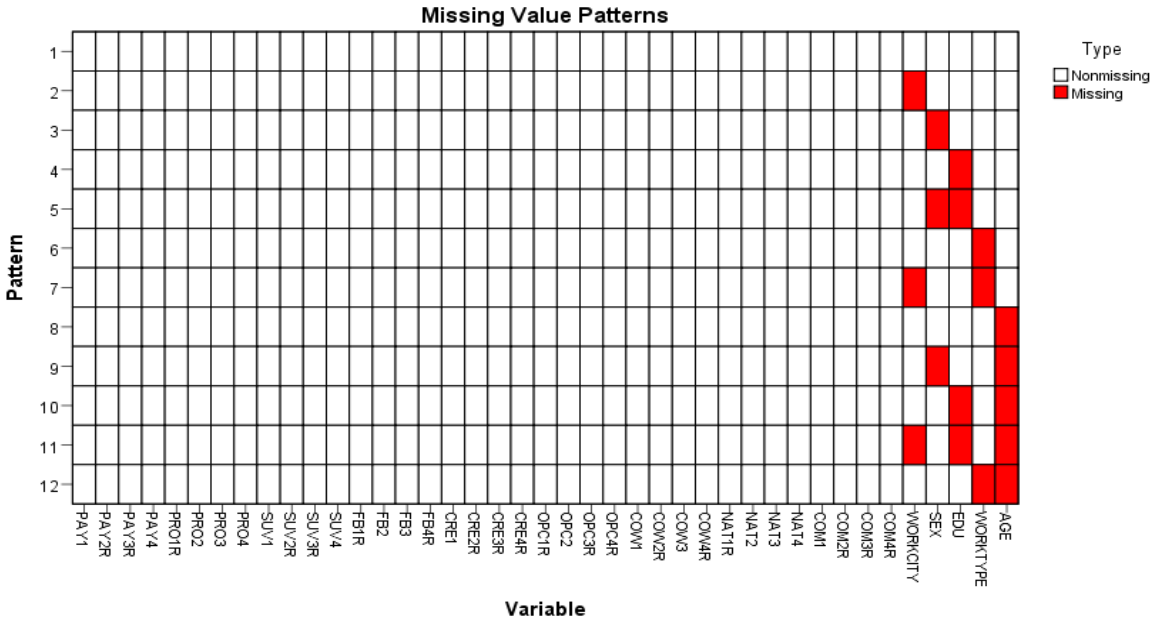

Figure 6. Missing value patterns.

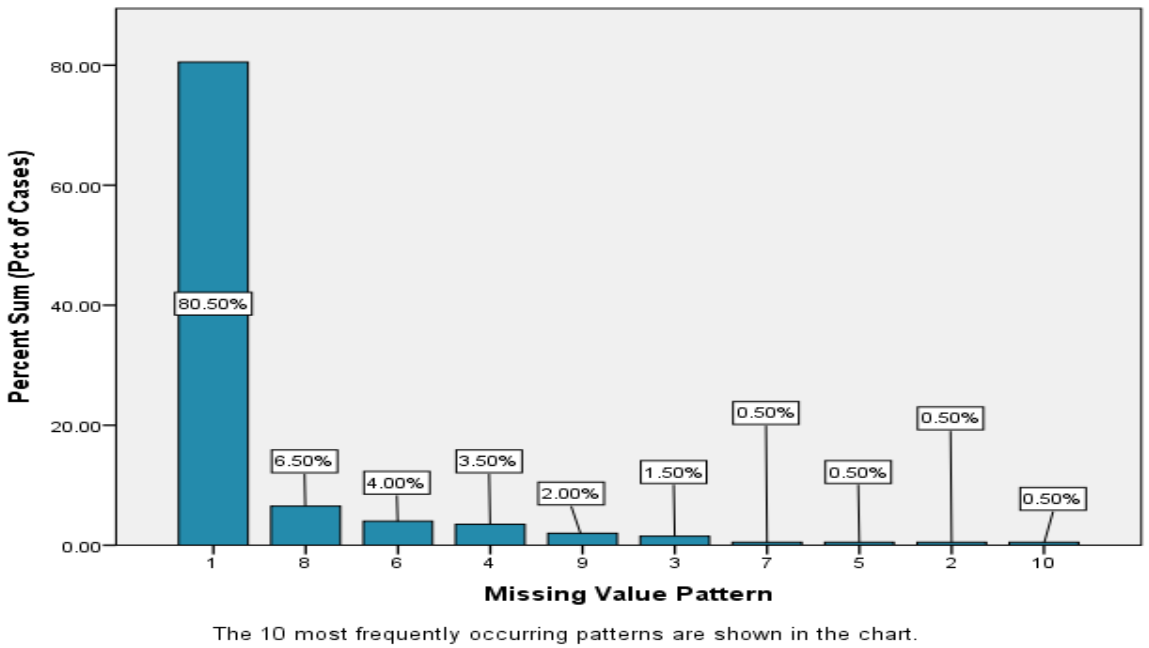

Figure 7. Missing value pattern graph.

Considering the statistics and patterns of missing data, it appears that the data are missing completely at random. Furthermore, Little's MCAR test is used to confirm this assumption. The null hypothesis for Little's MCAR test is that the data are missing completely at random (IBM, 2012). Little's MCAR test returns X^2 = 33.7, DF = 36 with a significance value of p = .58, much larger than .05. Therefore, the null hypothesis is retained, and it could be concluded that the data are missing completely at random.

Once the data are missing completely at random, the missing data will have ignorable potential impacts on the statistical analyses (McKnight et al., 2007). Nonetheless, it is important to take a look at the overall summary of missing data to decide whether data imputation is needed. The percentage of missing data for variables, cases, and values are shown by pie-charts in Figure 8 (12.20%, 20.3%, and 0.62%, respectively). There are five variables with at least one missing value on a case, 41 out of 202 cases contain at least one missing value on a variable, and 51 out of 8,282 (41 variables x 202 cases) values are missing. Only 0.62% of the data are missing, but using list-wise deletion will remove as many as 20.3% of the cases. This reduction is significant and might seriously affect the statistical analyses and thus lead to biased inference (Leech et al., 2014). Therefore, data imputation seems advisable for this study.

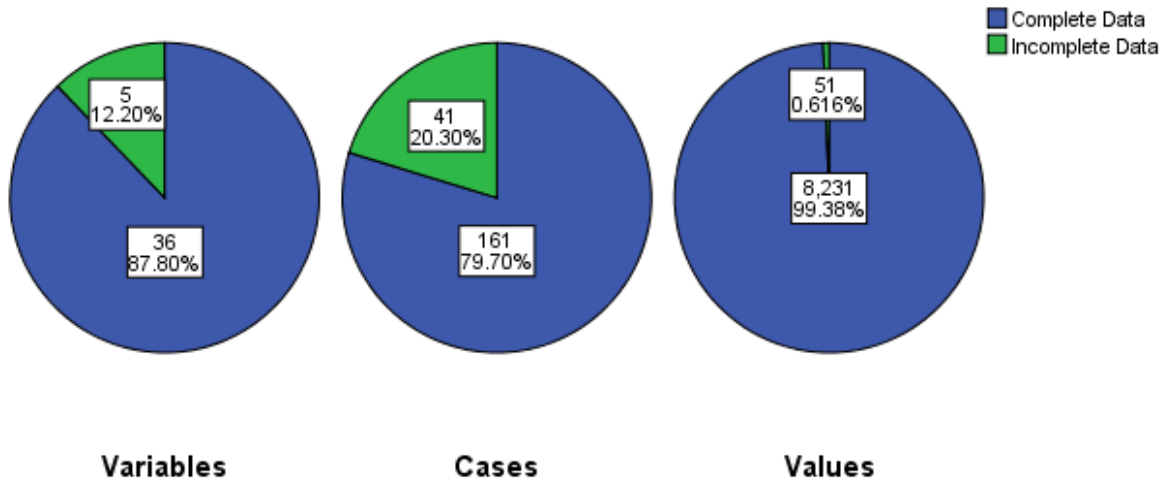

Figure 8. Overall summary of missing data.

4.6.2. Multiple imputation for missing data

As pointed out above, data imputation appears appropriate for this study due to a considerable amount of data that would be lost if list-wise deletion is selected and due to the data missing is completely at random. There are many imputation techniques for missing data which are categorized into two major groups: single imputation and multiple imputation. Single imputation techniques are the methods to impute missing data with a constant value (mean or median substitution, zero imputation), a random value (data-based and model-based imputation), or a non-random value (single or multiple conditions imputations). In contrast, multiple imputation replaces a missing value with multiple values instead of a single value like the single imputation.

With the development of modern computer technologies, multiple imputation has become much easier to perform. It has become the "standard method for handling missing data" (McKnight et al., 2007, p. 196) and the most highly praised technique for statistically dealing with missing data (Donders, van der Heijden, Stijnen, & Moons, 2006; Li, Stuart, & Allison, 2015; Rubin, 1996). Unlike single imputation methods, which likely result in biased estimates (Donders et al., 2006), multiple imputation provides accurate and generalizable estimates (Li et al., 2015; Rubin, 1996). According to Rubin (1996), multiple imputation is even superior to a combination of other procedures. Thus, multiple imputation, with the help of SPSS, is selected for dealing with the missing data in this study.

As summarized in Table 23 (p. 56), there are five variables with missing data. However, within the aim of this study, as the way the hypotheses are articulated, there are only four variables involved with the main objectives of the study: Age, Education

background, Sex, and Work type. Therefore, multiple imputation is employed to handle missing data of these four variables only. The other variable, Work City, is left intact due to its small amount of missing data. One additional reason for leaving the Work City variable untouched is that the sample size in this study is heavily geographically biased. Most of the participants are working in the capital city of Vietnam – Hanoi.

Imputation Results

Five sets of data with imputed values are created with SPSS. There is no constraint to the imputation for Sex, Education background, and Work type variables, while the imputed values for Age have been set to be equal to or greater than 21 and must be integer values. The constraint condition of a minimum value of 21 for Age is based on the fact that, in general, the financial service firms in Vietnam only recruit graduates who are at least 21 years of age. As a scale variable, AGE is modelled with a linear regression, and for categorical variables, the used model is logistic regression. Each model employs all other variables as main effects (Table 30).

Table 30

Imputation Models

	Model		Missing	Imputed
	Type	**Effects**	**Values**	**Values**
Sex	Logistic Regression	Edu, Worktype, Age	8	40
Edu	Logistic Regression	Sex, Worktype, Age	10	50
Worktype	Logistic Regression	Sex, Edu, Age	10	50
Age	Linear Regression	Sex, Edu, Worktype	20	100

A report of imputed datasets is produced with descriptive statistics for each variable. For the variable Age, it appears that the means and standard deviations of the imputed datasets are very close to that of the original dataset. For the two categorical variables, Sex and Edu, the distribution of the new imputed datasets are considerably synchronized with the original ones. For further details, please refer to Appendix K. Subsequently, all the analyses with the involvement of variables with imputed data are processed with all the imputed datasets. Where possible, a pooled result will be calculated and that would be the final outcome of the analysis.

4.7. Overall Job Satisfaction among Current and Ex-auditors in Vietnam

The level of job satisfaction is reported to have a mean of *M* = 137.8 and *SD* = 21.7 (Table 31). The overall job satisfaction is the sum of the scores on 36 items with the range from 1, as the least satisfied, to 6, as the most satisfied; therefore, the total score ranges from 36 to 216, and the mid-point is 126. Hence, the result of *M* = 137.8, *SD* = 21.7 is slightly higher than the mid-point of the satisfaction. The fluctuation of the overall level of job satisfaction is quite large in this situation, where the *SD* = 21.7, which means that 95% of the time, a participant will have a job satisfaction level within the range of *M* +/- 2**SD* (94.4 – 181.2).

Table 31

Mean Scores and Standard Deviations of Overall Job Satisfaction and its Subscale

	Mean	**Std. Deviation**
Subscale 'Pay'	14.1	3.4
Subscale 'Promotion'	15.4	3.9
Subscale 'Supervision'	16.4	3.8
Subscale 'Fringe benefits'	13.8	3.3
Subscale 'Contingent rewards'	14.7	3.5
Subscale 'Operating conditions'	13.1	3.1
Subscale 'Co-workers'	17.6	3.2
Subscale 'Nature of work'	15.8	3.9
Subscale 'Communication'	16.8	3.4
Overall Job Satisfaction	137.8	21.7

The mean scores of the subscales range from 13.1 to 17.6, in which 'Operating conditions' and 'Co-workers' are the subscales with the lowest and the highest levels of satisfaction, respectively. Despite the discrepancies, there is a similarity among the subscales. All of the subscales display a considerably high level of variation, with standard deviations ranging from 3.1 to 3.9. Vietnamese current and ex-auditors appear to be most contented with their colleagues (*M* = 17.6, *SD* = 3.2), the communication at their workplaces (*M* = 16.8, *SD* = 3.4), and their immediate supervisors (*M* = 16.4, *SD* = 3.8). Meanwhile, they are least satisfied with the rules and conditions at the workplaces (*M* = 13.1, *SD* = 3.1) and the fringe benefits (*M* = 13.8, *SD* = 3.3).

4.8. Difference in The Perception of Overall Job Satisfaction between Current and Ex-auditors in Vietnam

In order to find out whether current and ex-auditors are experiencing different levels of job satisfaction, an independent-samples t-test has been conducted. SPSS has performed the test for every imputed dataset and the original one as well. The Levene's Test for equality of variances reports non-significances in all datasets ($p > .05$ in every dataset); therefore, the assumption that the variances in the two groups are the same is confirmed. Hence, the results where equal variances are assumed are used. The effect sizes are calculated for every dataset by the formula 'Eta squared $\eta^2 = t^2 / (t^2 + (N1+N2-2))$' where t is the t-test value, and N1 and N2 are the population of the two respective groups (Pallant, 2011). The value of eta squared (η^2) is assessed based on the guidelines provided by Cohen (1988, p. 248): ".01 = small effect; .06 = moderate effect; .14 = large effect".

In Table 32, the results of independent t-tests are shown for each dataset. For the original one, the difference between current (M_{ori} = 141.96, SD_{ori} = 21.14) and ex-auditors (M_{ori} = 132.07, SD_{ori} = 20.13) in the scores of job satisfaction is statistically significant ($t(190) = 3.28$, $p = .001$, two-tailed). It appears that current auditors are experiencing a higher level of job satisfaction than ex-auditors. The magnitude of differences in the means (mean difference = 9.89, 95%*CI* = 3.94 to 15.84) is relatively moderate (eta squared η^2 = .054). In all imputed datasets, the magnitudes of differences in the means are also very close to the moderate level.

Table 32

Independent Samples Test for Overall Job Satisfaction Level Between Current Auditors and Ex-auditors

Dataset	Levene's Test for Equality of Variances		T-Test for Equality of Means							Effect size
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
0 Original data	0.27	0.61	3.28	190	.001	9.89	3.02	3.94	15.84	.054
1	0.34	0.56	3.25	200	.001	9.74	3.00	3.83	15.66	.050
2	1.16	0.28	3.14	200	.002	9.50	3.03	3.53	15.47	.047
3	0.74	0.39	3.59	200	.000	10.78	3.00	4.86	16.70	.061
4	0.61	0.44	3.08	200	.002	9.30	3.02	3.34	15.27	.045
5	1.00	0.32	3.32	200	.001	9.99	3.01	4.05	15.93	.052

Note. Equal variance assumed.

4.9. Job Satisfaction and Age

In order to test the second hypothesis, a correlation test is performed for the relationship between Age and the overall level of job satisfaction as well as the satisfaction with different facets of work. As displayed in Table 33, there is no correlation between the overall level of job satisfaction of Vietnamese current and ex-auditors with their age (r_{pooled} = -.084, N = 202, p_{pooled} = .24). Due to the non-significant result, the null hypothesis is retained that the overall level of job satisfaction of current and ex-auditors in Vietnam is not correlated with age. However, it is not the same for the subscales.

While most of the subscales do not correlate with age, negative correlations with age were spotted at two work facets that are 'Promotions' (r_{pooled} = -.193, N = 202, p_{pooled} = .011 <.05, two-tailed, 3.7% of variance explained), and 'Co-workers' (r_{pooled} = -.181, N = 202, p_{pooled} = .01 < .05, two-tailed, 3.3% of variance explained). In accordance with Cohen's (1988, pp. 79-81) guidance of the strength of correlation, these are relatively weak negative correlations (r < .3). It appears that the older the Vietnamese workers are, the less satisfied they tend to become with their promotions and colleagues.

Table 33

Correlation Between Age and Overall Job Satisfaction and its Subscales

Correlation with Age		Age	Pay	PRO	SUP	FB	CRE	OPC	COW	NAT	COM	Overall satisfaction
0	Pearson's *r*	1	.114	-.220**	-.135	.087	.033	-.119	-.191**	-.004	-.110	-.088
Ori.	Sig. (2-tailed)		.127	.003	.069	.242	.662	.109	.010	.956	.138	.237
data	N	182	182	182	182	182	182	182	182	182	182	182
1	Pearson's *r*	1	.113	-.185**	-.126	.088	.028	-.133	-.182**	.012	-.092	-.077
	Sig. (2-tailed)		.110	.008	.075	.212	.697	.058	.010	.862	.193	.273
	N	202	202	202	202	202	202	202	202	202	202	202
2	Pearson's *r*	1	.101	-.186**	-.134	.078	.029	-.123	-.181**	-.007	-.109	-.087
	Sig. (2-tailed)		.152	.008	.057	.268	.678	.082	.010	.917	.122	.221
	N	202	202	202	202	202	202	202	202	202	202	202
3	Pearson's *r*	1	.115	-.180*	-.108	.110	.029	-.102	-.169*	-.002	-.105	-.068
	Sig. (2-tailed)		.104	.010	.126	.117	.684	.148	.016	.973	.135	.337
	N	202	202	202	202	202	202	202	202	202	202	202
4	Pearson's *r*	1	.094	-.237**	-.119	.087	.033	-.136	-.188**	-.012	-.101	-.095
	Sig. (2-tailed)		.186	.001	.091	.217	.645	.054	.007	.863	.152	.179
	N	202	202	202	202	202	202	202	202	202	202	202
5	Pearson's *r*	1	.097	-.179*	-.147*	.083	.022	-.108	-.185**	-.026	-.127	-.093
	Sig. (2-tailed)		.168	.011	.037	.241	.751	.127	.008	.712	.073	.187
	N	202	202	202	202	202	202	202	202	202	202	202
Pooled	Pearson's *r*	1	.104	-.193*	-.127	.089	.028	-.120	-.181*	-.007	-.107	-.084
	Sig. (2-tailed)		.145	.011	.080	.214	.692	.097	.010	.921	.138	.242
	N	202	202	202	202	202	202	202	202	202	202	202

Note. **. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

An additional analysis is performed on the original dataset to explore the difference of hypothesis 2 between male and female participants (Table 34). For Vietnamese current and ex-auditors who are women, there is a statistically significant negative correlation between their age and the overall job satisfaction (r_{ori} = - .31, n = 91, p_{ori} = .003, two-tailed, 9.6% of variance explained). The correlation's strength is medium according to Cohen (1988), and the two variables share 9.6% of variance. The older female auditors and ex-auditors in Vietnam are associated with lower overall happiness in their jobs. Meanwhile, no significant relationship is reported for their male counterparts (r = .14, n = 87, p = .20).

Table 34

Correlation Between Overall Job Satisfaction and Age, Separated by Gender

Participant's gender			Overall job satisfaction	Age
Woman	Overall job satisfaction	Pearson Correlation	1.000	-.305**
		Sig. (2-tailed)	-	.003
		N	99	91
	Age	Pearson Correlation	-.305**	1.000
		Sig. (2-tailed)	.003	-
		N	91	91
Man	Overall job satisfaction	Pearson Correlation	1.000	.138
		Sig. (2-tailed)	-	.202
		N	95	87
	Age	Pearson Correlation	.138	1.000
		Sig. (2-tailed)	.202	-
		N	87	87

Note. **. Correlation is significant at the 0.01 level (2-tailed).

4.10. Job Satisfaction and Gender

An independent-sample t-test is performed for comparing the mean scores of job satisfaction between male and female participants in the present study. There is no big difference between the mean scores between the two groups (male and female) across the datasets. Levene's tests in the original and every imputed dataset return non-significant results (p > .05); therefore, the two groups possess equal variance in any circumstance (Table 35).

Table 35

Independent Samples Test for Overall Job Satisfaction and Gender

Dataset	Levene's Test for Equality of Variances		t-test for Equality of Means							Effect size
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
0 Original data	0.44	0.51	0.06	192	0.952	0.19	3.17	-6.06	6.44	0.00002
1	0.39	0.53	0.05	200	0.96	0.15	3.06	-5.89	6.19	0.00001
2	0.39	0.53	0.13	200	0.896	0.40	3.06	-5.64	6.44	0.00009
3	0.22	0.64	0.07	200	0.943	0.22	3.06	-5.82	6.26	0.00003
4	0.64	0.43	0.20	200	0.839	0.62	3.06	-5.41	6.66	0.00021
5	0.33	0.57	0.08	200	0.935	0.25	3.06	-5.79	6.29	0.00003

Note. Equal variance assumed.

T-test with equal variances assumed in any case reports a non-significant result; therefore, the null hypothesis is retained. For the original dataset, there is no significant difference between the female group (M_{ori} = 137.96, SD_{ori} = 23.00) and the male group (M_{ori} = 137.77, SD_{ori} = 21.05), $t_{ori}(192) = 0.06$, $p_{ori} = .95$, two-tailed. The magnitude of the differences in the means (mean difference = 0.19, 95% *CI*: -6.06 to 6.44) is extremely small (eta squared $\eta^2 = .00002$).

4.11. Job Satisfaction and Education Background

Two-tailed tests are executed for testing the correlation between the overall score of job satisfaction and education background in every dataset. Simultaneously, the correlations between education background and work aspects are also calculated and are shown in Table 36. Significant differences are reported between participants' education background and four subscales, including 'Promotion' (ρ_{pooled} = -.20, N = 202, p = .004, 4% of variance explained); 'Direct supervision' (ρ_{pooled} = -.19, N = 202, p = .009, 3.6% of variance explained); 'Operating conditions within workplace' (ρ_{pooled} = -.14, N = 202, p = .05, 2% of variance explained); and 'Co-workers' (ρ_{pooled} = -.21, N = 202, p = .004, 4.4% of variance explained). These work facets are negatively correlated with the education, which means that the higher qualification the worker has, the less satisfied they are with these aspects of their jobs. For the relationship between the overall level of job satisfaction and education background, a statistically significant result is reported (ρ_{pooled} = -.17, N = 202, p = .021, 2.9% of variance explained) and, therefore, the null hypothesis is rejected. The negative correlation means that workers with higher education background are associated with lower satisfaction in their jobs. However, the relationships between education backgrounds and the overall job satisfaction and individual job aspects are weak, with Spearman's rho less than .3 and the shared variance between them being considerably small.

Table 36

Correlations between Overall Job Satisfaction, Its Facets, and Education Background (Spearman's rho)

Spearman's rho		Total satisfaction	Pay	Promotion	Supervision	Fringe benefits	Cont. rewards	Operating conditions	Co-workers	Job nature	Commu-nication
0	Rho (ρ)	-.175*	.055	-.202**	-.197**	.060	-.078	-.137	-.222**	-.054	-.104
Original	Sig. (2-tailed)	.015	.450	.005	.006	.407	.282	.059	.002	.454	.153
data	N	192	192	192	192	192	192	192	192	192	192
1	Rho (ρ)	-.152*	.061	-.195**	-.184**	.052	-.077	-.131	-.193**	-.013	-.069
	Sig. (2-tailed)	.031	.390	.005	.009	.459	.273	.062	.006	.856	.331
	N	202	202	202	202	202	202	202	202	202	202
2	Rho (ρ)	-.153*	.060	-.196**	-.186**	.052	-.078	-.133	-.193**	-.013	-.069
	Sig. (2-tailed)	.030	.395	.005	.008	.466	.271	.060	.006	.854	.332
	N	202	202	202	202	202	202	202	202	202	202
3	Rho (ρ)	-.185**	.038	-.213**	-.209**	.026	-.075	-.155*	-.223**	-.043	-.095
	Sig. (2-tailed)	.008	.588	.002	.003	.708	.289	.027	.001	.540	.179
	N	202	202	202	202	202	202	202	202	202	202
4	Rho (ρ)	-.172*	.049	-.206**	-.175*	.032	-.081	-.153*	-.214**	-.035	-.091
	Sig. (2-tailed)	.014	.490	.003	.012	.647	.252	.029	.002	.620	.198
	N	202	202	202	202	202	202	202	202	202	202
5	Rho (ρ)	-.170*	.059	-.209**	-.182**	.074	-.071	-.138	-.230**	-.052	-.125
	Sig. (2-tailed)	.016	.403	.003	.009	.294	.318	.050	.001	.466	.077
	N	202	202	202	202	202	202	202	202	202	202
Pooled	Rho (ρ)	-.166*	.053	-.204**	-.187**	.047	-.076	-.142*	-.211**	-.031	-.090
	Sig. (2-tailed)	.021	.455	.004	.009	.521	.281	.047	.004	.671	.234
	N	202	202	202	202	202	202	202	202	202	202

Note. *. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In order to discover whether there is any difference between the two gender groups in this hypothesis, an additional statistical analysis on the correlation between overall job satisfaction and education background is carried out. This analysis is made for the original dataset only. As presented in Table 37, a statistically significant negative correlation with medium strength is spotted between the educational background and the overall level of job satisfaction for Vietnamese current and ex-auditors who are women (ρ_{ori} = -.3, n = 96, p = .003, two-tailed, % of variance explain = 9%). It appears that female auditors and ex-auditors in Vietnam with high educational qualifications are associated with lower levels of contentment in their jobs. Meanwhile, no significant result is reported for Vietnamese male auditors and ex-auditors.

Table 37

Correlation between Overall Job Satisfaction and Education Background, Separated by Gender

			Overall job satisfaction	**Educational background**
	Spearman's rho			
Woman	Overall job satisfaction	Rho (ρ)	1.000	-.300**
		Sig. (2-tailed)	-	.003
		N	99	96
	Educational background	Rho (ρ)	-.300**	1.000
		Sig. (2-tailed)	.003	-
		N	96	96
Man	Overall job satisfaction	Rho (ρ)	1.000	-.054
		Sig. (2-tailed)	-	.613
		N	95	89
	Educational background	Rho (ρ)	-.054	1.000
		Sig. (2-tailed)	.613	-
		N	89	89

Note. **. Correlation is significant at the 0.01 level (2-tailed).

By and large, analyses are illustrated comprehensively and their results are fully explained in this chapter. The scale's reliability and validity are examined and several linkages are found between job satisfaction and age, gender, and educational background. These results are elaborated further and connected to the conducted researches in the field in Chapter 5.

CHAPTER 5 – DISCUSSION

The aim of this study is to identify a reliable measuring instrument of job satisfaction, to reveal the satisfaction of current and ex-auditors in Vietnam with their jobs, and to find out the relationship between their job satisfaction with several demographic variables, including age, gender, and educational background. In this chapter, the results and findings from statistical analyses are discussed and compared with previous research on job satisfaction. The research has gathered 202 respondents who are either working as auditors or have been auditors in the past. Among them, 49% are male (n = 95) and 51% are female (n = 99). More than two thirds of the sample are young people who are in their twenties (72%, n = 131), and only one third of the participants are 30 years old and above (28%, n = 51). Out of 192 respondents who gave information on their educational background, over half of them have only Bachelor's degrees (58.3%, n = 112), one third possess at least either a Master's degree or a professional certificate (17.7%, n = 34 and 17.2%, n = 33 respectively), only 11 participants (5.7%) hold both a Master's degree and a professional certificate and, lastly, only two respondents have a PhD degree. The sample contains relatively equal numbers of current and ex-auditors (56.8% and 43.2% respectively, n = 192).

In the present study, current and ex-auditors in Vietnam appear as a young community with a mean age of 28 years. The reason, probably, is that auditing is quite a young and new profession in Vietnam, where the first international audit firm was only established in 1992 (Ernst&Young, 2016). They can also be considered as a niche community due to their high level of educational background as there is not a single participant who does not have a Bachelor's degree. This fact is explainable because most of the auditing firms in Vietnam only recruit high achieving students and there is absolutely no opportunity for employment for people who do not attend tertiary education.

In preliminary analyses, a statistically significant positive correlation with medium strength is found between two demographic variables, namely age and educational background (ρ =.33, n = 174, p < .001, 11% of variance explained, Table 9, p. 40). In other words, the older people in the present study are associated with higher educational backgrounds. This discovery also holds true for both genders, male and female auditors and ex-auditors in Vietnam (Table 10, p. 41). For male current and ex-auditors in Vietnam, the correlation between age and education background is not very strong with Spearman's ρ = .29, n = 82, p = .009 and share 8.4% of variance explained. For their female counterparts, the

relationship is stronger with Spearman's $\rho = .38$, $n = 89$, $p < .001$ and the two variables share 14.4% of variance explained. There is no significant difference between these two correlations among the two genders. This non-significant difference advises that educational background and age share the same variance in positive affects for both males and females who are current and ex-auditors in Vietnam.

There are many reasons why there is a positive correlation between education background and age. In Vietnam, auditing firms recruit employees every year from an abundant source of newly graduated students, both from domestic universities and from the students that have been studying abroad. Most of them possess only a Bachelor's degree at first. However, in order to stay in the industry and to be ready for promotions in the firms, they would have to improve themselves by studying for further professional qualifications and higher educational degrees. Therefore, the older they are, the greater the chance that they hold a higher educational qualification. Nevertheless, that is only for the people who remain in the auditing companies, but what about the people who have already moved on? A separate test for current and ex-auditors is computed and it reports an interesting result (Table 11, p. 42). No significant correlation is reported for the ex-auditors ($\rho = .08$, $n = 75$, $p = .47$), whilst there is indeed a strong, statistically significant and positive correlation between current auditors' age and education background ($\rho = .49$, $n = 90$, $p < .001$, 24% of variance explained). This contrast indicates that after quitting the auditing career, the pressure to improve oneself by upgrading qualifications is not as strong as when that person was working as an auditor. This implication at least holds true in the observation of the researcher. His ex-colleagues tend to quit the auditing career for other paths with lower work pressures and lower qualification requirements.

5.1. The Use of a Vietnamese Version of Spector's Job Satisfaction Survey in a Vietnamese Context

Job Satisfaction Survey (Spector, 1997) is one of the most extensively used instruments for measuring job satisfaction in the world (van Saane et al., 2003). It was originally developed in English and has been translated into many other languages for local researchers (Anari, 2012; Chin-Siang et al., 2014; Shahzad & Begum, 2011). The scale has also been widely utilized in developing countries, including Greece (Dimitrios et al., 2014; Saiti & Papadopoulos, 2015); Iran (Anari, 2012); India (Giri & Kumar, 2010; Tewari, 2009); Malaysia (Bokti & Talib, 2009; Chin-Siang et al., 2014); Pakistan (Khan & Ahmed, 2013; Shahzad & Begum, 2011); Turkey (Top et al., 2015; Top et al., 2013); and others (Spector,

1997). In this study, the Job Satisfaction Survey (Spector, 1997) has been carefully translated into Vietnamese through rigorous procedures, which involved the translate–retranslate technique, and its reliability and validity will be discussed below.

5.1.1. Reliability

Cronbach's alpha coefficients are computed for each of the subscales and the Job Satisfaction Survey as a whole (Table 38). For the subscales, internal consistencies range from .43 to .82, with the lowest value observed for 'Operating conditions' (α = .43) and peak at 'Nature of work' (α = .82). The rest of the subscales' alpha coefficients are in the region from α = .61 to α = .74. According to Kline (1999), generally, a Cronbach's alpha value of .7 or .8 is appropriate for scales used in cognitive or ability tests. However, in some cases where diverse psychological constructs are being measured, values below .7 can be expected (Kline, 1999), or even a value as low as .5 could be appropriate (Nunally, 1978). In the present study, most of the subscales have satisfactory Cronbach's alpha values, which are from α = .61 to α = .82, with the sole exception of the subscale 'Operating conditions' (α = .43).

Table 38

Internal Reliability (Cronbach's alpha)

Subscale	**Current Study**	**Malaysia[a]**	**Spector's JSS[b]**
PAY Subscale 'Pay'	.61	.59	.75
PRO Subscale 'Promotion'	.74	.50	.73
SUV Subscale 'Supervision'	.74	.69	.82
FB Subscale 'Fringe benefits'	.66	.51	.73
CRE Subscale 'Contingent rewards'	.65	.71	.76
OPC Subscale 'Operating conditions'	.43	.22	.62
COW Subscale 'Co-workers'	.64	.35	.60
NAT Subscale 'Nature of work'	.82	.60	.78
COM Subscale 'Communication'	.63	.58	.71
TOTAL SATISFACTION	.91	.86	.91

Note.

a. Adapted from Chin-Siang et al. (2014)

b. Adapted from Spector (1997, p. 10)

A low alpha coefficient indicates a low internal consistency of the items, which means that there might be potential problems with the internal reliability of the subscale. The 'Operating conditions' subscale aims at measuring the satisfaction of employees with the rules and procedures at work. It comprises four items, which are labelled in this study as OPC1R, OPC2, OPC3R, and OPC4R, that are: 1) Many of our rules and procedures make doing a good job difficult; 2) My efforts to do a good job are seldom blocked by red tape; 3) I have too much to do at work; and 4) I have too much paperwork. Among these four items, three are negatively worded, which are the first, the third, and the fourth ones. Therefore, there might be a chance that people could answer them in the same logic as the positively-worded questions, and that might be the reason for a low value of Cronbach's alpha. In order to verify this supposition, an internal consistency test is computed for the original scores of these items, where they are not reverted before calculations. However, a similar value of α = .42 indicates that there is no difference even when the original scores are used. Moreover, besides these three reverse items, there are many items in the questionnaires that are reverse; thus, this supposition could be dismissed.

This finding mirrors what is presented in research by Chin-Siang et al. (2014) for a group of military personnel in Malaysia (Table 38, p. 78). In this research, the subscale 'Operating conditions' also demonstrates a poor level of internal consistency (α = .22), while other scales show more reasonable alpha values. A further analysis is included for a more detailed look at the correlations between each question with the total score of the scale. Presented in Table 15 (p. 46) are only the items with correlation coefficients with the whole scale lower than .3. According to Field (2013), a value lower than .3 indicates that the item does not correlate well with the scale overall. For the five items listed in Table 15 (p. 46), their low relevance with the whole scale is confirmed by the increased Cronbach's alphas when they are deleted from the scale (column 'Cronbach's Alpha if Item Deleted' in Table 15, p. 46). Among them, there are three items that belong to the subscale 'Operating conditions' (OPC2, OPC3, OPC4). By and large, these results might suggest that the subscale does not really fit well into the Vietnamese context.

In this study as a whole, the Job Satisfaction Survey demonstrates a very high internal consistency of α = .91, equal to the value presented by its author (Spector, 1997). This is a very encouraging value according to Kline (1999). Once again, this result lends further support to the confirmations of a strong reliability of JSS (Spector, 1997) as reported in the studies of Anari (2012); Bateh and Heyliger (2014); Bokti and Talib (2009); Chin-Siang et al. (2014); Claiborne et al. (2013); Dimitrios et al. (2014); Top et al. (2013); and Top et al. (2015). In addition, the Guttman split-half coefficient of .70 (Table 16, p. 47) for this dataset is also a reasonable level of internal consistency. All things considered, the Vietnamese version of the Job Satisfaction Survey demonstrates an acceptable reliability through this research with a small caution on the subscale 'Operating conditions'.

5.1.2. Validity

Discriminant validity

There are nine facets of job satisfaction that are covered by the Job Satisfaction Survey (Spector, 1997). According to Spector (1985), if the JSS does indeed have a good discriminant validity, these nine conceptual facets of job satisfaction should be distinct with small to moderate inter-correlations among them. In this study, the correlations between the subscales are presented in Table 17 (p. 48) and range from r = .22 to r = .65 (p < .05, two-tailed), with a median correlation of .41. These correlation values are indeed in the range of small to medium (r < .50, according to (Cohen, 1988)), with the exception of the subscale 'Contingent rewards'. This scale correlates strongly with 'Pay', 'Supervision' and 'Fringe

benefits'. However, the majority of inter-correlation values are lower than .50; therefore, the Vietnamese version of JSS demonstrates an acceptable discriminant validity in this research. The dominance of small to moderate correlations among the subscales is also reported in the research of Bokti and Talib (2009), Giri and Kumar (2010), Top et al. (2013), and Saiti and Papadopoulos (2015).

Convergent validity

Firstly, the convergent validity is shown by strong correlations between the scores of subscales and the total job satisfaction scores (Table 17, p. 48). The scores of all subscales correlate with the total job satisfaction scores with Pearson correlation coefficients of around .70 except for 'Operating conditions' (r = .48). However, a correlation of .48 still belongs to the upper part of medium strength and is a strong correlation according to the classification of Cohen (1988).

Secondly, an exploratory factor analysis is employed to explore the underlying structure of the individual items of JSS (Spector, 1997). With the principal axis factoring extraction method, nine factors with eigenvalues greater than 1.0 are retained. These nine factors, in combination, accumulatively explain 64.10% of the variance and are shown in Table 21 (p. 52). With the new contents, these nine factors are re-named, respectively, as follows: 1) Payment and recognition; 2) Nature of work; 3) Promotions; 4) Benefits and rewards; 5) Communication; 6) Supervision; 7) Workload; 8) Colleagues; and 9) Work obstacles. Among the 36 items, CRE2 appears as the only item that does not heavily load onto any of the nine factors. However, it is most strongly associated with the sixth factor — Supervision — and this does make sense since the item asks about the appreciation shown to an employee for doing their job. Commonly, the employee would expect the appreciation from their direct superior. Thus, despite having no loading greater than .3, it is still reasonable to put the item CRE2 into the sixth group — Supervision.

It is very encouraging that EFA has discovered the same quantity of underlying dimensions of the Vietnamese-translated version of the Job Satisfaction Survey. Similarly, nine factors are also reported in the research of Spector (1985) and Chin-Siang et al. (2014). Despite some disorder in the allocation of items to factors, there are some factors that are exactly the same with or have a highly identical structure to the original dimensions, including 'Nature of work', 'Supervision', 'Promotion', and 'Communication'. Furthermore, internal consistencies have also been calculated for each and every factor with their corresponding items. Surprisingly, the Cronbach's alpha coefficients are even higher than

those of the original facets of job satisfaction, with values ranging from .69 to .82 for the first eight factors. The ninth factor appears to be isolated from the others because of its low internal consistency of .45. This scenario is just like a duplication of the nine original dimensions with 'Operating conditions' being the one with the lowest alpha value. By and large, EFA has reported an underlying pattern that is very close to the original structure of the original JSS (Spector, 1997).

5.2. General Level of Job Satisfaction among Current and Ex-Auditors in Vietnam

In this research, current and ex-auditors in Vietnam are reported to be slightly satisfied with their jobs generally. The mean of overall job satisfaction is M = 137.77, SD = 21.70 (Table 39), which is higher than the mid-point of the scale (mid-point = 126.00). However, considering the value of the standard deviation SD = 21.70, the fluctuation of the overall job satisfaction score in this study is quite large. With a mean score of M = 137.77 and standard deviation of SD = 21.79, 95% of the scores fall into the range from 94.38 to 181.17 (M +/- 2*SD range). Nonetheless, these parameters reveal that roughly around 38.3% of the participants are satisfied with their work. The reason is because the probability of belonging to the range of 'M +/- 0.5*SD' is roughly 38.3%, and that range in this study is from 126.92 to 148.62 (greater than the mid-point 126). The mean scores of subscales range from 13.10 to 17.59, where 'Operating conditions' and 'Co-workers' are the facets that current and ex-auditors in Vietnam are most and least satisfied with, respectively. Despite the discrepancies among the subscales, there is a common trait among them that they all have a high fluctuation. The standard deviations range from 3.14 to 3.91. This fact accounts for the big value of the standard deviation of the global job satisfaction. There are four items in each subscale, and the score for each subscale could range from 4 to 24, thus making the mid-point for each subscale 14. Considering this and based on the mean score, there are only two work aspects that Vietnamese current and ex-auditors are not satisfied with, which are the fringe benefits (M = 13.80, SD = 3.35) and the working conditions (M = 13.10, SD = 3.14). In contrast, they are reported to be generally happy with the rest of their job aspects, in which their satisfaction appears to be highest with their colleagues (M = 17.59, SD = 3.21), their direct supervisors (M = 16.45, SD = 3.80), and the communication in their workplaces (M = 16.78, SD = 3.35).

Table 39

Descriptive Statistics for Job Satisfaction and Subscales

Overall Job Satisfaction and Subscales		**Current Study**	**Norms[a]**
Pay	Mean	14.09	11.8
	Std. Deviation	3.38	2.6
Promotion	Mean	15.43	12.0
	Std. Deviation	3.86	1.9
Supervision	Mean	16.45	19.2
	Std. Deviation	3.80	1.5
Fringe benefits	Mean	13.80	14.2
	Std. Deviation	3.35	2.2
Contingent rewards	Mean	14.68	13.7
	Std. Deviation	3.47	2.0
Operating conditions	Mean	13.10	13.5
	Std. Deviation	3.14	2.2
Co-workers	Mean	17.59	18.3
	Std. Deviation	3.21	1.1
Nature of work	Mean	15.85	19.2
	Std. Deviation	3.91	1.3
Communication	Mean	16.78	14.4
	Std. Deviation	3.35	1.8
TOTAL SATISFACTION	Mean	137.77	136.5
	Std. Deviation	21.70	12.1

Note. a. norms based on 8,113 individuals from 52 samples (Spector, 1997, p. 12).

Lowest scores on the operating conditions imply that the participants in this study are either having too much to do at work or they are constrained by too many procedures in their work. In the same logic, they might think that they deserve a better benefit package or what the companies are offering simply does not meet their expectations. On the other hand, current and ex-auditors in Vietnam seem to be quite happy with the relationship with their colleagues, their supervisors and the communication systems in their companies. These positive signs suggest that the audit firms in Vietnam are doing well in keeping the harmony among their employees and maintaining a professional environment.

This study's results suggest that the Vietnamese people, who had been or who are currently working as auditors, are satisfied with their occupations. More or less the same conclusions are drawn in the studies on job satisfaction in Vietnam by Nguyen (2008) and Duong (2013), although the targeted populations are different from that of the present research. It might appear that the Vietnamese people hold a positive and optimistic view of their jobs. However, the suggestion must be taken with caution due to the limited amount of literature on the topic. It should also be noted that the target populations of the mentioned research and the present one are totally different. It would require a lot more studies in order to generalize such a conclusion for the attitude towards work in Vietnam.

Ignoring the differences in the targeted populations, a rough comparison with the norms of overall job satisfaction and satisfaction with individual subscales established by Spector (1997, p. 12) is presented in Table 39 (p. 82). In the norms, the mean scores of the subscales vary more strongly, from 11.8 to 19.2. In addition, the norm scores of the subscales appear to be much less fluctuated with standard deviation values that range from SD = 1.1 – 2.6 only. This difference is probably caused by a much larger sample size of 8,113 people, which is combined from 52 different samples. Generally, Vietnamese people are on the same level with American workers with a slightly higher margin (M = 137.77, M = 136.5 respectively). The participants in this study are more satisfied than the norm with the following work aspects: payment, promotion opportunities, rewards for good performance, and communication within the organization. On the other hand, Vietnamese people appear to be less happy than the norm with their supervisors, co-workers, and the nature of their work. These differences are illustrated by a radar chart in Figure 9.

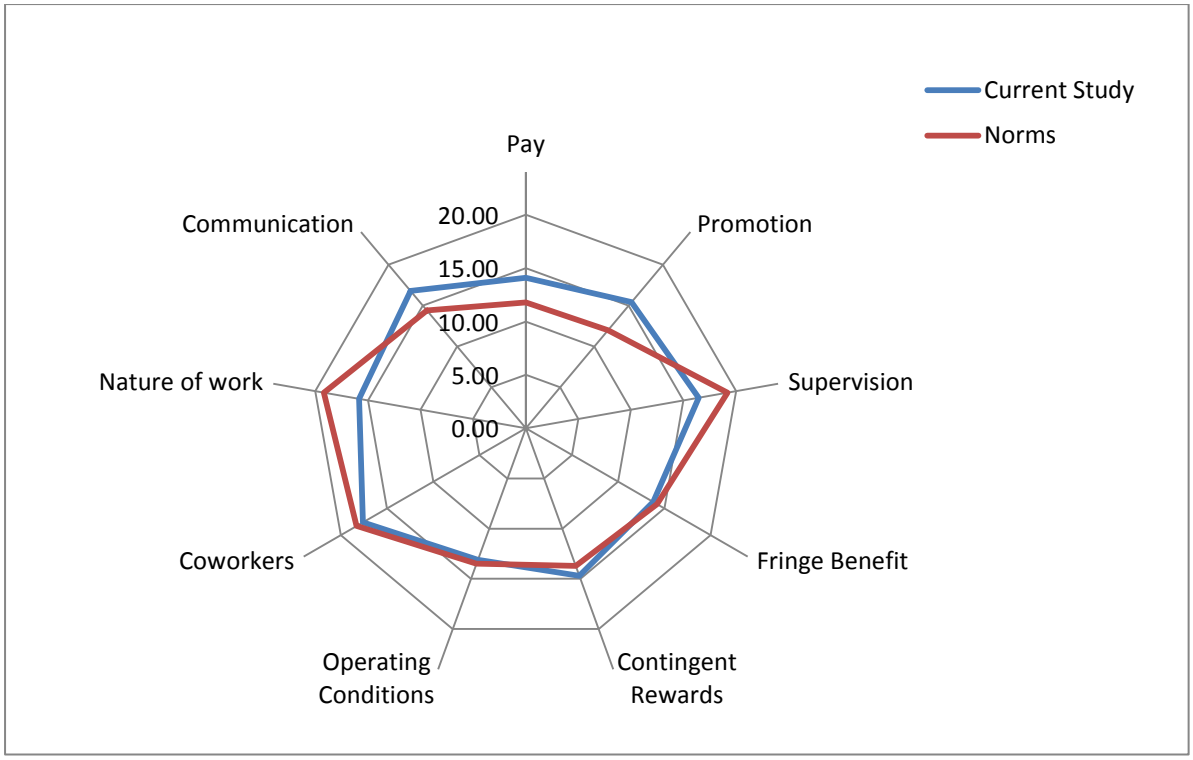

Figure 9. Comparison with Spector's (1997) norms of job satisfaction facets.

In a broader picture (Table 40, p. 85), the results of this study are compared with studies using the same measurement of job satisfaction, the Spector's Job Satisfaction Survey, across several countries, including the Dominican Republic (Marion-Landais, 1993); Hong Kong (Lammond, 1995); Singapore (Spector & Wimalasiri, 1986); Greece (Saiti & Papadopoulos, 2015); and Spector's norms (Spector, 1997). The overall satisfaction with work of the Vietnamese in this study is marginally higher than that of people in Hong Kong, Singapore, and the United States. Among the five listed countries, the lowest satisfaction in work is recorded for Greece. In particular, the Greek people are extremely dissatisfied with their salaries, and not happy with their chances of promotion, benefits, and rewards. The financial crisis in Greece probably has a role in these low scores.

On the other hand, the Dominican Republic scores highest on every facet except for 'Operating conditions'. This subscale has a particularly low mean score of M = 12.3 in comparison with other work aspects. The score of overall job satisfaction of the Dominican Republic is strikingly higher than all of the other nations. However, a similar pattern could be spotted between Vietnam and the Dominican Republic. People in these two countries appear to be happier with their supervision, colleagues, nature of work, and communication within the workplace than the rest of the work aspects. Moreover, both countries score

lowest on 'Operating conditions'. These similarities could be a reflection of the fact that both Vietnam and the Dominican Republic are classified as developing countries as classified by United Nations (UN) (2012) while the others already possess developed economies.

Table 40

Comparison of Mean Scores of Job Satisfaction Facets with Other Countries

Subscales	Vietnam[a]	Dominican Republic[b]	Hong Kong[c]	Singa-pore[d]	Greece[e]	United States[f]
Pay	14.09	17.2	15.0	14.0	6.4	11.8
Promotion	15.43	16.4	14.2	13.4	11.5	12.0
Supervision	16.45	20.0	16.0	13.4	20.6	19.2
Fringe benefits	13.80	16.8	14.4	14.2	10.8	14.2
Contingent rewards	14.68	17.8	14.9	17.3	10.5	13.7
Operating conditions	13.10	12.3	12.1	17.0	13.1	13.5
Co-workers	17.59	20.0	15.6	13.4	20.0	18.3
Nature of work	15.85	22.2	14.9	17.1	18.5	19.2
Communication	16.78	18.1	14.9	14.9	17.9	14.4
TOTAL SCORE	137.77	160.9	133.3	134.7	129.2	136.5
Sample size	202	148	136	182	188	8,113

Note. a. Present study;

b. Adapted from Marion-Landais (1993)

c. Adapted from Lammond (1995)

d. Adapted from Spector and Wimalasiri (1986)

e. Adapted from Saiti and Papadopoulos (2015)

f. Norm established by Spector (1997).

5.3. Differences in the Perception of Overall Job Satisfaction between Current and Ex-Auditors in Vietnam

This study has pointed out that there is a statistically significant difference in the level of job satisfaction between current and ex-auditors in Vietnam. Current auditors in Vietnam report a mean score for job satisfaction of M_{ori} = 141.96, SD_{ori} = 21.14, which is significantly higher than that of the ex-auditors in Vietnam (M_{ori} = 132.07, SD_{ori} = 20.13) with a relatively moderate effect ($t_{ori}(190) = 3.28$, p = .001, two-tailed, eta squared η^2 = .054). The difference is statistically significant not only in the original dataset, but the same results are observed in

all imputed datasets as well (Table 32, p. 67). Despite working in one of the most stressful professions with long working hours and busy schedules (Fisher, 2001; Kalbers & Fogarty, 2005; Larson et al., 2004; Larson & Murff, 2006; Salehi et al., 2012; Snead & Harrell, 1991), Vietnamese audit workers seem to be happy with their jobs. This result mirrors the findings of Larson and Murff (2006), Oxner and Oxner (2006), and Patten (2005), where high job satisfaction levels are reported among the auditors.

Besides being a highly competitive and intense environment, auditing is also reported to be a profession with a high turn-over rate (Chi et al., 2013). It seems common sense for people to quit their jobs when they cannot cope with its heavy requirements and fast pace. From personal observations, after quitting audit, people tend to choose jobs that are considered as 'lighter' and 'easier', including accounting, back office banking positions, or finance specialists. As a consequence, they should feel happier than when they were working as auditors. However, in this study, it is reported that people who quit audit are not as satisfied as the people who remain in the profession. This contradiction is interesting. A possible explanation for this contrast is that the people who had worked as auditors have become familiar with the nature of the job, and when they are at their new jobs, they might not find it as fascinating as they thought it would be or not as interesting as audit. Another possible reason could be that perhaps the people who had chosen an auditing profession prefer working hard and, when the amount of work is reduced after quitting audit, their happiness reduces as well (Larson et al., 2004). Larson et al. (2004) suggest that auditors' higher job stress level is associated with their perception of a lower job dissatisfaction, which means that the auditors appear to be more content with their work when they get busier and face more work pressures. This finding seems to be supported in the present study as well. The Vietnamese auditors who are busier and more stressful are significantly happier with their jobs than the Vietnamese ex-auditors, who are less busy and under less pressure.

Through Table 41 and Figure 10, the mean scores of the two groups in individual subscales are presented and visually displayed. The ex-auditors in Vietnam score lower in every subscale in comparison with the current employees. Intriguingly, they seem to be less content in every aspect of their new jobs than their ex-colleagues. The two relatively parallel lines in Figure 10 suggest that these two groups share a similar pattern of satisfaction on nine work dimensions of Spector's model. It could be a hint towards the common traits in the nature of the jobs of ex-auditors and the audit profession.

Table 41

Comparison of Subscales' Mean Scores between Vietnamese Current and Ex-auditors

Subscales	Current Auditors	Ex-auditors
Pay	14.62	13.36
Promotion	15.92	14.83
Supervision	17.06	15.61
Fringe benefits	14.05	13.34
Contingent rewards	15.29	13.87
Operating conditions	13.24	12.71
Co-workers	17.97	17.16
Nature of work	16.64	14.70
Communication	17.17	16.49

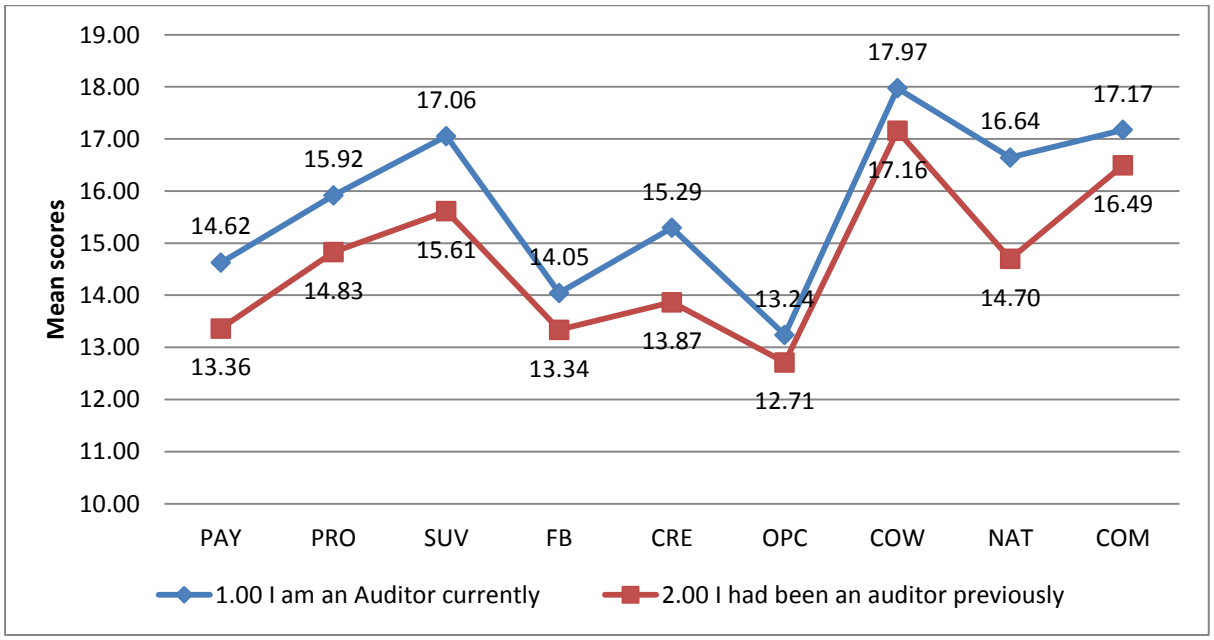

Figure 10. Comparison of subscales' mean scores between current and ex-auditors in Vietnam.

5.4. Job Satisfaction and Age

Non-significant negative correlation between age and the level of job satisfaction is reported in this study for the current and ex-auditors in Vietnam (r_{pooled} = -.084, N = 202, p_{pooled} = .24). Results produced from the original dataset (without imputed data) and from

every set of imputed data are relatively the same. A negative correlation means that the older the people get, the lower their job satisfaction. However, statistically non-significant results support that the hypothesis H_2 is rejected and the null hypothesis is retained. This conclusion mirrors the findings from previous works, where no correlation exists between job satisfaction and age (Anari, 2012; Chaudhuri et al., 2015; Dimitrios et al., 2014; Ghazzawi, 2011; Le, 2012; Saiti & Papadopoulos, 2015).

While the overall job satisfaction does not have a significant linear relationship with age, significant negative correlations are reported for the two subscales of promotion (r_{pooled} = -.193, N = 202, p_{pooled} = .011 < .05, two-tailed, 3.7% of variance explained) and colleagues (r_{pooled} = -.181, N = 202, p_{pooled} = .01 < .05, two-tailed, 3.3% of variance explained). These results imply that older employees are less satisfied with their chances of promotion and their colleagues. In auditing and financial service firms in Vietnam, younger employees have much better chances of moving forward on the hierarchical scale of the company. Meanwhile, the older ones will reach a peak in managerial levels, and it will be much harder to progress further past this critical checkpoint. Therefore, older employees might tend to feel discontented with their opportunities of promotion in their work. In addition, getting older might be equivalent to having more things to worry about in life and more responsibilities in work; therefore, the older employees might demand more from their colleagues and be less satisfied with them as a consequence.

According to Chaudhuri et al. (2015), although the linear relationship between these two variables is statistically non-significant, there is a difference between the two genders. Therefore, a further analysis, in which the two genders are separated, is carried out. It turns out that it is different as well for male and female Vietnamese current and ex-auditors. A significant negative correlation is spotted between age and the level of job satisfaction for female employees, who have been or are currently working as auditors in Vietnam (r_{ori} = -.31, n = 91, p_{ori} = .003, two-tailed, 9.6% of variance explained). This negative linear relationship is similar to the finding in the study of Jung et al. (2007). In contrast, no significant result is reported for Vietnamese male employees, who have been or are working as auditors (r = .14, n = 87, p = .20).

This finding is interesting since the male and female participants in this study share relatively the same descriptive statistics, which are presented in Table 42. The mean values of age and total satisfaction of the females are only slightly higher than that of their male counterparts, but a negative linear relationship with medium strength exists between their age and overall level of job satisfaction. The older female employees in Vietnam, who have been

or are working as auditors, are associated with lower levels of contentment with their jobs. There might be several factors that could explain this finding. Firstly, auditing is known as a very stressful and high pressure profession (Fisher, 2001; Kalbers & Fogarty, 2005; Larson et al., 2004; Larson & Murff, 2006; Salehi et al., 2012; Snead & Harrell, 1991) and it is common for employees in this industry to have busy work schedules and work long hours. Secondly, in Vietnam, most of society still has the perception that women are more responsible for taking care of different aspects of the family, while men are more associated with financial responsibilities. When the auditors or ex-auditors are young and free, working in such a high pressure industry might not be a problem. However, when they get older, there is a high chance that they would get married and have children and, therefore, their responsibilities are multiplied. The need to spend more time with the family while dealing with the same amount of pressure at work might have negative effects on the job satisfaction of women in this industry. Moreover, the longer they live under these parallel sources of stress, the worse the situation becomes, and that is why the increment in age is associated with a decrease in the overall job satisfaction of Vietnamese women who have been or are working as auditors.

Table 42

Descriptive Statistics Grouped by Gender

Participant's gender		**Mean**	**Std. Deviation**	**N**
Woman	Total Satisfaction	137.96	23.00	99
	Age	27.77	4.33	91
Man	Total Satisfaction	137.77	21.05	95
	Age	27.54	4.14	87

5.5. Job Satisfaction and Gender

In prior research, there has been much empirical evidence for the significant difference in the overall job satisfaction between men and women. Although the conclusions are not convergent, the common finding is that there is at least a relationship between gender and the level of job satisfaction. On one hand, women could be associated with a higher level of job satisfaction (Aguilar & Vlosky, 2010; Aletraris, 2010; Linz & Semykina, 2013; Sousa-Poza & Sousa-Poza, 2000, 2003) because they are generally less demanding than men. Therefore, it is easier to meet their requirements and expectations in work (Aletraris, 2010;

Sousa-Poza & Sousa-Poza, 2003). On the other hand, there are also many studies that support a contradictory conclusion, that men are happier than women with their jobs (Bönte & Krabel, 2014; Huang & Gamble, 2015; Kara et al., 2012; Sabharwal & Corley, 2009; Saiti & Papadopoulos, 2015; Singhapakdi et al., 2014). According to Singhapakdi et al. (2014), a possible explanation for these conclusions is that women are being treated inequitably at the workplace, especially in the case of Asian women, where the unfair treatment is much more prevalent.

Unlike any of the referred literature above, in the present study, gender has no role in the level of job satisfaction of Vietnamese current and ex-auditors. Non-significant differences are reported between the mean scores of male and female participants for all datasets (for the original dataset, $t_{ori}(192) = 0.06$, $p_{ori} = .95$, two-tailed). Despite sharing many similarities with the Chinese women, who are thought to have less contentment in their jobs than Chinese men (Huang & Gamble, 2015), Vietnamese women in this study are reported to have the same level of job satisfaction with their opposite gender and the null hypothesis is retained. Analogous results are also revealed in the research of Anari (2012) and Dimitrios et al. (2014). This finding of gender not having an influence in the current study could possibly suggest that there is no such thing as 'unfair treatment' in the workplace for Vietnamese female employees who are current or ex-auditors.

5.6. Job Satisfaction and Educational Background

Many researchers have supported the idea that higher educated workers are entitled to better professions with greater rewards, which are the antecedents of higher levels of job satisfaction (Berk, 1985; Duong, 2013; Glenn & Weaver, 1982; Gordon & Arvey, 1975; Martin & Shehan, 1989; Mottaz, 1984; Ross & Reskin, 1992). However, this is not the case for the present study where statistically significant negative correlations are reported between education background and the overall level of job satisfaction for Vietnamese current and ex-auditors ($\rho_{pooled} = -.17$, $N = 202$, $p = .021$, two-tailed, 2.9% of variance explained). The higher qualification a participant possesses, the higher the chance that they are experiencing a lower contentment with their job. In a more detailed exposure, the employees with higher educational backgrounds are more likely to be less satisfied with their promotions ($\rho_{pooled} = -.20$, $N = 202$, $p = .004$, two-tailed, 4% of variance explained); their direct supervision ($\rho_{pooled} = -.19$, $N = 202$, $p = .009$, two-tailed, 3.6% of variance explained); the operating conditions in their workplaces ($\rho_{pooled} = -.14$, $N = 202$, $p = .05$, two-tailed, 2% of variance explained); and

their colleagues (ρ_{pooled} = -.21, N = 202, p = .004, two-tailed, 4.4% of variance explained). Consequently, the fourth null hypothesis is rejected and the fourth hypothesis (H_4) is retained.

This finding echoes the empirical results in prior research by Mottaz (1984), Mann (1953), Mossin (1949), Neilson (1951), and Scott and Hayes (1921). Within these studies, the researchers suggest that having higher educational backgrounds leads to higher expectations at work and, therefore, it is harder to fulfill the job satisfaction of these people. This explanation seems to be applicable for the current and ex-auditor community in Vietnam. The negative linear relationships are stronger for the subscales 'Promotion' and 'Co-workers'. It appears that the more educated the employees are, the more demanding they are for their chances of promotion and of their peers at the workplace. However, all these correlations are relatively weak, which means that the chance of increment in dissatisfaction with jobs is relatively small for the current and ex-auditors with higher qualifications.

Furthermore, gender is taken into account to explore the difference between the male and female individuals of this community. Interestingly, a clear difference between the two sexes is revealed. Analogous to the case of age and level of job satisfaction, a significant negative correlation with medium strength (ρ_{ori} = -.3, n = 96, p = .003, two-tailed, % of variance explain = 9%) is spotted between educational background and overall job satisfaction for the current and ex-auditors in Vietnam who are female. For the opposite gender, a non-significant negative result is reported (ρ_{ori} = -.05, n = 89, p = .61).

In other words, current and ex-auditors in Vietnam who are women and have higher qualifications are associated with lower levels of job satisfaction, while such a relationship is not found among their male colleagues. This finding explains a deeper stratum of the previous one, where it is found that there is a significant negative correlation between education background and level of job satisfaction among current and ex-auditors in Vietnam. It appears that the correlation of the whole sample size was an effect of the medium strength correlation that existed among the female participants.

5.7. Limitations and Suggestions for Future Research

Despite the serious and careful considerations that have been adopted, like any research, the present study still has several limitations. Firstly, the sampling framework of this study is convenience sampling; therefore, the collected sample does not hold a strong representation for the whole targeted population (Bryman & Bell, 2011). As a result, generalization of the findings of the present research for the whole community of Vietnamese current and ex-auditors should be taken with caution. This issue could be mitigated in future

studies if a random sampling technique can be used. Alternatively, a less ambitious, smaller, and accessible population could also heighten the possibility that random sampling could be worked out and, hence, the generalizability of the findings could be improved. Furthermore, because the respondents are mostly within personal circles of the researcher, therefore the sample appears somewhat narrow and again, has a low representativeness for the auditors and ex-auditors community in Vietnam. A more well-defined targeted population or a better, systematic sampling method would improve this aspect for the future research.

Secondly, in spite of the researcher's effort, the present study could only attract a sample size of 202 participants, which is acceptable but not a very great number for factor analysis. The constraints in time and resources also contribute to this modest sample size. In order to avoid this shortcoming in future research, again, the targeted population's accessibility should be considered thoroughly. In other words, a population that could be approached more easily would require less time and effort for the researchers in collecting responses. Also, as long as the research funds allow, financial rewards could also be considered to improve the response rate (Bryman & Bell, 2011). Furthermore, future research with larger scales and broader timeframes should also be of help in addressing this sample size problem.

CHAPTER 6 – CONCLUSIONS AND RECOMMENDATIONS

The present study has aimed at clarifying the validity and reliability of the JSS (Spector, 1997) in the Vietnamese language and within a Vietnamese context. Simultaneously, the overall job satisfaction level of a specific community in Vietnam and its relationship with several demographic variables are under scrutiny in the present study as well. In spite of the limitations addressed in the previous chapter, this present research certainly still has a lot to offer to both academic and business communities.

JSS (Spector, 1997) has been translated into Vietnamese through a multi-stage process where the translation–retranslation technique is involved. The Vietnamese version of JSS has demonstrated an appropriate level of reliability and validity through a variety of tests and analyses. However, there is still room for improvement of the scale. The subscale 'Operating conditions' in the Vietnamese version is the sole subscale with a low level of internal consistency. For future studies on job satisfaction using JSS (Spector, 1997) as the measuring instrument, there are several recommendations for enhancing the tool as follows: 1) Modification of wording; for example, changing all the items into positively worded questions; and 2) Exclusion of the subscale from the instrument or replacing the four items of 'Operating conditions' with other questions. Regarding the second suggestion, other questions could be utilized to investigate different angles of the operating conditions in people's jobs, including the quality and sufficiency of working equipment, the convenience in commuting to the location of the workplace, and conditions in the work office.

In the present study, current and ex-auditors in Vietnam are happy with their jobs. More specifically, they are most satisfied with their colleagues and the communication within their workplaces, while being least pleased with their benefit packages and working conditions at work. This finding could be taken into consideration by the audit firms for improving their corporate working environment, or when they look for ways to heighten the job contentment of their employees. Improvements should be focused more on the job dimensions with least scores while maintaining or even enhancing the dimensions that generate the most satisfaction for employees.

The older members of the Vietnamese current and ex-auditors community are associated with higher educational backgrounds. However, it seems that this relationship is a consequence of a strong, significant, and positive correlation between age and education background which is reported among the current auditors. Logically, this finding suggests

that the qualification demand is more intense for the current auditors than for the ones who have exited the profession. This information is useful to the students who are expecting to enter the industry as well as for the people who are working in the industry and are looking for a way out. Nonetheless, while having less demanding requirements in terms of qualifications, the ex-auditors are reported to have lower levels of job satisfaction too. Despite working in a highly stressful and time-demanding profession, the Vietnamese auditors express a higher level of contentment than their former colleagues in every subscale of job satisfaction. This interesting fact could be utilized by the human resource teams in attracting and retaining talent for their audit companies. Moreover, this is also a suggestion for future studies in finding the difference between the levels of job satisfaction of auditors and ex-auditors. Because the ex-auditors might already be acquainted with being busy and under stress, they could find it unusual after shifting to a new profession which is less intense. Nevertheless, the tenure in audit as well as in the new job and the level of job stress should be included in the data for more clarity in the findings.

No significant correlation has been found between the age and the overall job satisfaction of the current and ex-auditors in Vietnam. However, there are indeed some weak, negative, and statistically significant correlations between their age and their contentment with the chances of promotion as well as relationships with co-workers. Although no correlation between age and overall job satisfaction is found for the sample as a whole, a different story is revealed when the two genders are separated. A medium strength, negative, and statistically significant correlation is confirmed between age and overall job satisfaction of female employees who are currently or had been working as auditors in Vietnam. In the opposite direction, there is no significant correlation found for their male counterparts. The older the women of this community get, the lower their overall satisfaction with their jobs becomes. This negative correlation suggests that for this specific population in Vietnam, women are more vulnerable to age than men in terms of happiness with their jobs. Thus, it is pragmatic for audit companies to pay greater attention to the aged women group than to the male group if they truly care about the job satisfaction of their employees. Higher levels of job satisfaction should be helpful in mitigating job burn-out consequences as well as in preventing senior female staff from quitting.

While no significant difference has been discovered between the levels of job satisfaction of male and female individuals in general, a significant negative correlation with medium strength between overall job satisfaction and educational background has been established among female employees that had been or are working as auditors in Vietnam. In

this case, lower job satisfaction is associated with the women who have more qualifications. This medium strength, significant, and negative correlation seems to be the root of the significant and negative correlation between education background and overall job satisfaction for the whole population. Furthermore, in general, the more highly educated employees are more concerned about certain work aspects, including promotions, supervision, operating conditions, and colleagues. Attention to these factors, especially the co-worker facet, would help the audit firms in Vietnam in maintaining a harmonious working environment. Moreover, besides the extra care that should be placed on the senior ladies, the audit firms should not ignore the female group with higher education backgrounds, regardless of their age.

By and large, the present dissertation has offered information on the general level of job satisfaction of current and ex-auditors in Vietnam and on its relationship with several demographic factors, including age, gender, and education background. With the reliability and validity verification of the Vietnamese version of Spector's (1997) Job Satisfaction Survey presented in this dissertation, a reliable measuring instrument of job satisfaction has been added to the selection pool for researchers in the future. The findings and derived recommendations in this dissertation are meaningful and applicable to both the academic community as well as audit firms in Vietnam. In addition, the present study has made a valuable contribution to the minimal amount of literature on job satisfaction in Vietnam. However, this is just a small addition to such an interesting, important, and highly practical topic. Because of that, this particular issue deserves much more research in the years to come.

REFERENCES

Aguilar, F. X., & Vlosky, R. P. (2010). Gender differences in determinants of job satisfaction among cooperative extension workers in the United States. *Applied Economics Letters, 17*(2), 175-179. doi: 10.1080/13504850701719959

Aletraris, L. (2010). How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations, 63*(8), 1129-1155.

Allen, P., & Bennett, K. (2012). *SPSS statistics: A practical guide, version 20*. South Melbourne, Australia: Cengage Learning Australia.

Altimus, C. A., & Tersine, R. J. (1973). Chronological age and job satisfaction: The young blue collar worker. *Academy of Management Journal, 16*(1), 53-66. doi: 10.2307/255042

Anari, N. N. (2012). Teachers: Emotional intelligence, job satisfaction, and organizational commitment. *Journal of Workplace Learning, 24*(4), 256-269.

Arvey, R. D., Bouchard, T. J., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology, 74*, 187-192.

Avery, R. E., Smillie, L. D., & Fife-Schaw, C. R. (2015). Employee achievement orientations and personality as predictors of job satisfaction facets. *Personality and Individual Differences, 76*, 56-61. doi: 10.1016/j.paid.2014.11.037

Baker, T. L. (1999). *Doing social research* (3rd ed.). New York, NY: McGraw-Hill.

Bateh, J., & Heyliger, W. (2014). Academic administrator leadership styles and the impact on faculty job satisfaction. *Journal of Leadership Education, 13*(3), 34-49.

Berk, L. E. (1985). Relationship of caregiver education to child-oriented attitudes, job satisfaction, and behaviors toward children. *Child Care Quarterly, 14*(2), 103-129. doi: 10.1007/BF01113405

Bokti, N. L. M., & Talib, M. A. (2009). A preliminary study on occupational stress and job satisfaction among male navy personnel at a naval base in Lumut, Malaysia. *Journal of International Social Research, 2*(9), 299-307.

Bönte, W., & Krabel, S. (2014). You can't always get what you want: Gender differences in job satisfaction of university graduates. *Applied Economics, 46*(21), 2477-2487. doi: 10.1080/00036846.2014.899677

Bopp, T., Wigley, B. J., & Eddosary, M. (2015). Job and life satisfaction: The perspective of collegiate head coaches. *International Journal of Sports Science & Coaching, 10*(6), 1025-1037.

Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology, 73*(2), 193-198.

Bryman, A., & Bell, E. (2011). *Business research methods* (3rd. ed.). New York, NY: Oxford University Press.

Case Western Reserve University (CWRU). (2015). Basic tips for choosing scales. from https://www.google.co.nz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&ved=0CEQQFjAHahUKEwiWqZu6wcPIAhVFnpQKHYaWDT4&url=https%3A%2F%2Fwww.case.edu%2Fir%2Fmedia%2Fcaseedu%2Finstitutional-research%2Fdocuments%2FChoosing-scales.docx&usg=AFQjCNGoCKTJp-oWBHeB1jxQP759wvMeAw&sig2=1FJe8vGlcOGA6jlGDjjQng&bvm=bv.105039540,d.dGo&cad=rja

Centers, R., & Bugental, D. E. (1966). Intrinsic and extrinsic job motivations among different segments of the working population. *Journal of Applied Psychology, 50*(3), 193-197.

Chaudhuri, K., Reilly, K. T., & Spencer, D. A. (2015). Job satisfaction, age and tenure: A generalized dynamic random effects model. *Economics Letters, 130*, 13-16. doi: 10.1016/j.econlet.2015.02.017

Chi, W., Hughen, L., Lin, C.-J., & Lisic, L. L. (2013). Determinants of audit staff turnover: Evidence from taiwan. *International Journal of Auditing, 17*(1), 100-112. doi: 10.1111/j.1099-1123.2012.00459.x

Chin-Siang, A., Talib, M. A., Juhari, R., & Madon, Z. (2014). Psychometric properties of the Malay version of the job satisfaction survey among Malaysian military personnel. *Pertanika Journal of Social Sciences and Humanities, 22*(1), 285-306.

Christiansen, N., Sliter, M., & Frost, C. T. (2014). What employees dislike about their jobs: Relationship between personality-based fit and work satisfaction. *Personality & Individual Differences, 71,* 25-29. doi: 10.1016/j.paid.2014.07.013

Claiborne, N., Auerbach, C., Lawrence, C., & Schudrich, W. Z. (2013). Organizational change: The role of climate and job satisfaction in child welfare workers' perception of readiness for change. *Children and Youth Services Review, 35*(12), 2013-2019.

Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational & Organizational Psychology*, *69*(1), 57-81.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, N.J: Lawrence Erlbaum Associates.

Cole, R. J., Oliver, A., & Blaviesciunaite, A. (2014). The changing nature of workplace culture. *Facilities, 32*(13/14), 786-800. doi: 10.1108/F-02-2013-0018

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Costello, A. B., & Osborne, J. W. (2005). Best practices in Exploratory Factor Analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*(7), 1-9.

Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York, NY: Macmillan.

Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior, 14*(6), 595-606.

Dabke, D. (2014). Can life satisfaction be predicted by emotional intelligence, job satisfaction and personality type? *Aweshkar Research Journal, 17*(1), 22-32.

Dastmalchian, A., & Blyton, P. (2001). Workplace flexibility and the changing nature of work: An introduction. *Canadian Journal of Administrative Sciences, 18*(1), 1-4.

Dimitrios, B., Kastanioti, C., Maria, T., & Dimitris, N. (2014). The influence of organizational culture on job satisfaction of administrative employees at a public hospital: The case of general hospital of Larissa. *Journal of Health Management, 16*(2), 217-231.

Donders, A. R. T., van der Heijden, G. J. M. G., Stijnen, T., & Moons, K. G. M. (2006). Review: A gentle introduction to imputation of missing values. *Journal of Clinical Epidemiology, 59*(10), 1087-1091.

Duong, M. Q. (2013). Job satisfaction among academic members of higher education in vietnam. *International Journal of Academic Research, 5*(5), 346-350. doi: 10.7813/2075-4124.2013/5-5/B.53

Dyer, S., Humphries, M., Fitzgibbons, D., & Hurd, F. (2014). *Understanding management critically: A student text*. London, England: SAGE.

Erdvik, I. B., Øverby, N. C., & Haugen, T. (2015). Translating, reliability testing, and validating a norwegian questionnaire to assess adolescents' intentions to be physically active after high school graduation. *SAGE Open, 5*(2), 1-6.

Ernst&Young. (2016). Welcome to EY Vietnam. from http://www.ey.com/VN/en/Home/EY-Vietnam

Evans, L., & Olumide-Aluko, F. (2010). Teacher job satisfaction in developing countries: A critique of herzberg's two-factor theory applied to the nigerian context. *International Studies in Educational Administration, 38*(2), 73-85.

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*(3), 272-299. doi: 10.1037/1082-989X.4.3.272

Fesharaki, G. M., Talebiyan, D., Aghamiri, Z., & Mohammadian, M. (2012). Reliability and validity of Job Satisfaction Survey questionnaire in military health care workers. *Iranian Journal of Military Medicine, 13*(4), 241-246.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London, England: SAGE.

Fisher, R. T. (2001). Role stress, the type a behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting, 13*(1), 143-170.

Fortune. (2016). 100 best companies to work for. from http://fortune.com/best-companies/

Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology, 40*(2), 287-322.

Ghazzawi, I. (2011). Does age matter in job satisfaction? The case of u.S. Information technology professionals. *Journal of Organizational Culture, Communications & Conflict*, *15*(1), 25-54.

Giri, V. N., & Kumar, B. P. (2010). Assessing the impact of organizational communication on job satisfaction and job performance. *Psychological Studies*, *55*(2), 137-143.

Glenn, N. D., & Weaver, C. N. (1982). Further evidence on education and job satisfaction. *Social Forces*, *61*(1), 46-55. doi: 10.2307/2578073

Gordon, M. E., & Arvey, R. D. (1975). The relationship between education and satisfaction with job content. *Academy of Management Journal*, *18*(4), 888-892. doi: 10.2307/255388

Gruneberg, M. M. (1979). *Understanding job satisfaction*. London, England: Macmillan.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizationbal Behavior and Human Performance*, *16*(1), 250-279.

Harrell, A., Chewning, E., & Taylor, M. (1986). Organizational-professional conflict and the job satisfaction and turnover intentions of internal auditors. *Auditing: A Journal of Practice & Theory*, *5*(2), 109-121.

Hassard, J., Teoh, K., & Cox, T. (2016). Job satisfaction: Theories and definitions. from http://oshwiki.eu/wiki/Job_satisfaction:_theories_and_definitions

Healy, K. (2016). A theory of human motivation by Abraham H. Maslow - Reflection. *The British Journal Of Psychiatry*, *208*(4), 313-313. doi: 10.1192/bjp.bp.115.179622

Herzberg, F. (1976). The motivation-hygiene theory. In M. Weir (Ed.), *Job satisfaction: Challenge and response in modern Britain* (pp. 75-81). Glasgow, Scotland: William Collins.

Herzberg, F., Mausner, B., Peterson, R. D., & Capwell, D. F. (1957). *Job attitudes: Review of research and opinions*. Pittsburgh, PA: Psychological Service of Pittsburgh.

Herzberg, F., Mausner, B., Peterson, R. D., & Capwell, D. F. (1987). *Job attitudes: Review of research and opinion*. New York, NY: Garland Publishing.

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (2nd ed.). New York: Wiley.

Hosie, P., Jayashree, P., Tchantchane, A., & Lee, B. S. (2013). The effect of autonomy, training opportunities, age and salaries on job satisfaction in the South East Asian retail petroleum industry. *International Journal of Human Resource Management, 24*(21), 3980-4007. doi: 10.1080/09585192.2013.829517

Huang, Q., & Gamble, J. (2015). Social expectations, gender and job satisfaction: Front-line employees in China's retail sector. *Human Resource Management Journal, 25*(3), 331-347. doi: 10.1111/1748-8583.12066

Hulin, C. L., & Smith, P. C. (1965). A linear model of job satisfaction. *Journal of Applied Psychology, 49*(3), 209-216.

Hunt, J. W., & Saul, P. N. (1975). The relationship of age, tenure, and job satisfaction in males and females. *Academy of Management Journal, 18*(4), 690-702. doi: 10.2307/255372

Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London, England: SAGE.

IBM. (2010). IBM SPSS missing values 19. from http://www.unt.edu/rss/class/Jon/SPSS_SC/Manuals/v19/IBM%20SPSS%20Missing%20Values%2019.pdf

IBM. (2012). IBM SPSS missing values 21. from http://www.sussex.ac.uk/its/pdfs/SPSS_Missing_Values_21.pdf

Ironson, G. H. (1992). Job stress and health. In C. J. Cranny, P. C. Smith, & E. F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York, NY: Macmillan.

Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a job in general scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology, 74*(2), 193-200.

Janson, P., & Martin, J. K. (1982). Job satisfaction and age: A test of two views. *Social Forces, 60*(4), 1089-1102.

Johari, J., Kirana, K. Y., & Omar, A. (2011). The construct validity of organization structure scale: Evidence from Malaysia. *World Journal of Management, 3*(2), 131-152.

Judge, T. A. (1992). The dispositional perspective in human resources research. *Reseach Personnel and Human Resources Management, 10*, 31-72.

Judge, T. A. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? *Journal of Applied Psychology, 78*(3), 395-401.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80-92. doi: 10.1037//0021-9010.86.1.80

Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior, 19*, 151-188.

Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction - life satisfaction relationship. *Journal of Applied Psychology, 78*(6), 939-948.

Jung, K., Moon, M. J., & Sung Deuk, H. (2007). Do age, gender, and sector affect job satisfaction? *Review of Public Personnel Administration, 27*(2), 125-146.

Kacmar, K. M., & Ferris, G. R. (1989). Theoretical and methodological considerations in the age-job satisfaction relationship. *Journal of Applied Psychology, 74*(2), 201-207.

Kalbers, L. P., & Fogarty, T. J. (2005). Antecedents to internal auditor burnout. *Journal of Managerial Issues, 17*(1), 101-118.

Kara, D., Uysal, M., & Magnini, V. P. (2012). Gender differences on job satisfaction of the five-star hotel employees: The case of the turkish hotel industry. *International Journal of Contemporary Hospitality Management, 24*(7), 1047-1065. doi: 10.1108/09596111211258919

Katzell, R. A., Thompson, D. E., & Guzzo, R. A. (1992). How job satisfaction and job performance are and are not linked. In C. J. Cranny, P. C. Smith, & E. F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York, NY: Macmillan.

Kavanagh, M. J., & Duffy, J. F. (1978). An extension and field test of the retranslation method for developing rating scales. *Personnel Psychology, 31*(3), 461-470.

Khan, A., & Ahmed, S. (2013). Job satisfaction among librarians in the universities of Khyber Pakhtunkhwa, Pakistan: A survey. *Library Philosophy and Practice*, 1-12.

Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London, England: Routledge.

Lammond, D. (1995). Unpublished data set. Sydney, Australia: Macquarie University.

Lancaster, G. A., Dodd, S., & Williamson, P. R. (2004). Design and analysis of pilot studies: Recommendations for good practice. *Journal of Evaluation in Clinical Practice, 10*(2), 307-312. doi: 10.1111/j..2002.384.doc.x

Lance, C. E., Lautenschlage, G. J., Sloan, C. E., & Varca, P. E. (1989). A comparison between bottom-up, top-down, and bidirectional models of relationships between global and life facet satisfaction. *Journal of Personality, 57*(3), 601-624. doi: 10.1111/1467-6494.ep8970785

Larson, L. L., Meier, H. H., Poznanski, P. J., & Murff, E. J. T. (2004). Concepts and consequences of internal auditor job stress. *Journal of Accounting & Finance Research, 12*(6), 35-46.

Larson, L. L., & Murff, E. J. T. (2006). An analysis of job stress outcomes among bank internal auditors. *Bank Accounting & Finance, 19*(4), 39-43.

Le, X. S. (2012). Job satisfaction in the shrimp trawl fisheries of vietnam. *Social Indicators Research, 109*(1), 39-51. doi: 10.1007/s11205-012-0054-4

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2014). *IBM SPSS for intermediate statistics: Use and interpretation* (5 ed.). New York, NY: Routledge.

Li, P., Stuart, E. A., & Allison, D. B. (2015). Multiple imputation: A flexible tool for handling missing data. *Journal of the American Medical Association, 314*(18), 1966-1967. doi: 10.1001/jama.2015.15281

Linz, S., & Semykina, A. (2013). Job satisfaction, expectations, and gender: Beyond the european union. *International Journal of Manpower, 34*(6), 584-615. doi: 10.1108/IJM-06-2013-0149

Lloyd, S., Streiner, D., Hahn, E., & Shannon, S. (1994). Development of the emergency physician job satisfaction measurement instrument. *American Journal of Emergency Medicine, 12*(1), 1-10. doi: http://dx.doi.org/10.1016/0735-6757(94)90187-2

Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance, 4*(4), 309-336. doi: http://dx.doi.org/10.1016/0030-5073(69)90013-0

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. P. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1350). Chicago, IL: Rand McNally.

Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology, 70*(2), 280-2289.

MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods, 4*(1), 84-99. doi: 10.1037/1082-989X.4.1.84

Mann, F. C. (1953). *A study of work satisfactions as a function of the discrepancy between inferred aspirations and achievement*. Unpublished doctoral dissertation.

Marion-Landais, C. A. (1993). *A cross-cultural study of leader-member exchange qualiy and job satisfaction as correlates of intra-dyadic work-value congruence*. Unpublished master's thesis. University of South Florida. Tampa, United States.

Martin, J. K., & Shehan, C. L. (1989). Education and job satisfaction: The influences of gender, wage-earning status, and job values. *Work and Occupations, 16*(2), 184-199. doi: 10.1177/0730888489016002005

Maslow, A. H. (1943). A theory of human motivation. *Psycholigical Review, 50*, 370-396.

Maslow, A. H. (1976). A theory of human motivation. In M. Weir (Ed.), *Job satisfaction: Challenge and response in modern Britain* (pp. 69-75). Glasgow, Scotland: William Collins.

McKnight, P. E., McKnight, K. M., Sidani, S., & Figueredo, A. J. (2007). *Missing data : A gentle introduction*. New York, NY: Guilford Press.

Mitchell, O. S., Levine, P. B., & Pozzebon, S. (1990). Aging, job satisfaction, and job performance. *CAHRS Working Paper 90-02.* from http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1366&context=cahrswp

Montero, R., & Rau, T. (2015). Part-time work, job satisfaction and well-being: Evidence from a developing OECD country. *Journal of Development Studies*, *51*(4), 370-385. doi: 10.1080/00220388.2014.963567

Montero, R., & Vásquez, D. (2015). Job satisfaction and reference wages: Evidence for a developing country. *Journal of Happiness Studies*, *16*(6), 1493-1507.

Moore, C. G., Carter, R. E., Nietert, P. J., & Stewart, P. W. (2011). Recommendations for planning pilot studies in clinical and translational research. *Clinical And Translational Science, 4*(5), 332-337. doi: 10.1111/j.1752-8062.2011.00347.x

Mossin, A. C. (1949). *Selling performance and contentment in relation to school background*. New York, NY: Columbia University.

Mottaz, C. (1984). Education and work satisfaction. *Human Relations*, *37*(11), 985-1004. doi: 10.1177/001872678403701107

Moyle, P. (1995). The role of negative affectivity in the stress process: Tests of alternative models. *Journal of Organizational Behavior*, *16*(6), 647-668.

Mueller, C. W., & McCloskey, J. C. (1990). Nurses' job satisfaction: A proposed measure. *Nursing Research*, *39*(2), 113-117. doi: 10.1097/00006199-199003000-00014

Neilson, W. R. (1951). *A study of the "painfully employed"*. Unpublished study. University of Pittsburgh, Pittsburg, United States.

Ng, S. H. (1993). A job satisfaction scale for nurses. *New Zealand Journal of Psychology, 22*(1), 46-53.

Nguyen, D. M. (2008). Farmers' satisfaction with aquaculture — A logistic model in Vietnam. *Ecological Economics, 68*, 525-531. doi: 10.1016/j.ecolecon.2008.05.009

Norris, M., & Lecavalier, L. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of Autism and Developmental Disorders, 40*(1), 8-20. doi: 10.1007/s10803-009-0816-2

Nunally, J. C. (1978). *Psychometric theory* (2nd. ed.). New York, NY: McGraw-Hill.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*(4), 775-802.

Oxner, T., & Oxner, K. (2006). Boom time for internal audit professionals. *Internal Auditor, 63*(3), 50-57.

Pallant, J. (2011). *SPSS survival manual : A step by step guide to data analysis using SPSS* (4th ed.). Sydney, Australia: Allen & Unwin.

Pallant, J. (2013). *SPSS survival manual : A step by step guide to data analysis using IBM SPSS* (5th ed.). New South Wales, Australia: Allen & Unwin.

Patten, D. M. (2005). An analysis of the impact of locus-of-control on internal auditor job performance and satisfaction. *Managerial Auditing Journal, 20*(9), 1016-1029.

Peat, J. K., Mellis, C., Williams, K., & Xuan, W. (2002). *Health science research : A handbook of quantitative methods*. Thousand Oaks, CA: SAGE.

Pham, H. N., Protsiv, M., Larsson, M., Ho, H. T., de Vries, D. H., & Thorson, A. (2012). Stigma, an important source of dissatisfaction of health workers in HIV response in Vietnam: A qualitative study. *BMC Health Services Research, 12*, 474-474. doi: 10.1186/1472-6963-12-474

Polit, D. F., & Beck, C. T. (2014). *Essentials of nursing research : Appraising evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Rentsch, J. R., & Steel, R. P. (1992). Construct and concurrent validation of the Andrews and Withey job satisfaction questionnaire. *Educational and Psychological Measurement, 52*(2), 357-367. doi: 10.1177/0013164492052002011

Roberts, K. H., & Glick, W. (1981). The job characteristics approach to task design: A critical review. *Journal of Applied Psychology, 66*(2), 193-217.

Roethlisberger, F. J. (1941). *Management and morale*. Cambridge, MA: Harvard University Press.

Ross, C. E., & Reskin, B. F. (1992). Education, control at work, and job satisfaction. *Social Science Research, 21*(2), 134-148. doi: 10.1016/0049-089X(92)90012-6

Roznowski, M., & Hulin, C. (1992). The scientific merit of valid measures of general constructs with special reference to job satisfaction and job withdrawal. In C. J. Cranny, P. C. Smith, & E. F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York, NY: Macmillan.

Rubin, D. B. (1996). Multiple imputation after 18+ years. *Journal of the American Statistical Association, 91*, 473-489.

Sabharwal, M., & Corley, E. A. (2009). Faculty job satisfaction across gender and discipline. *Social Science Journal, 46*(3), 539-556. doi: 10.1016/j.soscij.2009.04.015

Saiti, A., & Papadopoulos, Y. (2015). School teachers' job satisfaction and personal characteristics: A quantitative research study in Greece. *International Journal of Educational Management, 29*(1), 73-97.

Salehi, M., Gahderi, A., & Rostami, V. (2012). A study of job satisfaction between external and internal auditors: An iranian scenario. *Research Journal of Applied Sciences, Engineering and Technology, 4*(10), 1300-1309.

Schaubroeck, J., Ganster, D. C., & Fox, M. L. (1992). Dispositional affect and work-related stress. *Journal of Applied Psychology, 77*(3), 322-335.

Schneider, B., & Dachler, H. P. (1978). A note on the stability of the Job Descriptive Index. *Journal of Applied Psychology, 63*, 650-653.

Scott, W. D., & Hayes, M. H. S. (1921). *Science and common sense in working with men*. New York, NY: Ronald Press.

Shahzad, S., & Begum, N. (2011). Urdu translation and psychometric properties of Job Satisfaction Survey (JSS) in Pakistan. *International Journal of Education and Psychological Assessment, 9*(1), 57-74.

Sims Jr., H. P., Szilagyi, A. D., & Keller, R. T. (1976). The measurement of job characteristics. *Academy of Management Journal, 19*(2), 195-212. doi: 10.2307/255772

Singhapakdi, A., Sirgy, M. J., Lee, D. J., Senasu, K., Yu, G. B., & Nisius, A. M. (2014). Gender disparity in job satisfaction of Western versus Asian managers. *Journal of Business Research, 67*(6), 1257-1266. doi: 10.1016/j.jbusres.2013.04.004

Smith, P. C., & Kendall, L. M. (1963). Retranslation of expectations: An approach to the construction of unambiguous anchors for rating scales. *Journal of Applied Psychology, 47*(2), 149-155. doi: 10.1037/h0047060

Smith, P. C., Kendall, L. M., & Hulin, C. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Chicago, IL: Rand McNally.

Snead, K., & Harrell, A. (1991). The impact of psychological factors on the job satisfaction of senior auditors. *Behavioral Research in Accounting, 3*, 85-96.

Sousa-Poza, A., & Sousa-Poza, A. A. (2000). Taking another look at the gender/job-satisfaction paradox. *Kyklos, 53*(2), 135-152.

Sousa-Poza, A., & Sousa-Poza, A. A. (2003). Gender differences in job satisfaction in Great Britain, 1991-2000: permanent or transitory? *Applied Economics Letters, 10*(11), 691-694.

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology, 13*, 693-713.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, cause and consequences*. London, England: SAGE.

Spector, P. E. (2011). Job Satisfaction Survey, JSS Translations. from http://shell.cas.usf.edu/~pspector/scales/jsstranslate.html

Spector, P. E., & Wimalasiri, J. (1986). A cross-cultural comparison of job satisfaction dimensions in the United States and Singapore. *International Review of Applied Psychology, 35*(2), 147-158.

Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly, 31*(1), 56-77.

Staw, B. M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology, 70*(3), 469-480.

Tabachnick, B. G., & Fidel, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson Education.

Taber, T. D., & Taylor, E. (1990). A review and evaluation of the psychometric properties of the Job Diagnostic Survey. *Personnel Psychology, 43*(3), 467-500.

Tewari, R. (2009). Job satisfaction level of scientists in government-owned research and development organizations in India. *The Icfaian Journal of Management Research, 8*(4), 21-45.

Thompson, B. (2004). *Exploratory and confirmatory factor analysis : Understanding concepts and applications*. Washington, DC: American Psychological Association.

Tietjen, M. A., & Myers, R. M. (1998). Motivation and job satisfaction. *Management Decision, 36*(4), 226-231. doi: 10.1108/00251749810211027

Top, M., Akdere, M., & Tarcan, M. (2015). Examining transformational leadership, job satisfaction, organizational trust in Turkish hospitals: Public servants versus private sector employees. *International Journal of Human Resource Management, 26*(9), 1259-1282.

Top, M., Tarcan, M., Tekingunduz, S., & Hikmet, M. (2013). An analysis of relationship among transformational leadership, job satisfaction, organizational commitment and organizational trust in two Turkish hospitals. *International Journal of Health Planning and Management, 28*, 217-241.

Traynor, M., & Wade, B. (1993). The development of a measure of job satisfaction for use in monitoring the morale of community nurses in four trusts. *Journal of Advanced Nursing, 18*(1), 127-136. doi: 10.1046/j.1365-2648.1993.18010127.x

United Nations (UN). (2012). Country classification. from http://www.un.org/en/development/desa/policy/wesp/wesp_current/2012country_class.pdf

van Saane, N., Sluiter, J. K., Verbeek, J. H. A. M., & Frings-Dresen, M. H. W. (2003). Reliability and validity of instruments measuring job satisfaction: A systematic review. *Occupational Medicine, 53*(3), 191-200.

van Teijlingen, E. R., & Hundley, V. (2001). *The importance of pilot studies*. from http://sru.soc.surrey.ac.uk/SRU35.html

Vroom, V. H. (1982). *Work and motivation*. Malabar, Fla.: R.E. Krieger Pub. Co.

Warner, R. M. (2007). *Applied statistics: From bivariate through multivariate techniques* (1st ed.). London, England: SAGE.

Zhai, Q., Willis, M., O'Shea, B., Zhai, Y., & Yang, Y. (2013). Big five personality traits, job satisfaction and subjective wellbeing in china. *International Journal of Psychology, 48*(6), 1099-1108.

APPENDIX A – JOB SATISFACTION SURVEY

(ORIGINAL VERSION)

	JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida 						
	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1	I feel I am being paid a fair amount for the work I do.	1	2	3	4	5	6
2	There is really too little chance for promotion on my job.	1	2	3	4	5	6
3	My supervisor is quite competent in doing his/her job.	1	2	3	4	5	6
4	I am not satisfied with the benefits I receive.	1	2	3	4	5	6
5	When I do a good job, I receive the recognition for it that I should receive.	1	2	3	4	5	6
6	Many of our rules and procedures make doing a good job difficult.	1	2	3	4	5	6
7	I like the people I work with.	1	2	3	4	5	6
8	I sometimes feel my job is meaningless.	1	2	3	4	5	6
9	Communications seem good within this organization.	1	2	3	4	5	6
10	Raises are too few and far between.	1	2	3	4	5	6
11	Those who do well on the job stand a fair chance of being promoted.	1	2	3	4	5	6
12	My supervisor is unfair to me.	1	2	3	4	5	6
13	The benefits we receive are as good as most other organizations offer.	1	2	3	4	5	6
14	I do not feel that the work I do is appreciated.	1	2	3	4	5	6
15	My efforts to do a good job are seldom blocked by red tape.	1	2	3	4	5	6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1	2	3	4	5	6
17	I like doing the things I do at work.	1	2	3	4	5	6
18	The goals of this organization are not clear to me.	1	2	3	4	5	6

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT. 	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places.	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5	6
22	The benefit package we have is equitable.	1	2	3	4	5	6
23	There are few rewards for those who work here.	1	2	3	4	5	6
24	I have too much to do at work.	1	2	3	4	5	6
25	I enjoy my coworkers.	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organization.	1	2	3	4	5	6
27	I feel a sense of pride in doing my job.	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases.	1	2	3	4	5	6
29	There are benefits we do not have which we should have.	1	2	3	4	5	6
30	I like my supervisor.	1	2	3	4	5	6
31	I have too much paperwork.	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be.	1	2	3	4	5	6
33	I am satisfied with my chances for promotion.	1	2	3	4	5	6
34	There is too much bickering and fighting at work.	1	2	3	4	5	6
35	My job is enjoyable.	1	2	3	4	5	6
36	Work assignments are not fully explained.	1	2	3	4	5	6

APPENDIX B – JOB SATISFACTION SURVEY

(VIETNAMESE VERSION)

	Bảng khảo sát **mức độ hài lòng với công việc** Bản quyền Paul E. Spector 1994, Mọi quyền được bảo lưu.						
	HÃY CHỌN **MỘT (01)** PHƯƠNG ÁN TRẢ LỜI SÁT NHẤT VỚI QUAN ĐIỂM CỦA BẠN CHO TỪNG KHẲNG ĐỊNH DƯỚI ĐÂY	Rất không đồng ý	Tương đối không đồng ý	Hơi không đồng ý	Hơi đồng ý	Tương đối đồng ý	Rất đồng ý
1	Tôi cảm thấy tôi được trả công xứng đáng cho việc tôi làm	1	2	3	4	5	6
2	Các đợt tăng lương là quá ít và thưa thớt	1	2	3	4	5	6
3	Tôi cảm thấy mình không được trân trọng bởi tổ chức khi tôi nghĩ đến những gì họ trả cho tôi	1	2	3	4	5	6
4	Tôi cảm thấy hài lòng với những cơ hội tăng lương	1	2	3	4	5	6
5	Có thật sự quá ít cơ hội để thăng tiến trong công việc của tôi	1	2	3	4	5	6
6	Ai làm việc tốt thì đều có cơ hội được thăng tiến một cách công bằng	1	2	3	4	5	6
7	Mọi người thăng tiến ở đây nhanh như ở các nơi khác	1	2	3	4	5	6
8	Tôi hài lòng với những cơ hội thăng tiến của tôi	1	2	3	4	5	6
9	Cấp trên trực tiếp của tôi có đủ trình độ để thực hiện công việc của anh/cô ấy	1	2	3	4	5	6
10	Cấp trên trực tiếp của tôi không công bằng với tôi	1	2	3	4	5	6
11	Cấp trên trực tiếp của tôi thể hiện quá ít sự quan tâm tới cảm xúc của cấp dưới	1	2	3	4	5	6
12	Tôi thích cấp trên trực tiếp của tôi	1	2	3	4	5	6
13	Tôi không hài lòng với các lợi ích tôi nhận được	1	2	3	4	5	6
14	Các lợi ích chúng tôi nhận được tốt tương đương với những gì mà phần lớn các doanh nghiệp khác đề nghị	1	2	3	4	5	6
15	Gói lợi ích mà chúng tôi nhận được là công bằng	1	2	3	4	5	6
16	Có những lợi ích chúng tôi không có trong khi lẽ ra chúng tôi nên có	1	2	3	4	5	6
17	Khi tôi hoàn thành tốt công việc, tôi nhận được sự ghi nhận mà tôi đáng được nhận	1	2	3	4	5	6
18	Tôi không cảm thấy công việc tôi làm được trân trọng	1	2	3	4	5	6

	Bảng khảo sát **mức độ hài lòng với công việc** Bản quyền Paul E. Spector 1994, Mọi quyền được bảo lưu.						
	HÃY CHỌN **MỘT (01)** PHƯƠNG ÁN TRẢ LỜI SÁT NHẤT VỚI QUAN ĐIỂM CỦA BẠN CHO TỪNG KHẲNG ĐỊNH DƯỚI ĐÂY	Rất không đồng ý	Tương đối không đồng ý	Hơi không đồng ý	Hơi đồng ý	Tương đối đồng ý	Rất đồng ý
19	Có ít phần thưởng cho những người làm việc ở đây	1	2	3	4	5	6
20	Tôi không cảm thấy những nỗ lực của tôi được trả công theo cách mà chúng đáng được nhận	1	2	3	4	5	6
21	Nhiều quy định và quy trình trong công ty làm cho việc thực hiện tốt nhiệm vụ trở nên khó khăn	1	2	3	4	5	6
22	Những nỗ lực của tôi nhằm thực hiện tốt nhiệm vụ của tôi hiếm khi bị cản trở bởi thói quan liêu	1	2	3	4	5	6
23	Tôi có quá nhiều thứ để làm ở cơ quan	1	2	3	4	5	6
24	Tôi có quá nhiều công việc giấy tờ	1	2	3	4	5	6
25	Tôi thích những người tôi làm việc cùng	1	2	3	4	5	6
26	Tôi nhận ra mình cần phải làm việc cật lực hơn trong công việc bởi vì sự kém cỏi của những người tôi làm cùng	1	2	3	4	5	6
27	Tôi thích làm việc cùng các đồng nghiệp của tôi	1	2	3	4	5	6
28	Có quá nhiều tranh cãi vặt và đấu đá ở cơ quan	1	2	3	4	5	6
29	Tôi đôi khi cảm thấy công việc của mình là vô nghĩa	1	2	3	4	5	6
30	Tôi thích làm những việc của mình ở cơ quan	1	2	3	4	5	6
31	Tôi có cảm giác tự hào khi thực hiện công việc của mình	1	2	3	4	5	6
32	Công việc của tôi thú vị	1	2	3	4	5	6
33	Thông tin liên lạc trong công ty có vẻ tốt	1	2	3	4	5	6
34	Các mục tiêu của tổ chức này không rõ ràng đối với tôi	1	2	3	4	5	6
35	Tôi thường cảm thấy tôi không biết chuyện gì đang xảy ra với tổ chức này	1	2	3	4	5	6
36	Các phân công công việc không được giải thích đầy đủ	1	2	3	4	5	6

APPENDIX C – LOW RISK NOTIFICATION

FILE

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

7 August 2015

Minh Quang Pham
[redacted]
PALMERSTON NORTH 4410

Dear Minh

Re: Job Satisfaction and Its Relationship with Age, Gender and Educational Background in a Vietnamese Context

Thank you for your Low Risk Notification which was received on 31 July 2015.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

You are reminded that staff researchers and supervisors are fully responsible for ensuring that the information in the low risk notification has met the requirements and guidelines for submission of a low risk notification.

The low risk notification for this project is valid for a maximum of three years.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

> *"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.*
>
> *If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), telephone 06 356 9099, extn 86015, e-mail humanethics@massey.ac.nz".*

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Brian T Finch (Dr)
Chair, Human Ethics Chairs' Committee and
Director (Research Ethics)

cc Assoc Prof Paul Toulson
School of Management
PN214

Mrs Beth Tootell
School of Management
PN214

Prof Sarah Leberman, HoS
School of Management
PN214

Massey University Human Ethics Committee
Accredited by the Health Research Council

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11222, Palmerston North 4442, New Zealand **T** 06 3505573; 06 3505575 **F** 06 350 5622
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz **www.massey.ac.nz**

APPENDIX D – ONLINE SURVEY FOR PILOT STUDY

Chào mừng bạn tham gia vào nghiên cứu về Sự Hài lòng với Công việc!

Chúng tôi xin đảm bảo các thông tin cá nhân của bạn đều được bảo mật.

Xin chân thành cảm ơn!

Đây là một nghiên cứu được tài trợ bởi Trường Quản trị - Đại học Massey, New Zealand và chương trình học bổng Học giả ASEAN của New Zealand.

Để biết thêm thông tin chi tiết về nghiên cứu này, xin vui lòng truy cập vào link sau: https://drive.google.com/open?id=0B_39MAI0A2wpd2JmZE5ab3dpczg

Tiếp tục

PHẦN 1:
BẢNG KHẢO SÁT MỨC ĐỘ HÀI LÒNG VỚI CÔNG VIỆC

Vui lòng chọn ***một (01)*** phương án trả lời sát nhất với quan điểm của bạn cho từng vấn đề được nêu ra

1 - Rất không đồng ý
2 - Tương đối không đồng ý
3 - Hơi không đồng ý
4 - Hơi đồng ý
5 - Tương đối đồng ý
6 - Rất đồng ý

Khi bạn trả lời xong 1 câu hỏi, câu hỏi kế tiếp sẽ tự động hiện lên.
Bạn có thể thay đổi đáp án của mình nếu muốn.
Bạn có thể dùng con lăn của chuột để điều hướng bảng hỏi này.

Tôi cảm thấy tôi được trả công xứng đáng cho việc tôi làm

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các đợt tăng lương là quá ít và thưa thớt

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi cảm thấy mình không được trân trọng bởi tổ chức khi tôi nghĩ đến những gì họ trả cho tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi cảm thấy hài lòng với những cơ hội tăng lương

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có thật sự quá ít cơ hội để thăng tiến trong công việc của tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Ai làm việc tốt thì có cơ hội được thăng tiến một cách công bằng

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Mọi người thăng tiến ở đây nhanh như ở các nơi khác

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi hài lòng với cơ hội thăng tiến của tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên của tôi có đủ trình độ để thực hiện công việc của anh/cô ấy

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên của tôi không công bằng với tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên của tôi thể hiện quá ít sự quan tâm tới cảm xúc của cấp dưới

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích cấp trên của tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không hài lòng với các lợi ích tôi nhận được

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các lợi ích chúng tôi nhận được tốt tương đương với những gì mà phần lớn các doanh nghiệp khác đề nghị

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Gói lợi ích mà chúng tôi nhận được là công bằng

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có những lợi ích chúng tôi không có trong khi lẽ ra chúng tôi nên có

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Khi tôi hoàn thành tốt công việc, tôi nhận được sự ghi nhận mà tôi đáng được nhận

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không cảm thấy công việc tôi làm được trân trọng

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có ít phần thưởng cho những người làm việc ở đây

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không cảm thấy những nỗ lực của tôi được trả công theo cách mà chúng đáng được nhận

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Nhiều quy định và quy trình trong công ty làm cho việc thực hiện tốt nhiệm vụ trở nên khó khăn

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Những nỗ lực của tôi nhằm thực hiện tốt nhiệm vụ hiếm khi bị cản trở bởi thói quan liêu

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có quá nhiều thứ để làm ở cơ quan

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có quá nhiều công việc giấy tờ

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích những người tôi làm việc cùng

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi nhận ra mình cần phải làm việc cật lực hơn trong công việc bởi vì sự kém cỏi của những người tôi làm cùng

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích các đồng nghiệp của tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có quá nhiều tranh cãi vặt và đấu đá ở cơ quan

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi đôi khi cảm thấy công việc của mình là vô nghĩa

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích làm những thứ tôi làm ở cơ quan

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có cảm giác tự hào khi thực hiện công việc của mình

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Công việc của tôi thú vị

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Thông tin liên lạc trong công ty có vẻ tốt

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các mục tiêu của tổ chức này không rõ ràng đối với tôi

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thường cảm thấy tôi không biết chuyện gì đang xảy ra với tổ chức này

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các phân công công việc không được giải thích đầy đủ

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

PHẦN 2: XIN VUI LÒNG CUNG CẤP THÊM CHO CHÚNG TÔI THÔNG TIN VỀ BẠN

Tất cả các thông tin cá nhân của người tham gia khảo sát đều được bảo mật tuyệt đối.

37 Họ và tên:

38 Tuổi của bạn:

39 Giới tính của bạn:

Nữ

Nam

40 Bằng cấp cao nhất của bạn là:

Hãy chọn một trong các phương án dưới đây

- Bằng trung cấp trở xuống
- Bằng Đại học
- Bằng Đại học và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Bằng Thạc sỹ
- Bằng Thạc sỹ và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Bằng Tiến sỹ
- Bằng Tiến sỹ và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Chỉ có chứng chỉ hành nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)

41 Công việc của bạn:

Hãy chọn một phương án trả lời dưới đây.
Nếu bạn chọn phương án (C), vui lòng cho chúng tôi biết công việc của bạn.

- ○ Tôi đang là Kiểm toán viên
- ○ Tôi đã từng là Kiểm toán viên
- ○ Khác

42 Bạn đang làm việc tại:

- ○ Hà Nội
- ○ Vinh/Nghệ An
- ○ Thành phố Hồ Chí Minh
- ○ Khác

43 Địa chỉ email của bạn là:

44 Bạn mất bao nhiêu phút để hoàn thành bảng hỏi này?

45 Bạn có thấy đoạn hay câu nào khó hiểu hoặc không rõ ràng không?

Nếu có, hãy chỉ ra giúp chúng tôi ở khoảng trống dưới đây

○ Có ○ Không

Hoàn thành và gửi

Never submit passwords! - Report abuse

APPENDIX E – PILOT STUDY'S ANALYSES

Data analysis and results

A total of 72 responses are collected. However, after going through a data screening, four of them are dropped due to their large amount of missing data. Then, variables are entered into SPSS in the 'New order' (Table 6, p. 33) with a short code name for each sub-scale and a suffix from 1 to 4. For example, the first to four items (sub-scale for 'Pay') are coded as PAY1, PAY2R, PAY3R and PAY4, and so on for the rest. Among these 36 items, there are 19 items with negative wording (Table 6, p. 33), which are followed by the letter 'R' in their codenames. These variables are coded in SPSS with short abbreviations for the subscale with a suffix 'R' as in the cases of the second and third variables of the 'Pay' subscale (PAY2R and PAY3R). Subsequently, new 'non-reverse' scores for reverse items are calculated for analysis by SPSS as per Spector's (1997) instruction. New 'non-reverse' scores are calculated by subtracting respondent scores from the sum of the lowest and highest possible responses (in this case 1+6 = 7). For example, PAY2 = 7 – PAY2R.

Sub-sum scores for subscales are also calculated and coded as PAY, PRO, SUV, FB, CRE, OPC, COW, NAT, and COM. A sub-sum for each subscale is the sum of the scores of positively-worded items and reverse scores of negatively-worded items that belong to the facet. For example, the sub-sum score for the sub-category 'Pay' is calculated as follows: PAY = PAY1 + PAY2 + PAY3 + PAY4, where PAY1 and PAY4 are straight scores, and PAY2 and PAY3 are reverse scores. Finally, the total satisfaction score equals the sum of all sub-sums of subscales, TOTSAT = PAY + PRO + SUV + FB + CRE + OPC + COW + NAT + COM.

Participants

The ages of the pilot study's participants range from 23 to 66 years old, and the mean age is M = 31.97 with a standard deviation of SD = 7.76. The majority of the respondents are from the 20 to 39 years age range, which makes up to 88.2% of the sample size (Table E.1). The mean age for women is M = 30.19 (SD = 6.06), while men are three years older on average with M = 33.51 (SD = 8.82).

Table E.1

Distribution of Participants by Age (Pilot Study)

Age range	**Frequency**	**%**	**Cumulative %**
20-29 years old	24	35.3	35.3
30-39 years old	36	52.9	88.2
40-49 years old	5	7.4	95.6
50 years old and above	3	4.4	100.0
Total	68	100.0	

Only one participant does not answer the question regarding educational background. All the other 67 participants of the pilot study have at least a Bachelor's degree. A considerable number of participants have either Bachelor's or Master's degrees, which respectively account for 29.4% (n = 20) and 47.1% (n = 32) of the sample size. There are not many people who possess professional certification and tertiary qualifications or higher education qualifications at the same time. Likewise, only three respondents hold a PhD degree.

Many people opt to ignore the question on their current job. Among the 49 people who give answers to this question, there is only one individual who had previously been an auditor. The rest of the answers come from the 'Other' variant where a great variety is observed in respondents' current occupations, such as engineers, lecturers, administrative officers, and accountants.

Sixty-five answers for the question on the working city of respondents are recorded. More than half of the respondents (n = 40, 63.5%) work in the capital of Vietnam – Hanoi, located in the north of Vietnam; the rest are from Ho Chi Minh City (n = 10, 15.9%) – the second biggest city of Vietnam that lies in the south of Vietnam, and other cities of Vietnam (n = 13, 20.6%).

Descriptive statistics

The total satisfaction score can take any value in the range from 36 to 216 (Spector, 1985). For the whole sample size, total satisfaction has a mean score of M = 130.78 and a standard deviation of SD = 28.87 (Table E.2). The reported 5% Trimmed Mean is 130.31, which is just slightly different from the actual mean score. This indicates that the extreme values do not really affect the distribution of the dataset, and there is no need for further

investigation into the extreme cases (Pallant, 2011). When separated by gender, the mean of the overall score of women is M = 129.04 (SD = 31.54), and for men M = 133.41 (SD = 27.22). Again, there are no large differences between 5% Trimmed Mean values and the actual means for both females ($M_{trimmed}$ = 129.26) and males ($M_{trimmed}$ = 131.95).

Table E.2

Descriptive Statistics for Overall Job Satisfaction (Pilot Study)

Overall job satisfaction score	**Statistic**	**Std. Error**
Mean	130.78	3.76
5% Trimmed Mean	130.31	
Median	125.00	
Std. Deviation	28.87	
Minimum	69.00	
Maximum	203.00	

Normality assessment

The normality of the distribution of the overall satisfaction score is tested with the Kolmogorov-Smirnov and Shapiro-Wilk tests. Both tests return statistically non-significant (p > .05) results, with p = .17 for the Kolmogorov-Smirnov test and p = .27 for the Shapiro-Wilk test. These insignificant results guarantee a normal distribution for the overall satisfaction scores. This normality is also supported by the total satisfaction histogram in Figure E.1 and the normal Q-Q plot (Figure E.2). In Figure E.1, the histogram has a reasonably nice bell-shaped form and, as shown in Figure E.2, the dots fluctuate very closely to the straight line. Both of these results signal support for the normality of the data for the pilot study (Pallant, 2013).

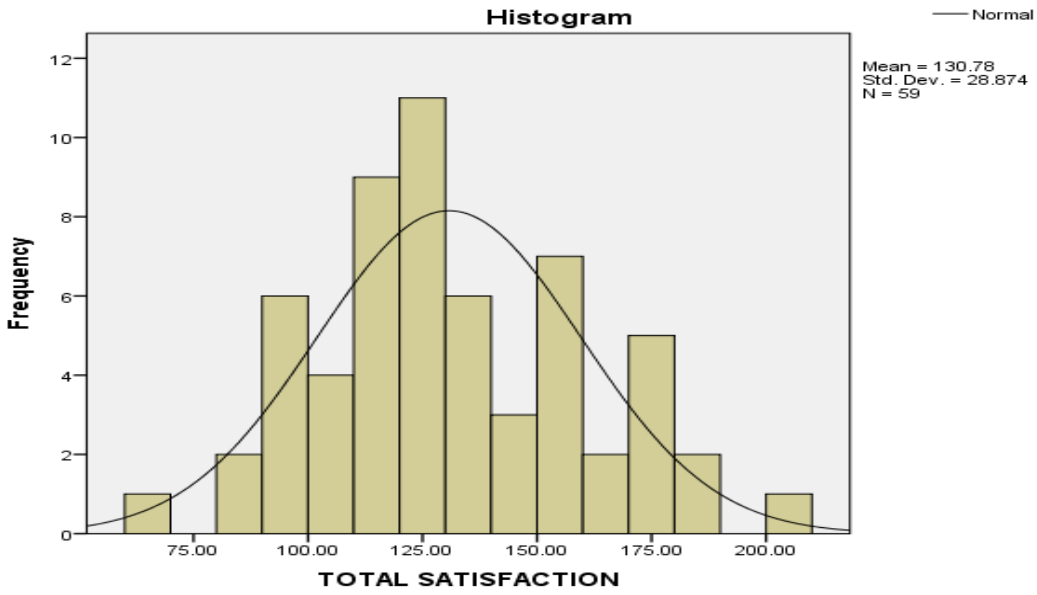

Figure E.1. Total satisfaction score frequency histogram (Pilot study)

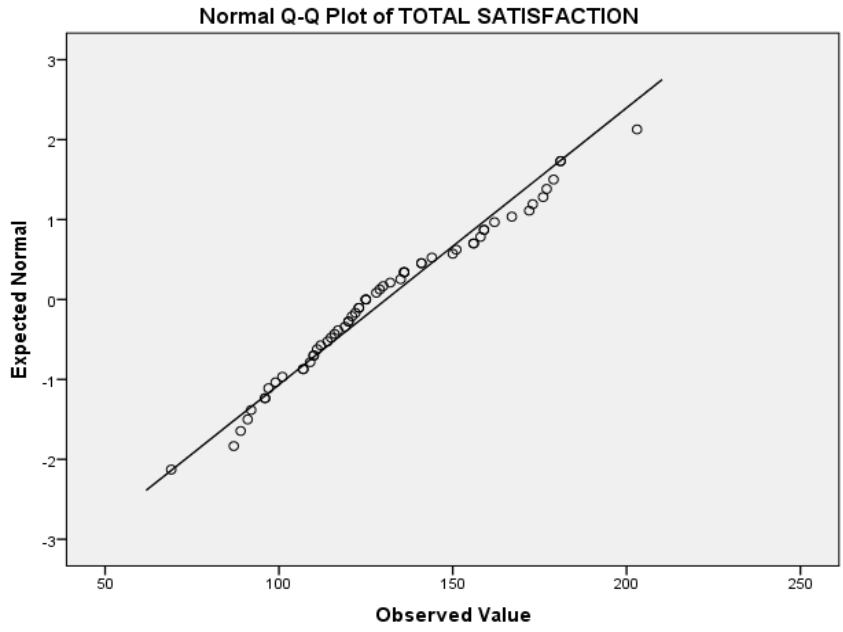

Figure E.2. Q-Q plot of overall satisfaction score (Pilot study).

Missing data analysis

The percentages of missing data per variables, cases, and values are 25%, 13.24%, and 0.45%, respectively (Figure E.3). It is clear that missing data accounts for a very small part of the whole dataset as only 0.45% of the scale's component scores are missing. In order to make sure that the missing data could be ignored, Little's MCAR test is chosen to identify the mechanism of the missing data. The null hypothesis for the Little's MCAR is that the

data are missing completely at random (MCAR) (IBM, 2010). The test returns a significance value of p = .06 (p > .05), which provides weak evidence to reject the null hypothesis. Therefore, this result suggests that the given set of data is missing completely at random. According to McKnight et al. (2007), the missing data are ignorable when it is missing completely at random (MCAR), which means that the missing data's effect on the whole dataset is insignificant. Due to the insignificant amount of data that are missing and that the data are missing completely at random, no imputation technique is used for the pilot study.

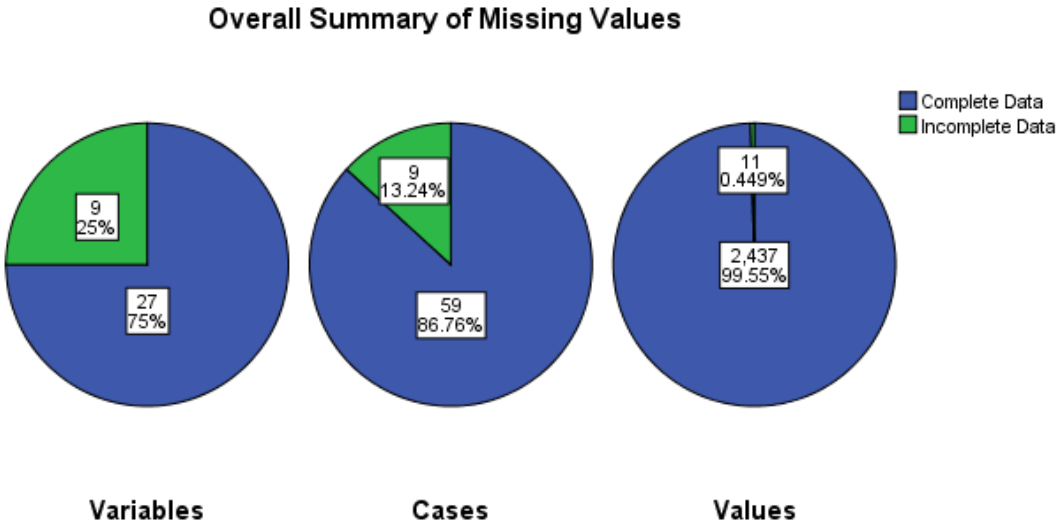

Figure E.3. Overall summary of missing data.

Reliability analysis

In the pilot study, the Vietnamese version of JSS demonstrates a very high internal consistency. Cronbach's alpha coefficient for the whole scale is α = .93. In addition, the Guttman Split-Half coefficient also yields a high level of reliability at .86 (Table E.3). The internal consistency coefficients of the subscales are also examined in Table E.4.

Table E.3

Reliability Statistics (Pilot Study)

Cronbach's Alpha	Part 1	Value	.92
		N of Items	18[a]
	Part 2	Value	.83
		N of Items	18[b]
	Total N of Items		36
Correlation Between Forms			.78
Spearman-Brown Coefficient	Equal Length		.87
	Unequal Length		.87
Guttman Split-Half Coefficient			.86

Note:

a. The items are: COM1, COM2, COM3, COM4, PAY1, PAY4, PRO2, PRO3, PRO4, SUV1, SUV4, FB2, FB3, CRE1, OPC2, COW1, COW3, NAT2.

b. The items are: NAT3, NAT4, PAY2, PAY3, PRO1, SUV2, SUV3, FB1, FB4, CRE2, CRE3, CRE4, OPC1, OPC3, OPC4, COW2, COW4, NAT1.

Table E.4

Cronbach's Alpha Coefficients (Pilot Study)

Subscales	**Cronbach's Alpha**
PAY Subscale 'Pay'	.69
PRO Subscale 'Promotion'	.70
SUV Subscale 'Supervision'	.83
FB Subscale 'Fringe Benefit'	.84
CRE Subscale 'Contingent Rewards'	.73
OPC Subscale 'Operating Conditions'	.16
COW Subscale 'Co-workers'	.70
NAT Subscale 'Nature of work'	.75
COM Subscale 'Communication'	.76
TOTSAT TOTAL SATISFACTION	.93

As shown in Table E.4, alpha values of most of the subscales are very close to or higher than .70, with the only exception being the case of the subscale 'Operating Conditions' (α = .16). A value of .16 is very low and suggests a potential problem with this subscale. This subscale consists of four items with three of them negatively-worded questions. There is a possibility that the respondent has misread the only positively-worded question and answered it with the same logic as the rest of the three items. Cronbach's alpha coefficient is recalculated specifically for this subscale with original scores of all four items where scores of negatively-worded items are not reversed. The recalculated alpha is .52, which is much higher than the previous value. In order to prevent the same thing happening in the main study, a small modification is made to the positively worded item of the subscale 'Operating Conditions'. The word 'seldom' in item 22 as 'My efforts to do a good job are seldom blocked by red tape' will be made bold in the final version of the Vietnamese JSS in the main study.

Time spent for survey completion

It is reported by the survey platform that people spent an average of eight minutes to complete the questionnaires. The pilot study gathers 72 responses in total, of which 44 are completed on computers and laptops (53%), and 27 responses are done on smartphones (45%). Only one respondent completes the survey on a tablet (2%). A summary is shown in Figure E.4.

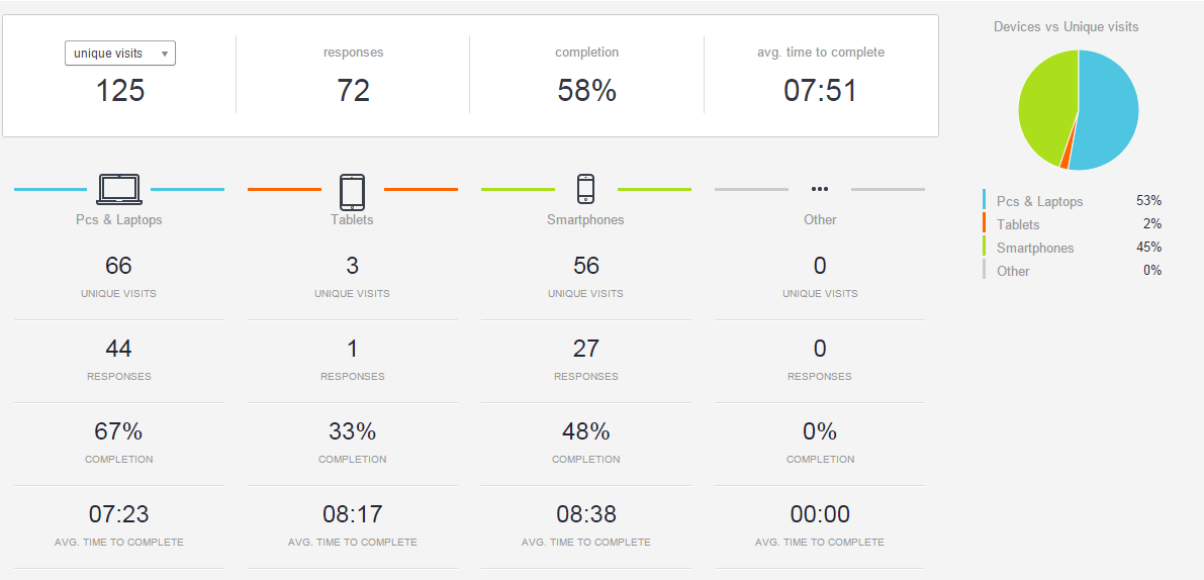

Figure E.4. Summary of platforms used for survey completion (Pilot study).

The well-balanced completion counts of the survey from both computers and laptops and handheld devices, including tablets and smartphones, is a good sign that people can access the survey and answer the questions with great convenience. This fact proves that the chosen platform is capable of providing a user-friendly interface with a wide range of access. Furthermore, an average of eight minutes to complete the whole survey also appears to be a good indicator because the less time it takes to complete, the less chance people will have of exiting in the middle of the survey (Bryman & Bell, 2011). In addition, the pilot study also asks respondents how long it took them to complete the questionnaires. This question yields a mean score of $M = 10.5$ ($SD = 5.29$), which is different from the actual result recorded by the survey's website. Incorrect estimation of the completion time of respondents might be the reason for the difference. However, with the given results, it can be safely assumed that the majority of participants would complete the survey within 20 minutes.

APPENDIX F – ONLINE SURVEY FOR MAIN STUDY

Chào mừng bạn tham gia vào nghiên cứu về Sự Hài lòng với Công việc!
Chúng tôi xin đảm bảo các thông tin cá nhân của bạn đều được bảo mật.
Xin chân thành cảm ơn!

Đây là một nghiên cứu được tài trợ bởi Trường Quản trị - Đại học Massey, New Zealand và chương trình học bổng Học giả ASEAN của New Zealand.

Để biết thêm thông tin chi tiết về nghiên cứu này, xin vui lòng truy cập vào link sau: https://drive.google.com/open?id=0B_39MAI0A2wpd2JmZE5ab3dpczg

Tiếp tục

PHẦN 1:
BẢNG KHẢO SÁT MỨC ĐỘ HÀI LÒNG VỚI CÔNG VIỆC

Vui lòng chọn ***một (01)*** phương án trả lời sát nhất với quan điểm của bạn cho từng vấn đề được nêu ra:

1 - Rất không đồng ý
2 - Tương đối không đồng ý
3 - Hơi không đồng ý
4 - Hơi đồng ý
5 - Tương đối đồng ý
6 - Rất đồng ý

Xin vui lòng đọc kỹ câu hỏi

Khi bạn trả lời xong 1 câu hỏi, câu hỏi kế tiếp sẽ tự động hiện lên.
Bạn có thể thay đổi đáp án của mình nếu muốn.
Bạn có thể dùng con lăn của chuột để điều hướng bảng hỏi này.

Tôi cảm thấy tôi được trả công xứng đáng cho việc tôi làm *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các đợt tăng lương là quá ít và thưa thớt *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi cảm thấy mình không được trân trọng bởi tổ chức khi tôi nghĩ đến những gì họ trả cho tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi cảm thấy hài lòng với những cơ hội tăng lương *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có thật sự quá ít cơ hội để thăng tiến trong công việc của tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Ai làm việc tốt thì đều có cơ hội thăng tiến một cách công bằng *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Mọi người thăng tiến ở đây nhanh như ở các nơi khác *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi hài lòng với những cơ hội thăng tiến của tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên trực tiếp của tôi có đủ trình độ để thực hiện công việc của anh/cô ấy *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên trực tiếp của tôi không công bằng với tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Cấp trên trực tiếp của tôi thể hiện quá ít sự quan tâm tới cảm xúc của cấp dưới *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích cấp trên trực tiếp của tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không hài lòng với các lợi ích tôi nhận được *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các lợi ích chúng tôi nhận được tốt tương đương với những gì mà phần lớn các doanh nghiệp khác đề nghị *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Gói lợi ích mà chúng tôi nhận được là công bằng *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có những lợi ích chúng tôi không có trong khi lẽ ra chúng tôi nên có *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Khi tôi hoàn thành tốt công việc, tôi nhận được sự ghi nhận mà tôi đáng được nhận *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không cảm thấy công việc tôi làm được trân trọng *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có ít phần thưởng cho những người làm việc ở đây *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi không cảm thấy những nỗ lực của tôi được trả công theo cách mà chúng đáng được nhận *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Nhiều quy định và quy trình trong công ty làm cho việc thực hiện tốt nhiệm vụ trở nên khó khăn *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Những nỗ lực nhằm thực hiện tốt nhiệm vụ của tôi ***hiếm khi*** bị cản trở bởi thói quan liêu *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có quá nhiều thứ để làm ở cơ quan *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có quá nhiều công việc giấy tờ *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích những người tôi làm việc cùng *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi nhận ra mình cần phải làm việc cật lực hơn trong công việc bởi vì sự kém cỏi của những người tôi làm cùng *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích làm việc cùng các đồng nghiệp của tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Có quá nhiều tranh cãi vặt và đấu đá ở cơ quan *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi đôi khi cảm thấy công việc của mình là vô nghĩa *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thích làm những việc của mình ở cơ quan *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi có cảm giác tự hào khi thực hiện công việc của mình *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Công việc của tôi thú vị *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Thông tin liên lạc trong công ty có vẻ tốt *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các mục tiêu của tổ chức này không rõ ràng đối với tôi *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Tôi thường cảm thấy tôi không biết chuyện gì đang xảy ra với tổ chức này *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

Các phân công công việc không được giải thích đầy đủ *

1 2 3 4 5 6

Rất không đồng ý Rất đồng ý

PHẦN 2: XIN VUI LÒNG CUNG CẤP THÊM CHO CHÚNG TÔI THÔNG TIN VỀ BẠN

Tất cả các thông tin cá nhân của người tham gia khảo sát đều được bảo mật tuyệt đối.

37 Họ và tên:

38 Tuổi của bạn:

39 Giới tính của bạn:

Nữ

Nam

40 Bằng cấp cao nhất của bạn là:

Hãy chọn một trong các phương án dưới đây

- Bằng trung cấp trở xuống
- Chỉ có chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Bằng Đại học
- Bằng Đại học và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Bằng Thạc sỹ
- Bằng Thạc sỹ và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)
- Bằng Tiến sỹ
- Bằng Tiến sỹ và một hoặc nhiều chứng chỉ nghề (ví dụ: ACCA, CPA, VACPA, CFA hoặc loại khác)

41 Công việc của bạn:

Hãy chọn một phương án trả lời dưới đây.
Nếu bạn chọn phương án (C), vui lòng cho chúng tôi biết công việc của bạn.

- Tôi đang là Kiểm toán viên
- Tôi đã từng là Kiểm toán viên

42 Bạn đang làm việc tại:

- Hà Nội
- Thành phố Hồ Chí Minh
- Khác

43 Địa chỉ email của bạn là:

Xin trân trọng cảm ơn Anh/Chị đã tham gia vào khảo sát của chúng tôi!

Nhóm nghiên cứu.
(Trong trường hợp nhấn nút "Hoàn thành và gửi" không được, có lẽ bạn chưa trả một trong số các câu hỏi từ 1 tới 36. Các câu chưa trả lời sẽ có thông báo hiện lên màu đỏ)

Hoàn thành và gửi

APPENDIX G – INFORMATION SHEET (ENGLISH VERSION)

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

College of Business
School of Management
Private Bag 11 222
Palmerston North
New Zealand
Telephone: +64 6 356 9099
Web: http://management.massey.ac.nz

Job Satisfaction and Its Relationships with Age, Gender and Education Background within a Vietnamese Context

Information sheet

Dear Participant,

You are invited to participate in a research which is sponsored by the School of Management of Massey University and the New Zealand ASEAN Scholar Awards program. This research is conducted by Master student Minh Q. Pham under the supervision of Associate Professor Paul Toulson and Mrs. Beth Tootell at the School of Management, Massey University.

The intent of this research is to enrich the knowledge of job satisfaction of a specified population in Vietnam through investigating following questions:

A. Are Vietnamese white-collar workers within the given context satisfied with their work?
B. Is there any relationship between their job satisfaction and demographic variables including age, gender and educational background?

The questionnaire comprises of 2 parts. Part 1, which consists of 36 short questions arranged into 9 sub-categories, enquires about your opinions on different aspects of your current job. Part 2 asks for some personal information including your name, age, gender, education background and the city where you are working.

This study has been approved by Massey University Human Ethics Committee on the 7th August 2015[1].

Overall, we anticipate that this survey should take you no more than 15-20 minutes to complete and please do not forget to submit it once you are done.

Some important notes:

1. All provided information will be held in strictest confidentiality and will only be seen by the researchers.
2. You have the right to refuse answering any question and to stop participating anytime you want. Submitting the questionnaire implies your consent.
3. In our reports, only summarized information will be used and absolutely no personal information would be provided in any form. The result of this research might be published in academic and professional journals.
4. You are more than welcome to contact the researcher at Q.Pham@massey.ac.nz if you have any inquiry.

Your participation is deeply appreciated. Thank you very much.

Minh Q. Pham
School of Management
Massey University

[1] *"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.*
If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), telephone 06 356 9099, extn 86015, e-mail humanethics@massey.ac.nz ".

APPENDIX H – INFORMATION SHEET (VIETNAMESE VERSION)

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

College of Business
School of Management
Private Bag 11 222
Palmerston North
New Zealand
Telephone: +64 6 356 9099
Web: http://management.massey.ac.nz

Sự Hài Lòng với Công Việc và Mối Liên Hệ với Tuổi, Giới Tính và Học Vấn tại Việt Nam

Giới thiệu

Kính gửi Ông/Bà,

Kính mời Ông/Bà tham gia vào một nghiên cứu được tài trợ bởi Trường Quản trị thuộc Đại học Massey – New Zealand và chương trình học bổng Học giả ASEAN của New Zealand. Nghiên cứu này được thực hiện bởi Phạm Quang Minh, hiện đang theo học chương trình thạc sỹ tại Trường Quản trị, Đại học Massey, dưới sự hướng dẫn của Phó Giáo sư Paul Toulson và cô Beth Tootell.

Nghiên cứu này được thực hiện với mục đích làm giàu thêm vốn kiến thức về sự hài lòng với công việc của một nhóm đối tượng cụ thể tại Việt Nam, thông qua các câu hỏi sau:

A. Các nhân viên văn phòng Việt Nam (trong một bối cảnh cụ thể của nghiên cứu) có hài lòng với công việc của họ không?
B. Có tồn tại mối liên hệ nào giữa sự hài lòng với công việc và các yếu tố nhân khẩu học, bao gồm tuổi, giới tính và học vấn không?

Bảng hỏi này bao gồm 2 phần. Phần 1 có 36 câu hỏi ngắn được sắp xếp theo 9 phạm trù công việc và hỏi về ý kiến trong từng yếu tố của nghề nghiệp hiện tại của Ông/Bà. Phần 2 sẽ thu thập một vài thông tin cá nhân của Ông/Bà như tên, tuổi, giới tính, học vấn và nơi ông bà đang làm việc.

Nghiên cứu này đã được thông qua bởi Hội đồng Đạo đức Đại học Massey ngày 7 tháng 8 năm 2015[1].

Chúng tôi dự kiến Ông/Bà sẽ mất không quá 15-20 phút để hoàn thành Bảng hỏi này và vui lòng nhấn nút "Hoàn thành và Gửi" sau khi Ông/Bà đã làm xong.

Một số lưu ý:

1. Tất cả các thông tin sẽ được lưu trữ ở mức bảo mật cao nhất và sẽ chỉ được truy cập bởi nhóm nghiên cứu.
2. Ông/Bà có quyền từ chối trả lời bất cứ câu hỏi nào và có quyền ngưng tham gia nghiên cứu bất cứ lúc nào. Nhấn nút "Hoàn thành và Gửi" đồng nghĩa với việc Ông/Bà cho phép chúng tôi sử dụng dữ liệu cho nghiên cứu.
3. Trong các báo cáo của chúng tôi, sẽ chỉ có các thông tin tổng hợp được sử dụng và tuyệt đối sẽ không có thông tin cá nhân nào được nêu ra dưới bất cứ hình thức nào. Kết quả của nghiên cứu này có thể sẽ được công bố trên các tạp chí khoa học.
4. Chúng tôi sẵn lòng tiếp nhận bất kỳ thắc mắc hay câu hỏi nào. Vui lòng liên hệ với nghiên cứu viên qua địa chỉ thư điện tử: Q.Pham@massey.ac.nz .

Chúng tôi hết sức trân trọng sự tham gia vào nghiên cứu này của Ông/Bà. Chân thành cảm ơn Ông/Bà.

Phạm Quang Minh
Trường Quản trị
Đại học Massey

[1] *"Dự án nghiên cứu này đã được bình duyệt và đánh giá có mức rủi ro thấp. Do vậy, nghiên cứu này không qua sự kiểm duyệt của các thành viên Hội đồng Đạo đức Đại học Massey. Nhóm nghiên cứu trên đây chịu trách nhiệm về các chuẩn mực đạo đức khi tiến hành nghiên cứu này. Nếu Ông/Bà có bất kỳ nghi ngại nào về các chuẩn mực đạo đức của nghiên cứu này và muốn trao đổi với người ngoài nhóm nghiên cứu, vui lòng liên hệ TS. Brian Finch, Giám đốc (Đạo đức Nghiên cứu) tại số điện thoại 06 356 9099, số máy lẻ 86015, thư điện tử humanethics@massey.ac.nz".*

APPENDIX I – NOTIFICATION EMAIL

Gmail Pham Minh <minhpq.hsb@gmail.com>

Typeform: New response for BẢNG KHẢO SÁT SỰ HÀI LÒNG VỚI CÔNG VIỆC_Pilot Study

notifications@typeform.com <notifications@typeform.com> 12 November 2015 at 19:06
Reply-To: no-reply@typeform.com
To: minhpq.hsb@gmail.com

Your typeform **BẢNG KHẢO SÁT SỰ HÀI LÒNG VỚI CÔNG VIỆC_Pilot Study** has a new response:

- **Tôi cảm thấy tôi được trả công xứng đáng cho việc tôi làm**
  2
- **Các đợt tăng lương là quá ít và thưa thớt**
  6
- **Tôi cảm thấy mình không được trân trọng bởi tổ chức khi tôi nghĩ đến những gì họ trả cho tôi**
  6
- **Tôi cảm thấy hài lòng với những cơ hội tăng lương**
  1
- **Có thật sự quá ít cơ hội để thăng tiến trong công việc của tôi**
  2
- **Ai làm việc tốt thì có cơ hội được thăng tiến một cách công bằng**
  1
- **Mọi người thăng tiến ở đây nhanh như ở các nơi khác**
  1
- **Tôi hài lòng với cơ hội thăng tiến của tôi**
  1
- **Cấp trên của tôi có đủ trình độ để thực hiện công việc của anh/cô ấy**
  1
- **Cấp trên của tôi không công bằng với tôi**
  5
- **Cấp trên của tôi thể hiện quá ít sự quan tâm tới cảm xúc của cấp dưới**
  6
- **Tôi thích cấp trên của tôi**
  1
- **Tôi không hài lòng với các lợi ích tôi nhận được**
  6
- **Các lợi ích chúng tôi nhận được tốt tương đương với những gì mà phần lớn các doanh nghiệp khác đề nghị**
  1
- **Gói lợi ích mà chúng tôi nhận được là công bằng**
  1
- **Có những lợi ích chúng tôi không có trong khi lẽ ra chúng tôi nên có**
  6

- **Khi tôi hoàn thành tốt công việc, tôi nhận được sự ghi nhận mà tôi đáng được nhận**
  3
- **Tôi không cảm thấy công việc tôi làm được trân trọng**
  3
- **Có ít phần thưởng cho những người làm việc ở đây**
  5
- **Tôi không cảm thấy những nỗ lực của tôi được trả công theo cách mà chúng đáng được nhận**
  6
- **Nhiều quy định và quy trình trong công ty làm cho việc thực hiện tốt nhiệm vụ trở nên khó khăn**
  3
- **Những nỗ lực của tôi nhằm thực hiện tốt nhiệm vụ hiếm khi bị cản trở bởi thói quan liêu**
  5
- **Tôi có quá nhiều thứ để làm ở cơ quan**
  6
- **Tôi có quá nhiều công việc giấy tờ**
  5
- **Tôi thích những người tôi làm việc cùng**
  3
- **Tôi nhận ra mình cần phải làm việc cật lực hơn trong công việc bởi vì sự kém cỏi của những người tôi làm cùng**
  6
- **Tôi thích các đồng nghiệp của tôi**
  3
- **Có quá nhiều tranh cãi vặt và đấu đá ở cơ quan**
  6
- **Tôi đôi khi cảm thấy công việc của mình là vô nghĩa**
  1
- **Tôi thích làm những thứ tôi làm ở cơ quan**
  6
- **Tôi có cảm giác tự hào khi thực hiện công việc của mình**
  6
- **Công việc của tôi thú vị**
  6
- **Thông tin liên lạc trong công ty có vẻ tốt**
  3
- **Các mục tiêu của tổ chức này không rõ ràng đối với tôi**
  1
- **Tôi thường cảm thấy tôi không biết chuyện gì đang xảy ra với tổ chức này**
  2
- **Các phân công công việc không được giải thích đầy đủ**
  6
- **Họ và tên:**
  T Tran

- **Tuổi của bạn:**
  31
- **Giới tính của bạn:**
  Nữ
- **Bằng cấp cao nhất của bạn là:**
  Bằng Thạc sỹ
- **Công việc của bạn:**
- **Bạn đang làm việc tại:**
  Hà Nội
- **Địa chỉ email của bạn là:**
  Not answered
- **Bạn mất bao nhiêu phút để hoàn thành bảng hỏi này?**
  5
- **Bạn có thấy đoạn hay câu nào khó hiểu hoặc không rõ ràng không?**
  No

[Quoted text hidden]

APPENDIX J – INVITATION EMAIL

Gmail

Pham Minh [redacted]

Survey on Job Satisfaction among auditors and ex-auditors in Vietnam

Minh Pham Quang [redacted] 31 December 2015 at 03:40

[redacted]

Kính gửi anh Hải,

Em chào anh ạ, như có trao đổi với anh lúc chiều. Em gửi anh thư mời tham gia khảo sát ạ.
Kính mong anh giúp đỡ.
Em cảm ơn anh rất nhiều ạ.

Kính gửi Quý Ông/Bà

Kính mời Quý Ông/Bà tham gia vào nghiên cứu về sự hài lòng với công việc và mối liên hệ với tuổi, giới tính và học vấn ở Việt Nam. Đối tượng hướng tới của nghiên cứu này là cộng đồng kiểm toán viên và cựu kiểm toán viên tại Việt Nam ("cộng đồng").

Đây là một nghiên cứu nghiêm túc với mong muốn khám phá các yếu tố cấu thành sự hài lòng trong công việc của cộng đồng này, cũng như những sự khác biệt giữa các kiểm toán viên hiện tại và các cựu kiểm toán viên, từ đó sẽ xác định được đâu là những khía cạnh công việc chưa thực sự đáp ứng được mong mỏi của các kiểm toán viên và cựu kiểm toán viên. Đây sẽ là cơ sở cho rất nhiều hướng nghiên cứu tương lai nhằm đưa ra các giải pháp cho tuyển dụng và các chính sách nội bộ của các công ty trong lĩnh vực này. Nghiên cứu hy vọng sẽ đóng góp được một phần nhỏ vào việc nâng cao sự thoả mãn với công việc của cộng đồng.

Quý Ông/Bà sẽ chỉ mất khoảng 5-10 phút để hoàn thành bảng khảo sát online của nghiên cứu này và việc này có thể thực hiện được trên điện thoại, máy tính bảng hay máy tính.

Khảo sát có thể được truy cập ở đường dẫn dưới đây:
https://minhpq.typeform.com/to/yOW6oH

Mọi thông tin được cung cấp cho chúng tôi sẽ được bảo mật ở mức cao nhất và chúng tôi xin bảo đảm sẽ không có bất kỳ thông tin cá nhân nào được tiết lộ hay sử dụng dưới bất kỳ hình thức nào. Sẽ chỉ có các thông tin thống kê nhóm được sử dụng trong các báo cáo của chúng tôi.

Kính mong Quý Ông/Bà bớt chút thời gian tham gia vào khảo sát của chúng tôi.
Chúng tôi chân thành xin lỗi nếu email này đã làm phiền Quý Ông/Bà.
Trân trọng cảm ơn Quý Ông/Bà và chúc Quý Ông/Bà một ngày tốt lành.

Trân trọng,
Đại diện nhóm nghiên cứu
Minh Phạm
[redacted]

APPENDIX K – REPORT OF IMPUTED DATASETS

Table J.1

Summary of Imputation for Age

Data	Imputation	N	Mean	Std. Deviation	Minimum	Maximum
Original Data		182	27.7308	4.23600	21.0000	45.0000
Imputed Values	1	20	27.3500	3.66024	22.0000	34.0000
	2	20	29.1000	3.30709	22.0000	34.0000
	3	20	28.4500	4.43046	21.0000	37.0000
	4	20	28.7500	3.72580	21.0000	36.0000
	5	20	28.0500	4.01936	22.0000	36.0000
Complete Data After Imputation	1	202	27.6931	4.17584	21.0000	45.0000
	2	202	27.8663	4.16655	21.0000	45.0000
	3	202	27.8020	4.24972	21.0000	45.0000
	4	202	27.8317	4.19089	21.0000	45.0000
	5	202	27.7624	4.20648	21.0000	45.0000

Table J.2

Summary of Imputation for Sex

Data	Imputation	Category	N	Percent
Original Data		1.00	99	51.0
		2.00	95	49.0
Imputed Values	1	1.00	5	62.5
		2.00	3	37.5
	2	1.00	3	37.5
		2.00	5	62.5
	3	1.00	7	87.5
		2.00	1	12.5
	4	1.00	4	50.0
		2.00	4	50.0
	5	1.00	5	62.5
		2.00	3	37.5
Complete Data After Imputation	1	1.00	104	51.5
		2.00	98	48.5
	2	1.00	102	50.5
		2.00	100	49.5
	3	1.00	106	52.5
		2.00	96	47.5
	4	1.00	103	51.0
		2.00	99	49.0
	5	1.00	104	51.5
		2.00	98	48.5

Table J.3

Summary of Imputation for Sex

Data	Imputation	Category	N	Percent
Original Data		1.00	109	56.8
		2.00	83	43.2
Imputed Values	1	1.00	2	20.0
		2.00	8	80.0
	2	1.00	8	80.0
		2.00	2	20.0
	3	1.00	7	70.0
		2.00	3	30.0
	4	1.00	7	70.0
		2.00	3	30.0
	5	1.00	7	70.0
		2.00	3	30.0
Complete Data After Imputation	1	1.00	111	55.0
		2.00	91	45.0
	2	1.00	117	57.9
		2.00	85	42.1
	3	1.00	116	57.4
		2.00	86	42.6
	4	1.00	116	57.4
		2.00	86	42.6
	5	1.00	116	57.4
		2.00	86	42.6

Table J.4

Summary of Imputation for Education Background

Data	Imputation	Category	N	Percent
Original Data		3.00	112	58.3
		4.00	33	17.2
		5.00	34	17.7
		6.00	11	5.7
		7.00	1	.5
		8.00	1	.5
Imputed Values	1	3.00	1	10.0
		8.00	9	90.0
	2	3.00	1	10.0
		7.00	3	30.0
		8.00	6	60.0
	3	3.00	1	10.0
		4.00	1	10.0
		6.00	1	10.0
		7.00	7	70.0
	4	8.00	10	100.0
	5	3.00	6	60.0
		5.00	2	20.0
		6.00	1	10.0
		7.00	1	10.0
Complete Data After Imputation	1	3.00	113	55.9
		4.00	33	16.3
		5.00	34	16.8
		6.00	11	5.4
		7.00	1	.5
		8.00	10	5.0
	2	3.00	113	55.9
		4.00	33	16.3
		5.00	34	16.8
		6.00	11	5.4

Data	Imputation	Category	N	Percent
		7.00	4	2.0
		8.00	7	3.5
	3	3.00	113	55.9
		4.00	34	16.8
		5.00	34	16.8
		6.00	12	5.9
		7.00	8	4.0
		8.00	1	.5
	4	3.00	112	55.4
		4.00	33	16.3
		5.00	34	16.8
		6.00	11	5.4
		7.00	1	.5
		8.00	11	5.4
	5	3.00	118	58.4
		4.00	33	16.3
		5.00	36	17.8
		6.00	12	5.9
		7.00	2	1.0
		8.00	1	.5