Job Satisfaction: Key Factors Influencing Information Technology (IT) Professionals in Washington DC

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Abstract

A problem most organizations face is how to retain skilled employees. As technology has gone from common to prevalent over the past twenty years, retaining skilled information technology (IT) professionals has become more difficult. Therefore, this study focused on examining job satisfaction of IT professionals in the D.C. area, paying particular attention to two of the most important factors of job satisfaction for IT workers: autonomy and the opportunity for advancement. Association of Information Technology Professionals (AITP) members from the D.C. metro area were surveyed using the Minnesota Satisfaction Questionnaire (MSQ). This paper reviewed existing literature to find what other researchers have done to ensure that IT professionals get job satisfaction. The paper went further to identify the most pertinent job satisfaction factors as follows: personality trait, values: extrinsic and intrinsic, working condition and social influence. This study employed quantitative research methods in order to address the research questions; what are the factors that influence IT professional's perceptions of job satisfaction and can organizations and management influence the issue of job satisfaction among IT professionals. The results of this study indicate that general satisfaction is significantly associated with satisfaction levels regarding autonomy and intrinsic factors.

1. Introduction

It is very clear that the world is flat due to information technology (IT). IT has wired the world and brought about global business [10]. However based on the Information Systems Strategy Triangle, a company has to balance its business, organizational and information systems strategies to be successful [40]. It is, therefore, not surprising that the job satisfaction of the IT professionals is paramount to the success of any business these days. As the environment of IT continues to grow, the more complex it appears to have become and the more dependent the current global community is to the promise of technological solutions to their problems [8]. This study therefore seeks to outline and analyze the ways and techniques that organizations could apply as they employ the core competencies and resources they possess in a strategic manner for the provision of job satisfaction. Using the D.C. metropolitan area for this study, the purpose is to examine how much the previously mentioned factors affect the job satisfaction of IT professionals.

Job satisfaction is important to employees because it can affect their general health, happiness and work/life balance [18]. Job satisfaction is of interest to employers because employees who are dissatisfied with their work have higher rates of absenteeism, are more likely to quit their jobs, arrive late for work, produce less than colleagues who are happier in their jobs and can negatively affect the morale of the organization [27][44][51][47]. A low level of job satisfaction is also reflected in an organization’s bottom line as the costs associated with discontent employees can readily be measured by looking at what an organization spends hiring and training new workers [6], and Reichheld’s [47] work showed that even a one or two percent turnover rate can significantly affect a company’s profitability. Cropanzano, et al. [6] also found that when low levels of job satisfaction led workers to find other employment, their former colleagues’ job satisfaction levels were affected negatively due to the stress of adjusting to new co-workers. Many studies have shown how important job satisfaction is to the success of an [37][44][54][5][46], but this information from Cropanzano, et al.’s study shows how a low level of job satisfaction in some workers within an organization can ultimately affect the job satisfaction of all workers within that organization.

What conditions affect how satisfied workers feel with their jobs? [14] found that some of the conditions for job satisfaction are brought to the workplace by the employees themselves. George and Jones [14] describe four major factors that lead...
a person to be happy in his or her work: personality traits, working conditions, extrinsic and intrinsic values and social influence. Ghazzawi [15] found that more than 12,000 studies had been conducted on the subject of job satisfaction by the early 1990s. Even with all those published studies, research has yet to be done on the job satisfaction of IT professionals in various cities of the United States. This study will concern itself with the job satisfaction rates of information technology (IT) workers in the Washington, D.C. area. This study will focus on two aspects of job satisfaction, one extrinsic and one intrinsic, that have been noted in the research that has been done on the job satisfaction factors of information technology professionals: their need for autonomy and their desire to advance within their organizations.

1.1 Background of the Study

Job satisfaction, as a general concept, depends on the agreement between an individual’s totality of attitudes, interests, behavioural patterns, emotional responses, social roles, and other individual traits that endure over long period of time and that person’s work environment [39]. Herzberg [21] believed workers were more satisfied with their jobs when they experienced certain intrinsic factors including: responsibility granted on the job, actual type of work done, the feeling of achievement from work performed and their potential to advance within the organization. Work, as described by Magnusson [33], has long occupied a central role in human existence, and, although the role remains central, the nature of that role is constantly evolving.

The work an individual performs goes beyond an income, it shows status and pride, and the bottom line is job satisfaction [20]. The other idea is that people who work in information technology fields are quite different from other people in their approach to work; they do work for money, but they often do the same kind of work just for fun [56]. This one characteristic may well make the difference between what factors affect job satisfaction in other workers and what factors may be more important, less important or unique to IT workers.

1.2 Problem and Purpose of Study

A problem most organizations face is how to retain skilled employees. As technology has gone from common to prevalent over the past twenty years, retaining skilled IT professionals has become more difficult. Organizations are paying their knowledge workers higher and higher salaries, increasing bonuses and vacation time to no avail. IT workers continue to job hop, and this is costing companies and other organizations money, time, human capital and productivity [47]. This study is intended to add to what is known about what IT workers need in order to have job satisfaction and to concentrate on the IT professionals in a specific area of the United States: Washington, D.C. The discussion of job satisfaction in the IT environment usually devolves into a familiar refrain of various issues: the type of work being done, working conditions and the environments in which IT workers are most necessary and common. In other words, the discussion of the job satisfaction of IT professionals sounds very much the same as a discussion of what makes any employee more satisfied with his or her job, but it is possible that, due to the narrow range of temperaments and personality traits exhibited by IT professionals, this particular group of workers may have a different and distinctive order in which they rank what factors of job satisfaction are most important to them.

Finding answers to the question of what an organization can do to attract and retain quality IT professionals is terribly important as it is widely believed that, although IT departments in the best case only break even, IT could not only pay for itself but improve the organization’s bottom line. However, in order to achieve its potential, researchers are going to have to find what is most important to knowledge workers, and businesses are going to have to realize that what they do to keep most employees—wage increases, bonuses, time off, flexible scheduling and the offer to telecommute—is not working for their IT professionals [24]. This study will look at two of the factors that IT workers claim [12] add significantly to their job satisfaction: autonomy in their work and the potential for advancement.

The purpose of this study is to quantify the job satisfaction level of IT workers in the Washington, D.C. area, paying particular attention to two of the most important factors of job satisfaction for IT workers: autonomy and the opportunity for advancement. As the environment of IT continues to grow, the more complex it appears to have become and the more dependent the current global community is to the promise of technological solutions to their problems [8]. This study therefore seeks to outline and analyze the ways and techniques that organizations could apply as they employ the core competencies and resources they possess in a strategic manner for the provision of job satisfaction. Using the D.C. metropolitan area for this study, the purpose is to examine how much the previously mentioned factors affect the job satisfaction of IT professionals.
1.3 Rationale
Better defining motivational strategies for job satisfaction will not only promote personnel who do those jobs but will also contribute to the competitive advantage, management and growth of any company. Horwitz, Heng and Quazi [23] found that individualization of employment practices and team-based work may provide personal and organizational flexibilities in addition to the fact that aligning HR and organizational strategies for competitive advantage has become more prominent. This helps management and companies to better align IT and IT workers in a way that enhances a win-win situation for all, thus leading to a better work-life balance and increased productivity, longevity and improved job satisfaction [26][9][19].

1.4 Definition of Terms

IT. Information Technology (IT) is part of an engineering technology involved with the transmission and storage of information, especially the development, installation, implementation, and management of computer systems within companies, universities, and other organizations.

Intrinsic Satisfaction. These are internal basic and essential factors that control behaviour and determined by job responsibilities and task which leads to advancement, recognition, achievement as created by the organization [21].

Job satisfaction. Satisfaction of a worker’s emotional response to different job related factors resulting to finding pleasure, comfort, confidence, rewards, personal growth, various positive opportunities including upward mobility, recognition and appraisal done on a merit pattern with monetary value as compensation [31][31][57].

MSQ. The Minnesota Satisfaction Questionnaire (MSQ) is designed to measure an employee’s satisfaction with his or her job.

Pervasiveness. The quality of being everywhere or widespread and having general applicability.

Ubiquity. The state of seeming to be everywhere at one time.

1.5 Organization of the Study
This research study is organized into five sections, starting with the introduction in section one. Section two reviews job satisfaction in detail as it discusses what the current literature states concerning benefits of job satisfaction among IT professionals and obstacles to job dissatisfaction among the IT professionals. Section three details the research methodology of this study. Section four analyses the data and discusses the results of the research. Section five provides conclusion, summary of the study, as well as provides recommendations for further research.

2. Theoretical Support and Methodology

A satisfied employee is a committed employee, an employee who has the intention to remain with the organization due to the perceived job satisfaction and organizational support [1][59]. Job satisfaction is a concept based on the premise that the happiest worker is also the most productive worker and that to people happy in their work, their job doesn’t feel as if it is work at all [58]. The concept of job satisfaction, viewed through different lenses by various scholars, is defined differently. Greenberg and Baron [17], for instance, viewed job satisfaction as a feeling that can produce a positive or negative effect toward one’s roles and responsibilities at work and added that it is important to understand the concept of job satisfaction as there is no single way to satisfy all workers in the workplace. Robbins and Judge [49] saw it as a positive feeling toward a person’s job.

This concept, according to George and Jones [14], is the combination of feelings and beliefs, which include the mental, emotional, and physical domains. Job satisfaction can also be defined as a worker’s emotional response to different job related factors resulting in finding pleasure, comfort, confidence, rewards, personal growth and various positive opportunities, including upward mobility, recognition and appraisal done on a merit pattern with monetary value as compensation [17][49][14]. Arnett, Laverie and McLane’s [2] definition is summarized by saying that job satisfaction is reflected as an employee’s general affective assessment of himself/herself in the context of his or her job.

2.1 Job Satisfaction in the IT Profession

All of the usual job satisfaction factors apply to IT workers just as they do all workers: compensation, benefits, flexible hours, the option to telecommute, having a good boss and agreeable co-workers, having the opportunity to learn and increase their skills, being recognized for their work and having opportunities to advance within the organization. IT workers, though, tend to focus on different job satisfaction factors than the ones that satisfy other kinds of employees: autonomy in their work and having opportunities to advance within the organization. The ubiquity of IT in recent times warrants the understanding of job satisfaction in the IT profession [15] as it relates to the workers’ level of satisfaction in relation to productivity in the organization. As the business environment continues to evolve at a rapid rate, management of every type of business continues to search for new ideas and possible core competencies and new skills in IT workers. In order for an organization to take full advantage of the skills and knowledge of
their IT workers, it must allocate IT professionals more appropriately [3], which will create a greater sense of accomplishment and job satisfaction for IT workers [58][13].

2.2 Personality Trait

Personality traits are what the employee brings to the job that influence his or her level of job satisfaction and are defined by Pervin and John [42] as the lasting characteristics of a person for a great length of time and across situations. As discussed by Lounsbury, et al. [32], eight traits were analysed in the authors’ effort to ascertain the significance they have in relation to job satisfaction as seen from the lens of the IT professional: assertiveness, emotional resilience, extraversion, openness, teamwork disposition, customer service orientation, optimism, and work drive.

2.3 Extrinsic Versus Intrinsic Effects

Satisfaction is affected by the different values that people possess [15]. Values, standards and expectations are associated with extrinsic and intrinsic effects displayed by an individual as they relate to being satisfied on the job. Extrinsic values of job satisfaction refer to those values that come from outside individual, physical and financial resources and other working conditions that contribute to the environment in which the person works. Intrinsic values are comprised of elements that numerous writers have researched, including the following: job responsibility, feeling of achievement, growth potential, self esteem, challenging work, sense of belonging, and help in reduction of conflict and boundary definition [20][36][50]. These factors, whether extrinsic or intrinsic, are what help to provide a feeling of how satisfied an individual is with his or her job.

2.4 Working Conditions

Emphasis on the quality of the work environment is also important simply because this is a place where workers spend most of their time outside of home. Long hours are often spent in the working environment by IT professionals. The organizations should help employees fight on-the-job-stress which can improve job satisfaction of its workers and thereby reduce turnover. There are still other work situations that are used to determine job satisfaction, and these typically include how a company handles conflict, benefits, fair policies, level of interaction between management and employees, job security, provision and availability of working tools and resources for performing tasks, growth and advancement opportunities in addition to flexibility, vacation, sick leave with pay, paid holidays, volunteer opportunity, comp days, leave of absence, maternity leave, paternity leave, training and development [4][14][28][52]. With all the above mentioned, it is easy to see why one’s work situation is seen as the most important determinant of job satisfaction by many researchers.

2.5 Managing Job Satisfaction Issues and its Effects in the IT Environment

Since IT is relatively new so is its management; there is a huge gap in who should manage IT professionals and how they should be managed [16]. The dynamic nature of this environment is the result of the constant changes in technology and, therefore, warrants good and effective management in order to promote a satisfying working environment [61]. The satisfaction of IT workers aids in the competitive advantage of the IT industry [11][60]. Given the dynamic nature of the technology and the rise of offshore competition, it is more important than ever for IT professionals to pay aggressive attention to their profession and seek the attention of management as well [38].

Although money appeals to all workers, many employees are more interested in how they can achieve a better work/life balance and are looking to their employers to help them by enabling them to work from home or from a remote location or to give them time off after a particularly hard week. Jiang and Klein’s [25] study shows that IT professionals can be hired by an employer simply by being offered monetary rewards; employers cannot keep valued IT workers by paying them more. Knowledge workers’ requirements for job satisfaction and organizational commitment extend far beyond the bounds of their pay checks [25][22].

2.6 Methodology

The purpose of this study was to examine two factors of job satisfaction that research has shown to be two of the most important to IT professionals: autonomy and the opportunity to advance within the organization. IT professionals in the Washington, D.C. area were chosen, in part, because there has not been any research into this topic that focused on this population. Though it is currently difficult to measure and assign a dollar value to intellectual capital, it is not difficult to understand that it is extremely desirable for organizations to keep their skilled information workers, and this study may help them do just that.

2.7 Research Questions

This study would provide answers to three research questions. The first research question was: What are the factors that influence IT professional’s perceptions of job satisfaction? The
second research question was: Can organizations and management influence the issue of job satisfaction among IT professionals? The third research question was: What are the expectations of an IT worker in terms of Job satisfaction? These research questions were converted into hypotheses.

2.8 Research Hypotheses

Three hypotheses were developed to help determine the level of job satisfaction.

H1: The level of autonomy experienced by IT professionals affects their level of job satisfaction.

H2: Achievement-motivated IT professionals prefer jobs that offer opportunity for advancement.

H3: Intrinsic motivational factors positively affect job satisfaction among IT workers in the DC metro area.

2.9 Survey Instrument

The research design for this study was based on a quantitative approach to address the effect of job satisfaction among IT professionals. Therefore this study employed quantitative research methods in order to address the research questions. The sample population consisted of all levels of IT professionals – senior, middle and entry-level professionals. The sample selection was performed by AITP (Association of Information Technology Professionals) according to their guidelines; they targeted their members in the D.C. metro area using their member database by sending an email to them with instructions and a link to the survey.

The Minnesota Satisfaction Questionnaire (MSQ1977) long form was the instrument selected for this research; the reason for the use of this instrument was that it has been repeatedly used by many researchers [15][29], proving its validity and reliability through repeated use and analysis of results. This research was designed to systematically measure as it discovers the extent of the dimension of job satisfaction among the IT professionals. Participants were asked to complete the MSQ 1977 long form containing the 100-question satisfaction scale to indicate their satisfaction with research variables along a five-point scale. The instrument was deployed using an online survey. MS Excel was used to array the data and SPSS was used for all analyses. Measures were taken to ensure that there are no duplicate submissions of the instrument.

2.10 Sample Design

The sample population consisted of all levels of IT professionals – senior, middle and entry-level professionals. The sample selection was performed by AITP (Association of Information Technology Professionals) according to their guidelines; they targeted their members in the D.C. metro area using their member database by sending an email to them with instructions and a link to the survey. In addition to AITP the following method was used to administer the survey in order to ensure that all level of IT professionals are captured for this research. Researcher searched the Internet and contacted participants by email, used mailing lists, and searched user groups to solicit for participation. Groups used for this survey included: (a) IT specialist group (b) IT project Management link group (c) Project Management networking group (d) DCWebwomen and (e) D.C. metro IT professionals group. These groups were available online and accessible to the public (Dore, 2004; Tomsho, Tittle, & Johnson, 2003). The sample consisted of participants from (a) IT professionals in the government sector (b) Academic institutions (c) IT professionals in Business for profit and non-profit.

2.11 Validity and Reliability

The MSQ has been solidly validated by extensive use of the instrument by several authors [48][15][29][30][43] since its inception in 1967. The studies by these authors used the MSQ to validate the relationship between job satisfaction and network administrators, attitudes, IT professionals, managerial behaviours, participative management, software developers and workers in high-technology organizations [29]. Based on this, MSQ was an ideal instrument to measure job satisfaction for the purpose of this research as it helps to provide more specific information concerning what an individual finds satisfying while on the job. It is thus supported by the validation studies of the Minnesota Importance Questionnaire based on the theory of work adjustment as described in details in the manual for the Minnesota Satisfaction Questionnaire [15].

3. Data Analysis

3.1 Data Collection

The purpose of this non-experimental and correlational study was to examine two factors of job satisfaction that research has shown to be the two most important factors to IT professionals: autonomy and the opportunity to advance within the organization. Therefore, this study measured a sample of 130 individuals’ job satisfaction via the Minnesota Satisfaction Questionnaire (MSQ) long form 1977, as well as their level of satisfaction in the workplace with regard to autonomy, intrinsic factors, achievement and advancement.
3.2 Analysis and Results

This section of the chapter presents the hypothesis test results based on the inferential statistical tests. Therefore, each research hypothesis is tested in this section through correlational methods (Pearson correlation and linear regression), and the null hypothesis is either rejected or retained. For example, if the results of the statistical tests are significant \( p < 0.05 \), then the null hypothesis is rejected and the research hypothesis is supported by the data. Conversely, if the results of the statistical tests are not significant \( p > 0.05 \) then the null hypothesis is retained and the research hypothesis is not supported by the data.

**Ho1**: The level of autonomy experienced by IT professionals affects their level of job satisfaction.

The first research hypothesis states “The level of autonomy experienced by IT professionals affects their level of job satisfaction.” Therefore the null hypothesis states “The level of autonomy experienced by IT professionals does not affect their level of job satisfaction.” In order to test this hypothesis, autonomy related scales were used as predictors of general satisfaction using multiple linear regression. The autonomy related scales included creativity, independence, moral values and responsibility.

Prior to the presentation and interpretation of the regression results, the statistical assumptions associated with multiple regressions were checked for validation. The assumption of linearity was checked by constructing scatter plots illustrating the pattern of the relationship between each of the four autonomy related predictor variables and general satisfaction.

**Figure 1 Scatter Plot: Creativity & General Satisfaction**

The scatter plot depicting the relationship between creativity and general satisfaction is provided in Figure 1. The scatter plot in Figure 1 indicates that the relationship is linear, given that the line of best fit through the data points is a straight line. Therefore the statistical assumption of linearity has been validated for the relationship between creativity and general satisfaction.

**Figure 2 Scatter Plot: Independence & General Satisfaction**

Figure 2 provides the scatter plot depicting the relationship between independence and general satisfaction. The data points in the scatter plot indicate that although the pattern is not as clear (e.g. the relationship is weaker) as that depicted in Figure 1, the data points form a linear pattern and therefore the statistical assumption of linearity has been validated with regard to the relationship between independence and general satisfaction.

**Figure 3 Scatter Plot: Moral Values & General Satisfaction**

The relationship between moral values and general satisfaction is presented in Figure 3. The scatter plot in Figure 3 indicates that although there is some scatter towards the lower end of the moral
values scale (deviation from a theoretical line of best fit), the line of best fit through the centre of the data points is still a straight line (vs. a curvilinear line). Therefore the statistical assumption of linearity has been validated with regard to the relationship between moral values and general satisfaction.

Figure 4 Scatter Plot: Responsibility & General Satisfaction

Finally, the relationship between responsibility and general satisfaction is depicted in Figure 4. The scatter plot in Figure 4 indicates that the pattern of the data points is linear, given that the line of best fit through the data points is a straight line. Therefore the statistical assumption of linearity has been validated with regard to the relationship between responsibility and general satisfaction.

Since regression analysis is a form of prediction, additional statistical assumptions apply when using regression analysis, which include normally distributed errors and constant error variance (e.g. homoscedasticity). However, according to [41], regression analysis is relatively robust against the violation of normally distributed errors and homoscedasticity. Therefore, only severe violations of normality and homoscedasticity were assumed to compromise the statistical validity of the analyses. The results for research hypothesis one indicate that there is empirical support for the research hypothesis that the level of autonomy experienced by IT professionals affects their level of job satisfaction. Therefore the null hypothesis that the level of autonomy experienced by IT professionals does not affect their level of job satisfaction is rejected.

Ho2: Achievement-motivated IT professionals prefer jobs that offer opportunity for advancement.

The second research hypothesis states “Achievement-motivated IT professionals prefer jobs that offer opportunity for advancement.” Therefore the null hypothesis states “Achievement-motivated IT professionals do not prefer jobs that offer opportunity for advancement.” In order to test this hypothesis Pearson correlation analysis was used.

A scatter plot demonstrating the relationship between Achievement scale scores and Advancement scale scores is presented in Figure 5. The scatter plot in Figure 5 indicates that the line of best fit through the centre of the data points is a straight line, and, therefore, the statistical assumption of linearity has been supported. The correlation results are provided in Table 1.

The results in Table 1 indicate that the relationship between achievement and advancement was positive, substantial and statistically significant ($r = .58$, $p < .01$). Therefore, higher achievement satisfaction scores were significantly associated with higher advancement satisfaction scores.

The results for research hypothesis two indicate that empirical support was provided for the research hypothesis that achievement-motivated IT professionals prefer jobs that offer opportunity for advancement. Therefore, the null hypothesis that achievement-motivated IT professionals do not
prefer jobs that offer opportunity for advancement is rejected.

Ho3: Intrinsic motivational factors positively affect job satisfaction among IT workers in the DC metro area. The third and final research hypothesis states “Intrinsic motivational factors positively affect job satisfaction among IT workers in the DC metro area.” Therefore the null hypothesis states, “Intrinsic motivational factors do not positively affect job satisfaction among IT workers in the DC metro area.” In order to test this hypothesis, Pearson correlation analysis was used.

The Pearson correlation results in Table 2 indicate that the relationship was very strong, positive and statistically significant ($r = .95$, $p < .01$). Therefore higher intrinsic satisfaction was strongly associated with higher satisfaction in general.

The results indicate that empirical support was provided for research hypothesis three, which states that intrinsic motivational factors positively affect job satisfaction among IT workers in the DC metro area. Therefore the null hypothesis stating that intrinsic motivational factors do not positively affect job satisfaction among IT workers in the DC metro area is rejected. Based on the results of this study, all three research hypotheses were supported. However, it is important to note that in some cases, items linking to general satisfaction were also linked to some of the remaining scales, which were correlated with general satisfaction. Therefore, relationships may be inflated, especially for the intrinsic scale scores, given that the items on the intrinsic scale were shared with the General Satisfaction scale.

4. Discussion

The study examines the job satisfaction of IT professionals in the Washington, DC area as there has not been any research into this topic with this population. The location of the study is also important as nowhere else in the country are organizations more dependent upon knowledge workers than in Washington, DC, and nowhere is the job satisfaction level of knowledge workers more important. It is here governmental agencies, non-governmental agencies, not-for-profits and private industry all converge and many have to find ways to work together to achieve their goals, and this ability and ease of cooperation falls largely on IT professionals to develop and maintain integrated systems. Thousands of studies have investigated job satisfaction in general, but the difference in this study is that it takes the factors that affect job satisfaction for all workers and narrow down those factors to the ones studies have shown to be most important to the job satisfaction of IT professionals. The results of the study could provide a baseline for succeeding studies in other American cities and towns, which may, eventually, indicate that the job satisfaction of IT professionals is influenced by the city in which they live, giving insight into less obvious, but important, intrinsic factors perhaps unique to IT workers. More knowledge in this area of job satisfaction may help organizations learn how to keep skilled IT workers from leaving.

Results of the survey were presented in tables and figures. The results of this study indicate that general satisfaction is significantly associated with satisfaction levels regarding autonomy and intrinsic factors. With regard to autonomy, satisfaction relating to responsibility was found to be the most significant predictor of general satisfaction followed by creativity and moral values. Therefore the higher the level of satisfaction with regards to autonomy and intrinsic factors, the higher the job satisfaction in general. Independence was not

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Table 2 Correlation Coefficient: Intrinsic Factors & General Job Satisfaction

found to be a significant predictor of general satisfaction once creativity, moral values and responsibility were taken into account. The results of this study also indicate that achievement satisfaction is substantially and significantly associated with advancement satisfaction in that the higher the achievement satisfaction, the higher the advancement satisfaction.

5. Implications and Limitations

5.1 Implications

A major practical implication delineated from the findings of this study for managers is the issue of consistency when it comes to advancement. As the business environment continues to evolve at a rapid rate, management of every type of business continues to search for new ideas and possible core competencies and new skills in IT workers. In order for an organization to take full advantage of the skills and knowledge of their IT workers, it must allocate IT professionals more appropriately while simultaneously providing opportunities for advancement at the same time [3]. Earned promotions give workers a greater sense of accomplishment and job satisfaction [58][13]. Companies and organizations should revise policies and strategies to enhance the advancement of IT workers and figure out a better way of implementing them.
5.2 Assumptions and Limitations

The first assumption is that most IT professionals are not satisfied in their jobs. The second assumption is that organizations are unaware of the job satisfaction variables that apply to their IT professionals. Another assumption is that there is a lot that can be done to align the IT environment and IT workers to bring job satisfaction. The Minnesota Satisfaction Questionnaire (MSQ) is being used as the survey tool, and it is assumed that responses from the participants will be honest and forthright without fear or favour. The limitations are that perceptions are from IT workers in the D.C. metropolitan area and may not be generalizable to other parts of the country or the world as a whole. Limitations identified with this study include:

Size of the questionnaire: - This study used Minnesota Satisfaction Questionnaire, 1977 long form. As the name implies the long form has 100 questions as opposed to the short form with only 25 questions. The speed survey systems (the site for the online survey) indicated that a total 145 participants abandoned the survey; the major reason for this can be seen in the fact that 100 questions is too many for busy IT professionals. It is easy to see that few individuals have the luxury of completing 100 questions in one sitting, and the system prevents a person from participating more than twice, which then leads to the next issue;
Response Rate: - The response rate and sample size used for this study would have been much better had 145 participants not failed to complete part of the survey. In a similar study carried out by [15], 132 out of 165 actually completed the short form of the MSQ, only 25 questions, yielding a response rate of 80%. While this study used the long form containing 100 questions, 161 responded, and 130 actually completed the survey (response rate of 80.7%).
Time the questionnaire was sent out (Holiday Season): - Another factor that could have contributed to the low response rate, in spite of the 100 questions, was the time period in which the research was conducted—during the month of December, leading up to Christmas, Kwanzaa, Hanukkah and other end-of-the-year events. Holiday time-constraints may have played a part in the response rate and account for some of the unfinished surveys.

6. Conclusion

Based on the results of this study, all three research hypotheses were supported. However, it is important to note that in some cases, items linking to general satisfaction were also linked to some of the remaining scales, which were correlated with general satisfaction. Therefore, relationships may be inflated, especially for the intrinsic scale scores, given that the items on the intrinsic scale were shared with the General Satisfaction scale. This study examined job satisfaction among Information Technology professionals in the Washington, DC, area. The purpose of this study is to quantify the job satisfaction level of IT workers in the Washington, DC, area, paying particular attention to two of the most important factors of job satisfaction for IT workers: autonomy and the opportunity for advancement.

It is, therefore, recommended that future research with a larger sample is necessary in order to measure the application of these findings to the general population of the IT professionals. Consideration should be given to the time of the year the survey is conducted as the month of December is a very busy and stressful month, full of holiday shopping and other events to end the year and usher in a new year. Another recommendation for future research would be to carry out the survey using a shorter questionnaire to avoid high numbers of abandoned surveys. The short version of the MSQ is not necessarily the best course of action, but perhaps the survey delivery platform company could be persuaded to allow participants to return to the study more than once, giving people the opportunity to answer a few questions per trip so that it’s more convenient for them. Future research should compare results of job satisfaction of IT professionals in the government sector with the job satisfaction of those in the private sector. Currently, the researcher is unaware of any other survey of job satisfaction of IT workers having been done on those in the Washington, DC area, thus this study plays a major part in adding knowledge to the IT professionals’ database.

7. References


