

ROLE OF DEMOGRAPHIC VARIABLES IN THE DETERMINATION OF VOLUNTARY TURNOVER INTENTION OF SOFTWARE PROFESSIONALS

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***Abstract:** Employee turnover is a major problem encountered by corporate leaders in any industry as the performance of any business enterprise depends upon its employees. The IT industry in India is one of the fastest growing industries'. In the IT industry the software business has been one of the leading and most innovative segments. Software is the main component of IT in India. Despite remarkable development sustaining the growth of the software sector poses a number of challenges. High rates of voluntary turnover are a major problem in most of the software companies. Several reasons may be attributed to the voluntary choice of exit that the employees make out of the organization. This study aims to explore and understand the role that demographic variables such as age, gender, marital status, educational qualification, years of experience and income levels contribute towards the voluntary turnover intention of software professionals.*

***Key Words:** Employees, Turnover, Demographic Variables, Software Industry.*

INTRODUCTION

The most important asset of an organization are its employees. Every organization faces a major challenge to retain its workforce. For an organization it is of prime importance to create an environment that is conducive to the employees so that they can improve their performance as well as increase organizational efficiency. Thus every organization gives due importance to the aspect of employee turnover and employee retention. Employee turnover may be defined as the change in the workforce during a definite time period. Turnover can be categorized as voluntary turnover and involuntary turnover. When an employee decides to leave an organization on his or her own choice it is called voluntary turnover. (Price and Muller, 1981).

According to Firth, Mellor, Moore and Loquat (2004) the intention to quit is a strong predictor of actual quitting behavior. The notion that turnover intention is the best predictor of actual turnover follows from research on the immediate determinants

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of actual turnover behavior (Ajzen and Fischbein, 1980). Therefore, turnover intentions can be regarded as the last in a sequence of withdrawal cognitions. This implies that turnover intention is an indication that an employee is likely to leave his or her current employer. Several NASSCOM reports and studies have shown that the software industry in India reports the highest number of voluntary exits. Literature gives us enough data that show that employees voluntarily leave an organization for a variety of reasons such as low job satisfaction, limited growth opportunities etc.

The present study aims to determine the role that demographic variables such as age, gender, marital status, educational qualification, income and years of experience contribute towards the voluntary turnover intention of software professionals. Demographic variables are social categories for individuals. Lo (2013) argued that these characteristics are important factors that influence turnover decisions. According to Pfeiffer (1983), the demographic composition of organizations influences many behavioral patterns including communication, promotions and turnover. These demographic patterns include age, tenure, qualifications, marital status and gender. Many studies of voluntary turnover have found that older, more tenured employees are less likely to leave than younger employees (Negadevara *et al.*, 2008). Lee and Rwigema, (2005) argued that this is because older workers would probably find it more difficult to adapt to a new psychological contract as well as a new working environment. Summarizing the above research, age is a significant variable that influences the decision to leave. Given the challenge of an ageing organization, it is important to determine whether age predicts turnover intention. Tenure refers to the length of time or years of service one has been employed in the current organization in a specific job (Carmeli, 2003). Consistent with Babajide's (2010) findings, a meta-analysis by Lo (2013) revealed that tenure has been investigated in ten studies and results suggest that technologically oriented professionals who are younger, single, highly educated and have less organizational tenure appear more willing to leave the organization to pursue external job opportunities.

This is not surprising given that Hulin (2002) also found that in any given cohort of hires, two-thirds to three-quarters of the resignations will occur by the end of the first three years of service. In addition, of these more than half will occur by the end of the first year alone. In this study, qualification refers to the completion of required schooling or the acquisition of a degree or a diploma. Additionally, the words education and qualification are used interchangeably. A recent review (Lo, 2013) of 5 articles on education in relation to turnover found education to be negatively related to job satisfaction and career satisfaction, while previous studies have found it to be positively related to turnover intentions (Igarria, 1998).

INDIAN SOFTWARE INDUSTRY

The Indian software industry has had a remarkable success story. The software industry in India includes businesses for development, maintenance and publication of software. India is considered as a pioneer in software development. Indian software industry

has had phenomenal growth in the last two decades and is expected to sustain this momentum in the foreseeable future. India's pool of young aged manpower is the key behind this success story. It is widely believed that the key to the success of the Indian software exports is the supply of trained, low cost software professionals. Despite remarkable development, sustaining the growth of the software sector poses a number of challenges. Of the many challenges that the software companies come across is high employee turnover. This makes retention and motivation of employee's a major concern of human resources personnel these days.

According to Murphy (2009), the IT industry still faces huge labour shortfalls. The continuing high voluntary turnover rate of information technology (IT) personnel particularly in the software sector is a major managerial problem, which project managers who lose staff in the middle of critical projects have to deal with. (Wade and Hulland, 2004; Bhardwaj, 2000) have argued that IT human capital represents a strategic resource for firms, and has the ability to bestow competitive advantage. Studies done show that the turnover rates for software professionals exceeds that of other professionals, with estimates varying between 25 percent and 35 percent (Jiang and Klein, 2002; Moore and Burke, 2002). In this regard, the turnover and retention of IT professionals persists as an important managerial concern (Luftman and McLean, 2004). IT turnover remains a chronic problem (Adams, Clark, Goldman, and Jester, 2006). The problem worsens as the IT labor market tightens due to continuing decline in the supply of IT graduates, baby boomers retiring from the IT workforce, and the exponential growth of IT applications in organizations (Hecker, 2005).

Voluntary Turnover and Demographic Variables

Literature suggests that several studies have identified the relation between voluntary turnover and demographic variables. Demographic variables are social categories for individuals. Lo (2013) argued that these characteristics are important factors that influence turnover decisions. According to Pfeiffer (1983), the demographic composition of organizations influences many behavioral patterns including communication, promotions and turnover. These demographic patterns include age, tenure, qualifications, marital status and gender. The age of employees has been shown to play an important part in employee commitment (Kotzé and Roodt, 2005).

Among all personal characteristics, employee age is the most consistent in its relationship to turnover (Lee and Rwigema, 2005). Many studies of voluntary turnover have found that older, more tenured employees are less likely to leave than younger employees (Negadevara *et al.*, 2008). Lee and Rwigema, (2005) argued that this is because older workers would probably find it more difficult to adapt to a new psychological contract as well as a new working environment. Summarizing the above research, age is a significant variable that influences the decision to leave. Given the challenge of an ageing organization, it is important to determine whether age predicts

turnover intention. With regard to marital status a study by Doran *et al.* (1991) found that marital status is negatively related to IT turnover intention because married employees are likely to have greater financial burdens and need to consider their spouses employment, compared to their single counterparts.

IT scholars have generally argued that female IT professionals experience greater desire to move because of restricted opportunities in promotions (Baroudi and Igbaria, 1995; Igbaria and Chidambaram, 1997). With regard to the gender perspective female IT professionals are likely to perceive less ease of movement because of the fewer opportunities or resources to develop their skills and careers, as well as the general stereotype of IT as a male dominated profession (Ahuja, 2002). These arguments are consistent with the extent gender research showing that women tend to hit a glass ceiling because of greater structural barriers and fewer work opportunities (Gutek, 1993). It results in less job satisfaction and loyalty to their organizations (Stroh and Reilly, 1997).

Another study by Wardell, Sawyer, Reagor, and Mitory (2005) found that women are nearly three times as likely as men to leave the IT workforce. Their findings showed that although women are able to gain the necessary skills to enter the IT workforce, they are more likely than their male counterparts to leave the IT industry. Thus the demographic characteristics that are chosen for the present study with respect to software professionals are age, gender, marital status, educational qualification, income and tenure in an organization.

Objectives of the Study

1. To explore the reasons for voluntary turnover.
2. To examine the relationship between demographic variables and employee turnover.

RESEARCH METHODOLOGY

Descriptive research design and simple random sampling method were used to obtain data from respondents selected from the various software companies in Bangalore. The primary data were collected through open ended and closed questionnaire survey. Secondary data was collected through books and websites. Multiple regression analysis was employed for the analysis. In analyzing the relationship between the demographic variables and the voluntary exit factors, the following hypotheses were constructed.

Hypothesis 1

Demographic variables have a significant impact on the intention to leave a company.

Hypothesis 2

Demographic variables have a significant impact on the reasons to work in the organization.

Hypothesis 3

Demographic variables have a significant impact on matching expectations to reality.

Hypothesis 4

Demographic variables have a significant impact on matching reasons to join a company with the reasons to quit.

Analysis of Results

Table 4.1
Age

<i>Age</i>	<i>Frequency</i>	<i>Percent</i>
20-30	17	27.0
30-40	18	28.6
40-50	25	39.7
50 and above	3	4.8

Table 4.2
Gender

<i>Gender</i>	<i>Frequency</i>	<i>Percent</i>
Male	35	55.6
Female	28	44.4

Table 4.3
Marital status

<i>Marital status</i>	<i>Frequency</i>	<i>Percent</i>
Married	44	69.8
Unmarried	12	19.0
Divorced/Widow/Separated	7	11.1

Table 4.4:
Education

<i>Education</i>	<i>Frequency</i>	<i>Percent</i>
UG	55	87.3
PG	8	12.7

Table 4.6
Income

<i>Income</i>	<i>Frequency</i>	<i>Percent</i>
5 lacs	25	39.7
6-10 lacs	14	22.2
11-15 lacs	22	34.9
More than 15 lacs	2	3.2

Descriptive Statistics

	Mean	Std. Deviation
	3.2540	.37431
Age	2.22	.906
Gender	1.44	.501
Maritalstatus	1.41	.687
Education	1.13	.336
Income	2.02	.942

Hypothesis 1

Demographic details have significant impact on the Intention to exit

Inference

The results suggest that 38.1% of the variation within the Intention to exit was due to the demographic details and it was highly significant ($p = 0.000$).

This hypothesis is accepted.

Inference

Gender and Marital status had negative impact on intention to exit and was significant ($p = 0.16$ for gender and 0.000 for marital status). Age, education and Income had positive impact; however, only income had significant impact ($p = 0.041$), while other two were insignificant.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df ₁	df ₂	
1	.618a	.381	.327	.30704	.381	7.029	5	57	.000

a : Predictors: (Constant), Income, Age, Gender, Education, Maritalstatus

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.548	.285		12.442	.000
	Age	.025	.051	.060	.487	.628
	Gender	-.212	.085	-.284	-2.485	.016
	Maritalstatus	-.249	.067	-.457	-3.736	.000
	Education	.274	.131	.246	2.091	.041
	Income	.000	.046	-.001	-.008	.993

a. Dependent Variable: Q7Avg

Hypothesis 2

Demographic details have significant impact on the Reasons to work in the organization.

Inference

Demographic details had significant ($p = 0.002$) impact on the reason to work in the organization. The R-squared value of 0.281 implies that the demographic predictor variables explain about 28% of the variance in the Reasons to work in the organization. Hypothesis accepted.

Inference

Except age, all the other factors such as gender, marital status, education and income had a negative impact on Reasons to work in the organization. The impact of Gender and Income were significant ($p = 0.039$ for Gender and 0.000 for Income), while it was insignificant for others.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df ₁	df ₂	
1	.530 ^a	.281	.218	1.829	.281	4.458	5	57	.002

a. Predictors: (Constant), Income, Age, Gender, Education, Marital status

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	6.484	1.699		3.816	.000
	Age	.430	.303	.188	1.419	.161
	Gender	-1.074	.508	-.260	-2.114	.039
	Marital status	-.760	.397	-.252	-1.913	.061
	Education	-.004	.782	-.001	-.005	.996
	Income	-1.047	.271	-.477	-3.860	.000

a. Dependent Variable: Why do you work for this organization?

Hypothesis 3

Demographic details had significant impact on matching expectations to reality.

Inference

Demographic details had significant ($p = 0.013$) impact on Matching expectations to reality with 21.8% of the variance explained by them. Hypothesis is accepted.

Age and Income had negative impact, while others had positive impact. Only Age had significant impact ($p = 0.015$).

Model Summary

Model	R	R Square	Change Statistics						
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df ₁	df ₂	Sig. F Change
1	.467 ^a	.218	.150	.438	.218	3.185	5	57	.013

a. Predictors: (Constant), Income, Age, Gender, Education, Marital status

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	1.485	.407		3.649	.001
	Age	-.183	.072	-.348	-2.520	.015
	Gender	.184	.122	.193	1.508	.137
	Marital status	.007	.095	.011	.078	.938
	Education	.343	.187	.242	1.832	.072
	Income	-.037	.065	-.074	-.571	.570

a. Dependent Variable: Considering the expectations you had when you joined this organization do you think that they have been satisfactory.

Hypothesis 4

Demographic details have significant impact on matching reasons to join with reasons to quit. Hypothesis accepted with $p = 0.025$.

Inference

Gender and Marital status had a significant impact with $p = 0.17$ for Gender and 0.014 for Marital status.

Model	R	R Square	Change Statistics						
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df ₁	df ₂	Sig. F Change
1	.444 ^a	.197	.127	.344	.197	2.805	5	57	.025

a. Predictors: (Constant), Income, Age, Gender, Education, Marital status

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	1.678	.320		5.249	.000
	Age	-.055	.057	-.135	-.961	.341
	Gender	-.236	.096	-.320	-2.466	.017
	Marital status	.190	.075	.355	2.547	.014
	Education	-.110	.147	-.101	-.750	.456
	Income	-.100	.051	-.256	-1.961	.055

a. Dependent Variable: Are the reasons you want to stay in this organization different from the reasons you had for joining this organization.

1. If you could make any changes about your job what would it be? Choose a change according to your preferences.
 - (a) Clarity in work
 - (b) Avoid unnecessary manager influences
 - (c) Giving importance to quality than quantity
 - (d) Make work fun

31. 7% of the respondents expected Clarity in work followed by Giving importance to quality than quantity, Make work fun and Avoid unnecessary manager influences.

	<i>Frequency</i>	<i>Percent</i>
Clarity in work	20	31.7
Giving importance to quality than quantity	16	25.4
Make work fun	15	23.8
Avoid unnecessary manager influences	12	19

What can the employer do to make your job more satisfying? Rate according to your preferences.

- (a) Clear cut policies regarding work
- (b) Ensuring that work does not bring down the motivation level of employees.
- (c) Ensuring that employees are given freedom to bring out their skills and talent in an effective manner.
- (d) Avoid work overload by proper delegation of work.

Clear cut policies regarding work (36.5%) topped the list that would bring job satisfaction followed by ensuring that work does not bring down the motivation level of employees (33.3%) and avoid work overload by proper delegation of work (23.8%). Ensuring that employees are given freedom to bring out their skills and talent in an effective manner (6.3%).

<i>Items</i>	<i>Frequency</i>	<i>Percent</i>
Clear cut policies regarding work	23	36.5
Ensuring that work does not bring down the motivation level of employees.	21	33.3
Avoid work overload by proper delegation of work.	15	23.8
Ensuring that employees are given freedom to bring out their skills and talent in an effective manner.	4	6.3

Findings

1. The results of the study indicate that demographic variables have a significant relation with voluntary turnover intentions of the software professionals.

2. Gender and Marital status had negative impact on intention to exit and was significant.
3. Age, education and income had positive impact; however, only income had significant impact while other two were insignificant.
4. Most of the employees have mentioned that clear cut policies regarding work as well as other aspects would increase their job satisfaction.
5. Employees were also of the opinion that work should never bring down their overall motivation level.
6. Employees had also suggested that there should be proper delegation of work so as to avoid work overload.
7. Some employees had opined that they should be given freedom to bring out their skills and talents in an effective manner.

CONCLUSION

It can be concluded that firms should offer opportunities for staff to improve their skills and at the same time provide incentives to retain their talent pool. HR departments should continuously organize training for their IT staff. Once employees are certified they can be awarded a raise. The same is true for those experienced professionals; HR policies should be such that these employees get incentives so that they are retained. This would reduce costs spent on recruitment and learning time on a new job. Employees should also consider the time value of certifications and invest in updating their skills every now and then. This will make them more marketable. Organizations should provide a suitable environment where the new employees feel they fit, belong, and can plan to be with the firm longer. In addition, the remuneration and soft benefits should be addressed, as these were the main reasons for moving.

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