

# Turnover Intentions: Scale Construction & Validation

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*The literature revealed a stark scarcity of statistically validated scale on turnover intentions. This study constructs and validates a scale on turnover intentions. Based on the analysis of relevant previous studies, 6-item scale of Turnover intentions was developed. Items of the scale were validated in a pilot study (N=156) and subsequently in a final study (N=524) in Business Process Outsourcing (BPO) sector in India which is prone to low retention rates of employees. For checking the discriminant and nomological validity, constructs like sportsmanship, organizational culture and commitment along with demographic profile of employees were also administered. Exploratory factor analysis revealed uni-dimensionality of the scale and exhibited adequate levels of reliability, discriminant and nomological validity. Additionally, TI has been measured according to different socio demographic group of employees in BPO sector.*

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## Introduction

Employee retention has become a big concern in organizations all over the world. The BPO/ITES sector in India is particularly affected by the low retention rates and high staff turnover. In comparison to global turnover rate of 20%, Indian call centers have topped the list with an employee turnover rate of 40 per cent according to a global call centre study. Out of 100 employees who joined a call centre; almost 60 leave the organization before completion of one year of their service (Holman et al., 2007). Attrition rate in BPO sector in the first quarter of the year 2011 was as high as 55 per cent (ASSOCHAM, 2011). Attrition has taken a horrendous toll on firms due to heavy expenditure on recruitment, training, administration and retention. Attrition is a much deliberated issue. But there is no standard reason why people leave an organization.

It is hard to get data on actual turnover. Research has repeatedly shown turnover intentions to be the best antecedent of actual turnover

(Mobley et al., 1979). Bluedorn (1982) recommended use of turnover intention over actual turnover because actual turnover is more complex to predict than intentions due to various other external factors that affect turnover. The literature on turnover models incorporate one or more cognitions constructs such as intention to leave (or intention to quit or propensity to leave) (Mobley, 1977; Mobley et al., 1979; Steers & Mowday, 1981; Bluedorn, 1982). Various studies of employee turnover established that turnover behavior is heralded by one or more of the variables. (Bannister & Griffeth, 1986; Sager et al., 1998).

Studies on turnover have established that there is scarcity of statistically validated scales to characterize turnover cognitions (Sager et al., 1998). Most scales in the literature measure turnover intentions on only a relatively small number of items. Many researchers have used only single item (Guimaraes, 1997). The usage of single-item indicators to quantify turnover cognitions is condemned as construct validity is anonymous (Sager et al., 1998; Lee et al., 2000). Only a few studies could be found where three-items (Lum et al., 1998; Kim & Stoner 2008; Vandenberghe et al., 2002; Mobley et al., 1978; Schaubroeck & Merritt, 1989), four-items (Kelloway et al., 1999; O'Reilly et al., 1991; Spencer et al., 1983; Kim et al., 1996) and six items (Singh et al., 1996) per instrument were used (Appendix A). Only recently some authors have used double digit item scales (Sager et al., 1998; Jacobs & Roodt, 2008). Very few studies are there where validation of the scales has been checked

and moreover in India, almost no study has been found on the validity of the TISCALE. Remarkably, while there are many examples of cross-cultural investigation carried out to test the TISCALE, we have not encountered any research study that examines the applicability of TISCALE to different demographic groups and different strata of BPO sector.

The research effort has two broad objectives:

- To assess the validity and reliability of turnover intentions scale (TISCALE).
- To measure the extent of turnover intentions of employees according to various socio demographic variables

### **Literature Review & Hypotheses**

Employee turnover is the movement of employees across organizations; jobs; labor markets etc. (Abassi & Hollman, 2000). The term turnover is defined by Price (1977) as the ratio of the number of employees who have left during the period to the average number of employees in that organization during the period. Hom and Griffeth (1995) have taken samples from around 800 studies in their meta-analysis and Maertz and Campion (1998) have observed that there have been literally thousands of studies on employee turnover, thus it speaks volumes about the research on this very crucial topic.

Intent to stay/leave denotes to an employee's behavioral intentions, and has

been proved to exert a strong negative impact on actual turnover (Mueller *et al.*, 1992). Intention to leave involves allegiance of an employee, hence has its behavioral implications (Iverson & Roy, 1994). Sager *et al.* (1998:255) referred to turnover cognitions as mental decisions intervening between an individual's attitudes regarding the job and the stay or leave decision. Intention to leave can be considered as the extent of likelihood of an employee forfeiting his association in an organization (Curri van, 1999). Intention to quit is the intensity of an individual's view to stay or to leave (Boshoff *et al.*, 2002); attitudinal/cognitive manifestation (Elangovan, 2001) of the behavioral decision to quit.

Evolving through the literatures and ideas of March and Simon (1958), Mobley (1977) and others, most of the published turnover models incorporate one or more turnover cognitions constructs (Steers & Mowday, 1981). From a theoretical perspective, turnover cognitions represent mental decisions intervening between an individual's attitudes regarding a job and the stay or leave decision. To facilitate understanding, Sager *et al.*, (1998: 255) defined three turnover cognitions as follows:

- Thinking of quitting: An employee considers leaving the organization. An example would be a co-worker's comment: "I thought about quitting this company the other day".
- Intention to search: An employee decides to go about looking for a job outside of the organization. Co-

worker comments: "I intend to look for another job".

- Intention to quit: The employee decides to leave the organization at some unspecified point in the future. A co-worker says: "I intend to leave this company."

### Turnover Intentions (TISCALE)

The scale used for the purpose of measuring the responses of the employees for turnover intentions was the one developed and tested by the researcher by taking cue from various other questionnaires. It is a six items scale. The items of the scale were framed after analyzing various studies (Kelloway *et al.*, 1999; Sager *et al.*, 1998; Vandenberghe *et al.*, 2002; Nissly *et al.*, 2005; O'Reilly *et al.*; Chatman & Caldwell 1991; Jacobs & Roodt, 2008). Sample items are exhibited in Appendix B. The items were scored on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The Cronbach's alpha of this scale was 0.839.

Review of literature reveals that scant efforts have been made to measure reliability and validity of single item scales of turnover intentions. In three-item, 4-item or 6-item scales of turnover intentions, reliability (cronbach alpha) and content validity were found out. There are some studies where construct validity (Khatri *et al.*, 2001), two dimensional structures (intention to quit and intention to search) (Jacobs & Roodt, 2008), three dimensional structure (thinking of quitting, intention to search and intention to quit) (Sager *et al.*, 1998) has been found out.

It is against this context that the following hypotheses have been proposed. A privation of prior research in India on the psychometrics of the TISCALE acted as a drawback while framing the hypotheses.

H<sub>1</sub>: Each of the 6 items of TISCALE is able to discriminate between high scores and low scores.

H<sub>2</sub>: Turnover intentions scale (TISCALE) is uni-dimensional.

H<sub>3</sub>: Turnover intentions scale (TISCALE) is internally consistent.

H<sub>4</sub>: The turnover intentions scale has discriminant validity with respect to related phenomena against which it is tested.

H<sub>5</sub>: The turnover intentions scale has nomological validity with respect to each of the variables in its nomological net against which it was tested.

### Socio-demographic Variable

Age, work experience, educational level and job category (managerial or non-managerial) are some of the demographic variables that have been found to have steady relationship with turnover intentions in literature. Cotton and Tuttle (1986) have found that educational level of employees is positively related to turnover meaning that more educated employees often have more tendencies to leave the organization than the less educated. Relationship between turnover intention and demographic variables such as age and work experience has been found to be negative (Cotton & Tuttle, 1986; Mobley et al., 1979). As far as rela-

tionship between turnover intentions and level of employees in terms of managerial and non managerial is concerned, Price and Mueller (1986) established that managerial employees are less likely to quit than non-managerial.

**More educated employees often have more tendencies to leave the organization than the less educated.**

Studies on the relationship between gender and turnover provide variegated results, Khatri et al. (2001) found that gender was significantly associated with turnover intentions in retail industry, Berg (1991) reported no relationship between gender and turnover, on the other hand Cotton and Tuttle (1986) observed that female employees have more tendency to leave than males. One obvious reason for this finding is the family responsibilities to female employees. Hence above studies give us the direction to develop hypothesis six.

H<sub>6</sub>: The different socio-demographic group will differ with respect to turnover intentions.

### Methodology

For the validation of the instrument, a two phase research design was used. In the first phase, 6-item scale was constructed by taking clue from various other questionnaires. The items of the scale were framed after analyzing various studies. The second phase was related to an exploratory stage where the dis-

crimutory power of items, item to total correlations, uni-dimensionality of the scale were found out which led to an exploratory factor analysis that yielded an interpretable factor structure. In the second step, discriminant validity was checked and for that the variable chosen was 'sportsmanship', an important domain of organizational citizenship behaviors (OCBs). In the third step, nomological validity was tested where the constructs of turnover intentions were examined to conclude whether they relate as expected in the theoretically derived nomological net. In the nomological net, constructs like organizational culture and commitment were measured.

### Sample & Procedures

At the very outset, a list of BPO units was taken from STPI (Software Technology Park of India), Mohali (India). Then BPOs were segregated in three strata, according to no. of employees as given below. Data was collected through multi stage sampling. In the first stage, stratified sampling has been used for selecting BPOs. Out of total 40 BPO units, 15 BPOs have been selected proportionately from the following strata for final study:

1. BPOs having less than 250 employees
2. Between 250-500 employees
3. BPOs having more than 500 employees

In stratum I, we took a mix bag of BPOs catering to a different focus area viz. one BPO unit had publishers, docu-

mentation companies as its clients; another had insurance as its focus area, general business consulting BPO and BPO service provider to telecom companies. Another three BPO units were into medical billing services; IT development and related outsourcing services; and telemarketing. Rest two BPO units have their customer service support centres, virtual back office and had their field sales operation. In stratum II, three BPO units had been taken for the research and all the three had voice based and non-voice based outsourcing services. In stratum III, first BPO was a third party outsourced customer service centre while the second was leader in BPO, call centre to telecom companies and was into manpower outsourcing business.

For the pilot study, one BPO unit each from second and third stratum and two BPO units from the first stratum were selected, to keep the sample representative of the population. Data was collected from 156 employees selected through judgment and convenient sampling of four BPO units.

### Measures

Organizational culture was measured using the 40-items OCTAPACE scale developed and validated in Indian scenario by Pareek (1997). OCTAPACE comprises eight dimensions viz. openness, confrontation, trust, authenticity, pro-action, autonomy, collaboration and experimenting. Responses of these dimensions were measured on a four-point scale (1 = To very low extent to 4 = To very high extent). The Cronbach's alpha of this scale was 0.80.

The scale used for the purpose of measuring the responses of the employees for organizational commitment was developed and revised by Meyer and Allen (1997). The scale had three dimensions named as affective commitment, normative commitment and continuance commitment. The scale had 18 items. And the items were scored on a seven-point Likert scale (1 = Strongly disagree to 7 = Strongly Agree). The reliability of this scale was found to be 0.787

The scale used for the purpose of measuring the responses of the employees for sportsmanship consisted of 5-items from organizational citizenship behaviors scale (24 items) and developed by Podsakoff et al. (1990). The items were scored on a seven-point Likert scale according to the following response categories (1 = strongly disagree to 7 = strongly agree). The reliability of this scale was found to be 0.834.

**Psychometrics of the TISCALE**

Hypothesis 1 relates to discriminating power of all 6 items of TISCALE. Table 1 on validation of turnover intentions scale contains the results obtained on testing the psycho-

**Table 1 Validation of Turnover Intentions Scale in Pilot Study**

Cronbach $\alpha = 0.862$ Items	Discriminating power of the items			Assessment of dimensionality of the item results of exploratory factor analysis			
	Mean for all respon- dents (N=156)	Mean for low quartile (N=23)	Mean for high quartile (N=23)	P value	Assessment of uni-dimens- ionality of the items to total correlation (item to total correlation score)	KMO Bartlett's Test of Sphericity total percent variance explained No of Factors	0.866 0.000 63.546
<b>TI1</b>	3.41	1.65	4.95	0.000	0.723	One	0.826
<b>TI2</b>	3.40	2.00	4.65	0.000	0.644		0.759
<b>TI3</b>	3.24	1.73	4.26	0.000	0.582		0.703
<b>TI4</b>	3.42	1.69	4.60	0.000	0.635		0.757
<b>TI5</b>	3.51	1.34	4.86	0.000	0.745		0.838
<b>TI6</b>	3.12	1.21	4.39	0.000	0.621	Factor Loading	0.739

metric properties of scale of TI in pilot study. Table 1 gives, for each item the mean for low quartile (bottom 25% scorer), mean for high quartile (top 25% scorer), mean for all respondents and significance levels.

The difference in the mean scores obtained by top 25% scorer and bottom 25% scorer were subjected to t-test. All t-values are significant at 0.05 level of significance. Thus, each statement is able to discriminate between high scores and low scores or scale has discriminating power.

Hypothesis 2 relates to the uni-dimensionality of the TISCALE. As evident from Table 1, an item to total correlation was conducted. All correlations are between 0.582 and 0.745 and there is no sudden drop in item to total correlation. Then exploratory factor analysis was conducted. The results of exploratory factor analysis as presented in the last column of Table 1, depicts KMO value = 0.866 (>0.8) is acceptable; Bartlett test of sphericity is significant. The percentage of variance explained, 63.546 %, outstrips the thumb rule of 0.6 (Malhotra, 2007). The factor

**Table 2 Validation of Turnover Intentions Scale in Final Study**

Cronbach $\alpha = 0.839$ Items	Discriminating power of the items				Assessment of dimensionality of the item results of exploratory factor analysis			
	Mean for all respon- dents (N=524)	Mean for low quartile (N=130)	Mean for high quartile (N=130)	P value	Assessment of uni-dimens- ionality of the items to total correlation (item to total correlation score)	KMO	Bartlett's Test of Sphericity total percent variance explained	No of Factors
<b>TI1</b>	3.26	1.8308	4.61	0.000	.627	0.870	0.000	One
<b>TI2</b>	3.18	2.2308	4.43	0.000	.623			
<b>TI3</b>	3.19	2.1385	4.02	0.000	.647			
<b>TI4</b>	3.38	2.0154	4.38	0.000	.630			
<b>TI5</b>	3.47	2.0231	4.60	0.000	.657			
<b>TI6</b>	2.92	1.6846	4.07	0.000	.537			
								Factor Loading
								0.757
								0.748
								0.769
								0.759
								0.782
								0.674

loadings are high and range between 0.703 and 0.838. Thus, we can say that TISCALE is uni-dimensional. As all the results were acceptable, it was decided to use six items scale in the final study questionnaire.

### **Final Study**

A total of six items as used in pilot study (N=154) constitute the turnover intentions scale in the final study (N=524). Table 2 exhibits a summary of the cronbach alpha, t-test, item to total correlation analysis and exploratory factor analysis results of the final study.

As observed, coefficient alpha obtained for the scale was 0.839; t-test was conducted to find the discriminating ability of each item of the scale. Table 2 gives for each item the mean for low quartile, mean for high quartile, mean of all respondents and significance level. All t-values are significant at 0.05 level of significance. Thus, each statement is able to discriminate between high scores and low scores.

An item to total correlation was conducted. All correlations are between 0.537 and 0.657) and there is no sudden drop in item to total correlation. In the exploratory factor analysis KMO value (0.87) is acceptable; Bartlett test of sphericity is significant. The percentage of variance explained is 60.106. The factor loadings are high and range between 0.674 and 0.782. The final items retained for the turnover intentions scale developed and tested formed the basis for testing rest of the hypotheses in the study.

Hypothesis 3 is related to internal consistency of TISCALE. This has been tested with the help of cronbach alpha. According to Churchill (1979), the recommended measure of the internal consistency of a set of items is provided by coefficient alpha. Nunnally (1978) suggests a value of .70 as a lower acceptable bound for alpha. Based on experience, DeVellis (1991) proposes the following alpha ranges for research scales: below .60, unacceptable; between .60 and .65, undesirable; between .65 and .70, minimally acceptable; between .70 and .80, acceptable; between .80 and .90, very good; much above .90, one should consider shortening the scale. Thus, an alpha value of 0.60 and 0.70 or above is considered to be the criterion for demonstrating internal consistency of new scales and established scales respectively. As the value surpassed the minimum requirement, in pilot study (N=154) cronbach alpha is 0.862 and in final study for N=524, its value is 0.839, it is thereby demonstrated that the turnover intentions scale is internally consistent.

Hypothesis 4 is related to the discriminating validity of the TISCALE. Malhotra (2007: 317) defined discriminant validity as, "a type of construct validity that assesses the extent to which a measure doesn't correlate with other constructs from which it is supposed to differ. According to Papadogiannis et al. (2009:49), those that inter-correlate between  $r = .00$  and  $.25$  are considered unrelated to minimally related with one another. Inter-correlations ranging from  $r = .25$  to  $.50$  indicate minimal to moderate overlap, while inter-correlations rang-

ing from  $r = .50$  to  $.75$  are deemed moderate to highly related concepts.

Sportsmanship was identified as a construct that is related yet conceptually distinct from turnover intentions. Organ et al. (2006) define sportsmanship as an employee's "ability to roll with the punches" even if they do not like or agree with the changes that are occurring within the organization. By the very definitions it appears rational to assume that both the constructs are opposite to each other

as sportsmanship is good for the organization while turnover intentions are bad. Therefore we assume that both are separate constructs. For discriminant validity, it is expected that scores on the Turnover intentions instrument should not correlate with sportsmanship (theoretically unrelated construct). As depicted in Table 3, the correlations between sportsmanship and turnover intentions are  $-0.226$  and for which p-value is  $0.277$ , hence not even significant. Hence confirms discriminant validity.

**Table 3 Discriminant and Nomological Validity of the TISCALE using Correlations Inter-correlation among Sportsmanship, Organizational Culture, Commitment and Turnover Intentions**

Variables	Organizational Culture	Organizational Commitment	Turnover Intentions
<b>Sportsmanship</b>			$-0.226$
<b>Organizational Culture</b>	1.000		
<b>Commitment</b>	$.555^{**}$	1.000	
<b>Turnover Intentions</b>	$-.681^{**}$	$-.604^{**}$	1.000

\*\* correlation significant at 0.05 level

Hypothesis 5 is related to nomological validity of TISCALE. Nomological validity is extent to which scale correlates in theoretically predicted ways with other distinct but related constructs (Malhotra & Birks, 2007: 358-59). Scores obtained from TISCALE were correlated with two other scores-organizational culture and commitment. The relationship between organizational culture, commitment and turnover intentions was investigated using Pearson correlation. Preliminary analysis revealed that there were no violations of the assumptions of linearity and homoscedasticity and all associations were found to be significant at 95% level.

The pattern of correlation as depicted in Table 3 was as expected. A significant negative correlation exists between organizational culture and turnover intentions ( $r = -0.681$ ,  $p = 0.00$ ). A significant negative correlation exists between organizational commitment and turnover intentions ( $r = -0.604$ ,  $p = 0.00$ ). Thus turnover intentions score correlated with constructs in its nomological net. Thus corroborates the nomological validity of the scale.

### Socio Demographic Variables

Hypothesis 6 suggests that different socio-demographic group will differ with respect to turnover intentions. The hy-

pothesis has various sub dimensions e.g. related to age, education, marital status, gender, total work experience, work experience in the present organization and level of management. Employees of different age category differ significantly with their perception of turnover intentions ( $H_{6a}$ ). The descriptive statistics and Analy-

sis of Variance (ANOVA) are depicted in Table 4. It is clear that there are statistically significant differences between the mean values of different age group of employees for turnover intentions ( $p < 0.05$ ). It can be concluded that the hypothesis  $H_{6a}$  is supported. Further, Scheffé test is used to compare the variance.

**Table 4 Descriptives and Analysis of Variance (ANOVA) of Age Categories for Turnover Intentions**

Variables	Age	N	Mean	F-test	Sig.
<b>Turnover Intentions</b>	<25 years	179	3.5484	22.753	.000
	25-30 years	243	3.1749		
	30-40 years	102	2.8203		
	Total	524	3.2335		

**Table 5 Multiple Comparisons between Different Age Groups of Employees for Turnover Intentions**

Dependent Variable	(I) level_1	(J) level_1	Mean Difference (I-J)	Std. Error	Sig.
<b>turnoverintentions</b>	<25 years	25-30 years	-.37352*	.08761	.000
		30-40 years	.35464*	.10494	.004
	25-30 years	<25 years	.37352*	.08761	.000
		30-40 years	.72816*	.11035	.000
	30-40 years	<25 years	-.35464*	.10494	.004
		25-30 years	-.72816*	.11035	.000

\*. The mean difference is significant at the 0.05 level.

It is clear that employees in the age category of 30-40 years have less turnover intentions than other age groups employees.

Employees of different educational levels differ significantly with their perception of turnover intentions ( $H_{6b}$ ). From the results of ANOVA (Table 6), it is clear that there is significant difference in the perception of turnover intentions across the employees of different educational level categories ( $p < 0.05$ ).

Further, Scheffé test is used to compare the variance. From the Table 7, it is clear that graduates have more turnover intentions than post graduates.

Employees of different gender categories differ significantly with their perception of turnover intentions ( $H_{6c}$ ). From the independent t-test results (Table 8), it is clear that there are no statistically significant differences between the mean values of two gender groups of employees for turnover intentions ( $p > 0.05$ ).

**Table 6 Descriptives and Analysis of Variance (ANOVA) of Educational Level Categories for Turnover Intentions**

Variables	educational level categories	N	Mean	F-test	Sig.
<b>Turnover Intentions</b>	Graduate	346	3.3015	3.890	.021
	Post Graduate	123	3.0325		
	Others	55	3.2545		
	Total	524	3.2335		

**Table 7 Post Hoc Tests Multiple Comparisons between Different Educational Categories for Turnover Intentions**

Dependent Variable	(I) qualific_1	(J) qualific_1	Mean Difference (I-J)	Std. Error	Sig.
<b>Turnover Intentions</b>	graduate	post graduate	.26902*	.09665	.021
		others	.04700	.13365	.940
	post graduate	graduate	-.26902*	.09665	.021
		others	-.22203	.14934	.332
	others	graduate	-.04700	.13365	.940
		post graduate	.22203	.14934	.332

**Table 8 Descriptives Statistics and T-Test for Equality of Means of Gender Categories for Turnover Intentions**

Variables	Gender	N	Mean	t-test	Sig. (2-tailed)
<b>Turnover Intentions</b>	Female	195	4.5271	-.148	.882
	Male	329	3.2290		

Employees of different marital status category differ significantly with their perception of turnover intentions ( $H_{6d}$ ).

**Table 9 Descriptives Statistics and T-Test for Equality of Means of Marital Status Categories for Turnover Intentions**

Variables	Marital Status	N	Mean	t-test	Sig. (2-tailed)
<b>Turnover Intentions</b>	married	109	2.9648	-3.439	.001
	unmarried	415	3.3040		

From the independent t-test results as depicted in Table 9, it is clear that there are statistically significant differences between the mean values of two marital status groups of employees for turnover intentions ( $p < 0.05$ ). It is clear that unmarried employees have more turnover intentions.

Employees of different work experience in the present organization differ significantly with their perception of turnover intentions ( $H_{6e}$ ). The descriptive statistics and Analysis of Variance (ANOVA) for the number of employees who responded to turnover intentions under the different categories of work

experience in the present organization are depicted in Table 10.

It is clear from Table 10 that there are no significant differences in the turnover intentions across the different work experience in the present organization categories ( $p > 0.05$ ).

Employees of different total work experience differ significantly with their

perception of turnover intentions ( $H_{0t}$ ). The descriptive statistics and Analysis of Variance (ANOVA) for the number of employees who responded to turnover intentions under the different categories of total work experience are depicted in Table 11. It is clear from the results that there is no significant difference in the perception of turnover intentions across the different work experience in the present organization categories ( $p > 0.05$ ).

**Table 10 Descriptives Statistics and Analysis Of Variance (ANOVA) of Work Experience in Present Organization for Turnover Intentions**

Variables	Work experience in Years	N	Mean	F-test	Sig.
<b>Turnover Intentions</b>	0-2 years	278	3.2806	1.176	.318
	2-4 years	144	3.2488		
	4-6 years	54	3.1080		
	Above 6 years	48	3.0556		
	Total	524	3.2335		

**Table 11 Descriptives Statistics and Analysis of Variance (ANOVA) of Total Work Experience Categories for Turnover Intentions**

Variables	Total work exp.	N	Mean	F-test	Sig.
<b>Turnover Intentions</b>	0-5 years	228	3.2617	2.349	.072
	5-10 years	169	3.2653		
	10-15 years	82	3.2805		
	Above 15 years	45	2.8852		
	Total	524	3.2335		

Employees of different levels of management categories differ significantly with their perception of turnover intentions ( $H_{0g}$ ). From Table 12, it is clear

that there is significant difference in the perception of turnover intentions among employees across different level of management ( $p < 0.05$ ).

**Table 12 Descriptives Statistics and Analysis of Variance (ANOVA) of Level of Management Categories for Turnover Intentions**

Variables		N	Mean	F-test	Sig.
<b>Turnover Intentions</b>	Top	71	2.9131	6.549	.002
	Middle	159	3.1813		
	Lower	294	3.3390		
	Total	524	3.2335		

Further, Scheffe (Table 13) is used to compare the variance and it is clear from the results that lower level employees have more turnover intentions than top level employees.

**Table 13 Multiple Comparisons between Different Levels of Management for Turnover Intentions**

Dependent Variable	(I) level_1	(J) level_1	Mean Difference (I-J)	Std. Error	Sig.
<b>Turnover Intentions</b>	Top	Middle	-.26820	.13076	.123
		Lower	-.42586*	.12114	.002
	Middle	Top	.26820	.13076	.123
		Lower	-.15766	.09018	.218
	Lower	Top	.42586*	.12114	.002
		Middle	.15766	.09018	.218

\*. The mean difference is significant at the 0.05 level.

## Discussion

Results revealed adequate psychometric properties of turnover intentions scale. Further turnover intentions of employees differ significantly across different age groups, educational levels, marital status groups and across levels of management. While, no significant difference was found in turnover intentions across employees of different gender groups, different tenures in total and in the present organization. Further, turnover intentions are high among BPO employees who are in less than 25 years of age group; graduates have more turnover intentions than post graduate employees; unmarried employees have more turnover intentions than married employees; lower levels employees have more turnover intentions than top level and middle level employees.

Thus, findings are in line with Arnold and Feldman (1982), Cotton and Tuttle (1986) Mobley et al. (1979) and Price and Mueller (1986), as far as turnover

intentions are concerned across different age group of employees. Management needs to focus more on retaining employees who are less than 25 years of age group, graduates, unmarried, lower level (entry level /call centre executives etc.) as turnover intention is high among these demographic variables.

In designing the study, the researcher attempted to be as scientific as possible; however, the present study nevertheless has the following limitations. First limitation concerns the nature of measures used. The measures included in this research were all based upon the perceptions of the participating employees (self-reports). Therefore, the potential for data inaccuracies due to item misinterpretation or predisposition to certain responses on the part of the participant as well as social desirability effects exist. So this limitation should be considered while interpreting findings. Secondly, convergent validity has not been checked in this study. Therefore future study should include various other scales on turnover

intentions and should try to correlate the scores on both to check the convergent validity. Further confirmatory factor analysis could be used to validate the scale. Similar research should be carried out in variety of organizational and cultural contexts. The scale developed and validated in this study on turnover intentions should be tested further and improved.

## References

- Abassi, S.M. & Hollman K.W. (2000), "Turnover: the Real Bottom Line", *Public Personnel Management*, 2(3): 333-42.
- Arnold, H.J. & Feldman D.C. (1982), "Multivariate Analysis of the Determinants of Job Turnover", *Journal of Applied Psychology*, 67(3): 350-60.
- ASSOCHAM (2011), Talent Crunch, Soaring Attrition Rate Might Push India behind Other BPO Giants: ASSOCHAM Study, April 14, Retrieved from [www.assochem.org/prels/shownews.php?id=2846](http://www.assochem.org/prels/shownews.php?id=2846). (accessed 29th April, 2011)
- Berg, T.R. (1991), "The Importance of Equity Perception and Job Satisfaction in Predicting Employee Intent to Stay at Television Stations", *Group and Organization Studies*, 16(3): 268-84.
- Bluedorn, A.C. (1982), "A Unified Model of Turnover from Organizations", *Human Relations*, 35 (2): 135-53.
- Boshoff, A.B., Wyk R Van, Hoole C. & Owen J.H. (2002), "The Prediction of Intention to Quit by Means of Biographic Variables, Work Commitment, Role Strain and Psychological Climate", *Management Dynamics*, 11 (4): 14-28.
- Churchill Jr., G.A. (1979), "A Paradigm for Developing Better Measure of Marketing Constructs", *Journal of Marketing Research*, 16(1): 64-73.
- Cotton, J.L. & Tuttle J.F. (1986), "Employee Turnover: A Meta-Analysis and Review with Implications for Research", *Academy of Management Review*, 11(1): 55-70.
- Curri van, D.B. (1999), "The Causal Order of Job Satisfaction and Organizational Commitment in Models of Employee Turnover", *Human Resource Management Review*, 9(4): 495-524.
- Elangovan, A.R. (2001), "Causal Ordering of Stress, Satisfaction and Commitment, and Intention to Quit: a Structural Equation Analysis", *Leadership and Organization Development Journal*, 22 (4): 159-65.
- Guimaraes, T. (1997), "Assessing Employee Turnover Intentions before/after TQM", *International Journal of Quality & Reliability Management*, 14(1): 46-63.
- Holman, D., Batt R. & Holtgrewe U. (2007), The Global Call Centre Report: International Perspectives on Management and Employment. Retrieved from [http://www.ilr.cornell.edu/globalcallcenter/upload/GCC-Intl-Rept-US\\_Version.pdf](http://www.ilr.cornell.edu/globalcallcenter/upload/GCC-Intl-Rept-US_Version.pdf) (accessed 31st May, 2013)
- Hom, P. & Griffeth R. (1995), Employee Turnover, Cincinnati, OH: Southwestern Publishing
- Iverson, R.D. & Roy P. (1994), "A Causal Model of Behavioral Commitment: Evidence from a Study of Australian Blue-Collar Employees", *Journal of Management*, 20 (1): 15-41.
- Jacobs, E. & Roodt G. (2008), "Organizational Culture of Hospitals to Predict Turnover Intentions of Professional Nurses", *Health SA Gesondheid*, 13 (1): 63-78.
- Kelloway, E.K., Gottlie B.H. & Barham L. (1999), "The Source, Nature, and Direction of Work and Family Conflict: A Longitudinal Investigation", *Journal of Occupational Health Psychology*, 4(4): 337-46.
- Khatri, N., Fem C.T. & Budhwar P. (2001), "Explaining Employee Turnover in an Asian

- Context”, *Human Resource Management Journal*, 11 (1): 54-74.
- Kim H. & Stoner M. (2008), “Burnout and Turn-over Intention among Social Workers: Effects of Role Stress, Job Autonomy and Social Support”, *Administration in Social Work*, 32 (3): 5-25.
- Kim S.W., Price J.L., Mueller C.W. & Watson T.W. (1996), “The Determinants of Career Intent among Physicians at a U.S. Air Force Hospital”, *Human Relations*, 49 (7): 947-76.
- Lee, K., Carswell J. & Allen N. (2000), “A Meta-Analytic Review of Occupational Commitment: Relations with Person and Work-Related Variables”, *Journal of Applied Psychology*, 85(5): 799–811.
- Lum, L., Kervin J., Clark K., Reid F. & Sirola W. (1998), “Explaining Nursing Turnover Intent: Job Satisfaction, Pay Satisfaction, or Organizational Commitment”, *Journal of Organizational Behavior*, 19(3): 305-20.
- Maertz, C.P. Jr & Campion M.A. (1998), “25 Years of Voluntary Turnover Research: A Review and Critique”, in Cooper, C.L. and Roberstson, I.T. (Eds.), *International Review of Industrial and Organizational Psychology*, NY: Wiley.
- Malhotra, N.K. (2007), *Marketing Research: an Applied Orientation*, Delhi, India: Pearson Prentice Hall.
- Malhotra N.K. & Birks D.F. (2007), *Marketing Research: an Applied Approach*, Harlow, England: Prentice Hall.
- March, J. & Simon H. (1958), *Organizations*, New York: John Wiley.
- Meyer, J.P. & Allen, N.J. (1997), *Commitment in the Workplace: Theory, Research, and Application*, Thousand Oaks, CA: Sage.
- Mobley W.H., Griffeth R.W., Hand H.H. & Meglino R.M. (1979), “Review and conceptual analysis of the employee turnover process”, *Psychological Bulletin*, 86(3): 493-522.
- Mobley W.H., Horner S.O. & Hollingsworth A.T. (1978), “An Evaluation of Precursors of Hospital Employee Turnover”, *Journal of Applied Psychology*, 63(4): 408–14.
- Mobley, W.H. (1977), “Intermediate Linkages in the Relationship between Job Satisfaction and Employee Turnover”, *Journal of Applied Psychology*, 62 (2): 237-40.
- Mueller, C.W., Wallace J.E. & Price J.L. (1992), “Employee Commitment: Resolving Some Issues”, *Work and Occupations*, 19(3): 211-36.
- Nissly, J.A., Barak M.E. & Levin A. (2005), “Stress, Social Support, and Workers’ Intentions to Leave Their Jobs in Public Child Welfare”, *Administration in Social Work*, 29(1): 79-100.
- Nunnally, J.C. (1978), *Psychometric Theory*, NY: McGraw-Hill.
- O’Driscoll, M.P. & Beehr T.A. (1994), “Supervisor Behaviors, Role Stress, and Uncertainty as Predictors of Personal Outcomes for Subordinates”, *Journal of Organizational Behavior*, 15(2): 141-55.
- O’Reilly, C.Á., Chatman J. & Caldwell D.F. (1991), “People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit”, *Academy of Management Journal*, 34(3): 487-516.
- Organ, D.W., Podsakoff P.M. & MacKenzie S.P. (2006), *Organizational Citizenship Behavior: Its Nature, Antecedents, and Consequences*, London: Sage Publications.
- Papadogiannis, P.K., Logan D. & Sitarenios G. (2009), “An Ability Model of Emotional Intelligence: A Rationale, Description, and Application of the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT)”, in Stough C., Saklofske D.H., and Parker J..D.A. (Eds.), *Assessing Emotional Intelligence Theory, Research, and Applications*, NewYork: Springer.
- Pare, G., Tremblay M. & Lalonde P. (2001), *The Role of Organizational Commitment and*

- Citizenship Behaviors in Understanding Relations between Human Resources Practices and Turnover Intentions of IT Personnel, Working paper (2001s-24), CIRANO, Montreal, March.
- Pareek, U. (1997), Training Instruments for Human Resource Development, New Delhi: Tata McGraw-Hill Publishing Company.
- Podsakoff, P.M., S.B. Mackenzie, Moorman R.H. & Fetter R. (1990), "Transformational Leader Behaviors and their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behavior", *Leadership Quarterly*, 1(2): 107-42.
- Price, J.L. (1977), The study of turnover, Ames: Iowa State University Press.
- Price, J.L. & Mueller C.W. (1981), Professional Turnover: The Case of Nurse. NY: Spectrum Publications Inc.
- Price, J.L. & Mueller C.W. (1986), Absenteeism and Turnover of Hospital Employees, Greenwich, CT: JAI Press.
- Sager, J.K., Griffeth R.W. & Hom P.W. (1998), "A Comparison of Structural Models Representing Turnover Cognitions", *Journal of Vocational Behavior*, 53 (2): 254-73.
- Schaubroeck, J. & Merritt, D.E. (1997), "Divergent Effects of Job Control on Coping with Work Stressors: The Key Role of Self-Efficacy", *Academy of Management Journal*, 40 (3): 738-54.
- Singh, J., Verbeke W., & Rhoads G.K. (1996), "Do Organizational Practices Matter in Role Stress Processes? A Study of Direct and Moderating Effects for Marketing-Oriented Boundary Spanners", *Journal of Marketing*, 60(3): 69-86.
- Spencer, D.G., Steers R.M. & Mowday R.T. (1983), "An Empirical Test of the Inclusion of Job Search Linkages into Mobley's Model of the Turnover Decision Process", *Journal of Occupational Psychology*, 56 (2): 137-44.
- Steers, R. & Mowday R. (1981), "Employee Turnover and Post-Decision Accommodation Processes", *Research in Organizational Behavior*, 3: 235-81.
- Vandenberghe, C., Stordeur S. & D'hoore W. (2002), "Transactional and Transformational Leadership in Nursing: Structural Validity and Substantive Relationships", *European Journal of Psychological Assessment*, 18(1): 16-29.

## Appendix A

### List of Turnover Intentions Scales: Researchers and No. of items

S.No.	Researcher(s)	No. of items of Scale
1	Kelloway et al.'s, (1999)	4-item scale
2	Kim and Stoner (2008)	3-item scale
3	Vandenberghe et al.'s (2002)	3-item scale
4	Mobley et al.'s (1978)	3-item scale
5	O'Reilly et al.'s (1991).	4-item scale
6	Singh et al.'s (1996).	6-item scale
7	Lum et al.'s (1998)	3-item scale
8	Spencer et al.'s (1983)	4-item scale
9	Schaubroeck et al.'s (1989)	3-item scale
10	O'Driscoll and Beehr's (1994)	3-item scale
11	Kim et al.'s (1996)	4-item scale
12	Sager et al.'s 1998)	15 item scale
13	Pare et al.'s 2001)	2-item scale
14	Jacobs and Roodt (2008)	14-item scale

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**Appendix B**

**Turnover Intentions Scale (Tiscale) Items and Respective Researchers**

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S.No.	Items	Researchers
1	I intend to ask people about new job opportunities.	<b>Kelloway et al. (1999)</b>
2	My current job is not addressing my important personal needs.	<b>Jacobs and Roodt (2008)</b>
3	Very often are opportunities to achieve my most important goals at work jeopardized.	<b>Jacobs and Roodt (2008)</b>
4	I intend to search for a position with another employer.	<b>Vandenberghe et al. (2002)</b>
5	I occasionally think about leaving this organization.	<b>Nissly et al. (2005)</b>
6	Very often I think about becoming an entrepreneur.	<b>O'Reilly et al. (1991)</b>

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