Analysis of Factors That Affect the Intention to Leave of White-collar Employees in Turkey Using Structural Equation Modelling

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Abstract—Intention to leave refers to conscious and deliberate willfulness to leave the organization. Job satisfaction and organizational commitment are the two most important factors which play an important role in determining employees' intention to leave their job.The aim of this study is to analyze the effects of job satisfaction, organizational commitment's components (affirmative, continuance, normative), perceived organizational support, and job stress on white-collar employees' intention to leave in Turkey. A structural equation-modelling approach was applied to identify the variables that significantly affect the intention to leave. Using LISREL, data collected from 225 employees were used to test the proposed model. Results indicated that seventy two percentage of white-collar employees' intention to leave is explained by job satisfaction, affective commitment, and normative commitment. Among them, job satisfaction has the strongest effect.

Index Terms—intention to leave, affective commitment, continuance commitment, normative commitment, job satisfaction, perceived organizational support, job stress

I. INTRODUCTION

EMPLOYEE turnover has been an important issue in several different areas. High turnover ratio in the organizations causes high cost of recruiting and training new employees, decrease of organizational performance, lack of organizational employee continuity and organizational stability [1], [2]. Therefore, turnover is an undesirable event in the organizations, because "long-term productivity is affected not only by hiring the best qualified personnel, but keeping them in the organization for long periods of time" [3].

The reasons behind the turnover decision have been investigated for years. However, the literature review shows that the main factor that affects employees to quit their current jobs is the intention itself [1], [2], [4], [5], [6]. According to the Theory of Reasoned Action, an individual's behavior is determined by his or her behavioral intention [7]. The more an individual shows intention to perform a particular behavior, the more he or she is expected to act it. [7]. For this reason, we should emphasize on the employees' intention to leave.

Intention to leave refers to "conscious and deliberate willfulness to leave the organization" [8]. Job satisfaction and

organizational commitment are the two most important factors which play an important role in determining employees' intention to leave their job [8]. High levels of job satisfaction and organizational commitment provide unwillingness of quitting work. There are several studies that examine the effect of both factors on intention to leave. Reference [5] modeled job satisfaction and organizational commitment as the antecedents of intention to leave, and also examined the effect of job satisfaction on organizational commitment. Information technology professionals intention to quit their jobs in Turkey was questioned in order to investigate the reasons behind turnover. In the study of reference [9], turnover intention of white-collar and blue-collar employees working in a manufacturing firm was examined exploring the relationships among job satisfaction, organizational commitment's components (affective, continuance, normative) and intention to leave. Job satisfaction and three components of organizational commitment were found to be important in determining an employee's intention to leave. Reference [10] also structured the relationships among job satisfaction, three components of organizational commitment, and intention to leave as the core of the research model, which was conducted with the hospital employees in Iran.

Apart from the core of the model, there are also some other factors which contribute to the determination of turnover intention. Perceived organizational support and job stress have been investigated in many studies. Reference [11], [10] studied the perceived organizational support, whereas job stress was examined in the studies of reference [6], [4], [12] in order to explore its effect on intention to leave and its related factors.

This study aims to analyze the effects of organizational commitment's components (affective, continuance, nomrmative), job satisfaction, perceived organizational support, and job stress on the intention to leave of white-collar employees in Turkey.

II. RESEARCH MODEL AND HYPOTHESES

A. Organizational Commitment

Organizational Commitment (OC) is defined as "the relative strength of an individual's identification with and involvement in a particular organization" [13]. Employees who feel strong commitment to the organizations are less likely to quit their job [14]. On the other hand, there are also less-committed employees in the organization. They perceive their current jobs as a temporary employment, and when they get a better opportunity outside the organization, they may have a favorable intention to quit [11]. However,

one dimensional commitment is found to be insufficient so that three-component model of organizational commitment is proposed to better identify the psychological state that leads empolyees to be committed to the organization [15]. These components are affective commitment (AC) which refers to the emotional attachment of an employee to the organization, continuance commitment (CC) which refers to the perceived costs that will be the consequence of leaving organization, and normative commitment (NC) which refers to an individual's obligation to the organization [15]. Furthermore, the effects of organizational commitment's components on intention to leave are also examined in other studies [9], [16], [10]. Therefore, we hypothesize as follows:

H1: Affective commitment negatively influences intention to leave.

H2: Continuance commitment negatively influences intention to leave.

H3: Normative commitment negatively influences intention to leave.

B. Job Satisfaction

Job satisfaction is defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" [17]. Employees show positive attitude toward their jobs as they experience that their jobs fulfill values which are important to them [17]. Satisfied employees are more likely to perform their jobs better. The more they are satisfied, the more they are committed and unintended to quit [4]. The low level of job satisfaction causes employees to feel a poor sense of belonging to the organization and search for alternative jobs [18]. Therefore, job satisfaction has an important role in maintaining commitment and influencing intention to leave [5]. Furthermore, the effect of job satisfaction on organizational commitment's components and intention to leave is also examined in other studies [9], [16], [19], [10]. Therefore, we hypothesize as follows:

H4: Job satisfaction positively influences affective commitment.

H5: Job satisfaction positively influences continuance commitment.

H6: Job satisfaction positively influences normative commitment.

H7: Job satisfaction negatively influences intention to leave.

C. Perceived Organizational Suppport

Perceived Organizational Support (POS) is defined as employees' "global beliefs about the extent to which the organization cares about their well-being and values their contributions" [20]. The more employees perceives the organizational support, the more they feel that they are respected and esteemed in the organization, and expect that their superior performance will be rewarded [21]. This attitude breeds a strong sense of belonging to the organization and puts aside the feelings of entrapment in the organization [22]. Hence, employees with high POS are more likely to devote themselves to their organizations. They perceive firm's successes and failures as their own [23]. Moreover, their overall satisfaction related with their job increases if the organization meets their socioemotional needs, answers their call for help in an emergency, and rewards their increased performance [22]. Furthermore, the effect of perceived organizational support on organizational commitment's components and job satisfaction is also examined in other studies [24], [25], [19]. Therefore, we hypothesize as follows:

H8: Perceived organizational support positively influences affective commitment.

H9: Perceived organizational support positively influences continuance commitment.

H10: Perceived organizational support positively influences normative commitment.

H11: Perceived organizational support positively influences job satisfaction.

D. Job Stress

Job stress refers to "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" [26]. Employees usually encounter stress in the workplace because of the the excessive demands of organizations for better job outcomes. Some negative effects such as uninterest to the job, a lack of concern for the organization, or a loss of responsibility can occur [27]. The experience of job related stress causes a decrease in the job satisfaction of employees. Therefore, there is a negative relationship between job stress and job satisfaction [4]. Stressful individuals feel dissatisfied with their jobs, and end up quitting from the organization [28]. Furthermore, the effect of job stress on job satisfaction is also examined in other studies [5], [6], [12]. Therefore, we hypothesize as follows:

H12: Job stress negatively influences job satisfaction.

III. METHODOLOGY

A survey methodology was used in this study to gather data. Target population is the white-collar employees who are working in different companies.The questionnaire was formed by two main parts. The first part consisted of demographic questions designed to solicit information about gender, age, working industry, working position, full-time professional experience, full-time working experience in the current firm. The 225 questionnaires were collected from different companies. The 53.33 percentage of respondents were male, and the average age of respondents was 30.22 years. The summary of demographic profiles of respondents is given in Table I.

The second part consisted of the items measuring behavioral intention to leave [29], organizational commitment [30], job satisfaction [31], perceived organizational support [20], and job stress [4]. The items for the constructs and their corresponding sources can be seen in the Appendix. A five-point Likert-scale type was used to measure all these items. In a five-point Likert-scale type, one represents "strongly disagree" and five represents "strongly agree".

TABLE I
DEMOGRAPHIC PROFILES OF THE RESPONDENTS

Gender (%)
Female: 46.67   Male: 53.33

Age (years)
Max: 55   Min: 22

Educational Status (%)
Graduate: 67.11   Post-graduate: 32.09

Full time professional experience (%)
<6 months: 2.22   3-5 years: 22.67
6 months - 1 year: 2.66   5-10 years: 23.56
1-3 years: 24.44   >10 years: 24.44

Work experience in the current company (%)
<6 months: 7.11   3-5 years: 18.67
6 months - 1 year: 11.56   5-10 years: 16.44
1-3 years: 36.00   >10 years: 10.22

Department (%)
Information Technology: 18.67   Accounting: 3.11
Marketing/Sales: 9.78   Engineering: 3.11
Financial Services: 8.00   Consultancy: 2.67
Production: 5.78   Enterprise Resource Planning: 2.67
Research & Development: 5.33   Quality/Control: 2.67
Project Management: 4.89   Others: 24.01

Position(%)
Specialist: 27.55   Director: 4.88
Departmant Manager: 14.22   Job Analyst: 4.88
Engineer: 13.77   Project Manager: 4.44
Supervisor: 7.55   Consultant: 3.11
Assistant Specialist: 4.88   Others: 14.22

IV. RESULTS

The model was tested using LISREL 8.80 [32] with LISREL project.

A. Measurement Model

The measurement model included 44 items, describing seven constructs: intention to leave (ITL), job satisfaction (JSat), affective commitment (AC), continuance commitment (CC), normative commitment (NC), perceived organizational support (POS), job stress (JS). According to the results of reliability analysis, the items whose factor loadings are lower than 0.5 and the items with excessive standard errors were dropped from the model one by one. A total of 7 items were dropped from the model.

After re-analyzing the measurement model, reliability and validity of the model is examined by factor loadings, composite reliability (CR), and average variance extracted (AVE). The results can be seen in Table II and Table III. The factor loadings which are higher than 0.50 are considered practically significant [33]. Retained items in the measurement model are reasonably explained by related factors. In order to evaluate the reliabilities of the constructs, CR and AVE are examined. According to the results, each construct has a greater CR than the recommended value of 0.70 [34]. The constructs except normative commitment and intention to leave have also greater AVE values than the recommended value of 0.50 [34]. However, AVE values of normative commitment (0.48) and intention to leave (0.49) are close enough to 0.50. Therefore, each construct indicates an acceptable level of reliability.

TABLE II
FACTOR LOADINGS OF THE ITEMS

Code	λ	Code	λ	Code	λ
ITL01	0.58	POS01	0.83	JS01	0.74
ITL02	0.61	POS02	0.84	JS02	0.81
AC01	0.60	POS03	0.81	JS03	0.82
AC02	0.55	POS04	0.88	JS04	0.83
AC03	0.89	POS05	0.69	JS05	0.74
AC04	0.88	POS06	0.73	JS06	0.72
AC05	0.80	POS07	0.67	JS07	0.76
AC06	0.63	POS08	0.73	JS08	0.65
CC02	0.79	NC02	0.60	JSat01	0.78
CC03	0.79	NC03	0.78	JSat02	0.80
CC04	0.62	NC04	0.71	JSat03	0.85
		NC05	0.75	JSat04	0.77
		NC06	0.59	JSat05	0.80

TABLE III
RELIABILITY ANALYSIS

	CR	AVE
Perceived Organizational Support	0.92	0.60
Job Stress	0.92	0.58
Job Satisfaction	0.94	0.76
Affective Commitment	0.88	0.53
Continuous Commitment	0.78	0.55
Normative Commitment	0.82	0.49
Intention to Leave	0.71	0.48

B. Structural Model

The relationships between constructs are indicated in the structural model [33]. As seen in Table IV, Chi-square to degrees of freedom ratio at 2.32, Root Mean Squared Error of Approximation (RMSEA) at 0.077, Comparative Fit Index (CFI) at 0.96, Normed Fit Index (NFI) at 0.93 are all within the recommended values [33], [35], [36]. This implies that the model provides a reasonably good fit to the data.

TABLE IV
FIT INDICES

Fit index	Recommended value	Observed value
$\chi^2/df (\chi^2; df)$	≤ 3	2.32 (1433; 616)
RMSEA	≤ 0.08	0.077
CFI	≥ 0.90	0.96
NFI	≥ 0.90	0.93

The model explains substantial variance in ITL (R^2 = 0.67), AC (R^2 = 0.53), CC (R^2 = 0.05), NC (R^2 = 0.50), and JSat (R^2 = 0.26). Additionally, all the hypotheses are supported except H2 (CC-ITL), H5 (JSat-CC), H6 (JSat-NC), and H8 (POS-CC). The results show that ITL is explained by JSat, AC, and NC. However, their standardized estimates are different from each other so that their explanatory power is not the same ($\beta_{JSat-ITL}$=-0.67, β_{AC-ITL}=-0.27, β_{NC-ITL}=-0.37). Among these constructs, JSat is found to be the main predictor of ITL. Subsequently, JSat is explained by both POS and JS. POS is a relatively stronger determinant of JSat ($\beta_{POS-JSat}$=0.37, $\beta_{JS-JSat}$=-0.20). Similarly, POS also has a high effect on AC (β_{POS-AC}=0.63), whereas JSat has a low effect ($\beta_{JSat-AC}$=0.20). Finally, according to the results, NC is only explained by POS (β_{POS-NC}=0.67) and the effects of POS and JSat on CC are found to be insignificant to explain CC.

V. CONCLUSION AND DISCUSSION

This study analyzes the effects of job satisfaction, affective commitment, continuance commitment, normative commit-

ment, perceived organizational support, and job stress in determining the white-collar employees' intention to leave their job. For this, 225 questionnaires have been collected from white-collar employees working in the different firms.

The explanation rate of intention to leave which is 0.67, is relatively high in this study compared to the other studies [4], [5], [10]. The results also show that intention to leave is explained by job satisfaction, affective commitment and normative commitment. It is found that job satisfaction is the most important antecedent of intention to leave. Consistent with the findings of reference [9], job satisfaction has stronger effect than other factors on white-collar employees' intention to leave their jobs. The results imply that the satisfied employees will be less likely to quit their jobs. However, inconsistent with the findings of reference [9], [10], the effect of continuance commitment is found to be insignificant whereas affective commitment and normative commitment have significant effects on intention to leave.

Another result of this study is that affective commitment is explained by perceived organizational support and job satisfaction, whereas normative commitment is only explained by perceived organizational support. However, both of them is found to be insignificant to explain continuance commitment. According to the results of the analysis, perceived organizational support plays a more effective role than job satisfaction in explaining the affective commitment. These results are partially supported by the findings of reference [24], [19]. In these studies, all three components of organizational commitment are explained by perceived organizational support and job satisfaction. However, similar to our findings, perceived organizational has the highest influence on affective commitment compared to the other factors.

The other result indicates that job satisfaction is explained by perceived organizational support and job stress. Of the two, perceived organizational support has a higher impact on job satisfaction, but its effect is found to be relatively low compared to reference [19]. On the other hand, in the study of reference [12], job stress' effect on job satisfaction is also found to be low.

In conclusion, this study provides a better understanding of the influence of the factors on the intention to leave among white-collar employees. Firms in Turkey should consider the findings of the study for the continuity of their employees in their organizations.

APPENDIX A
CONSTRUCTS, CORRESPONDING SOURCE AND THE ITEMS

Intention to Leave [29]

If I have a good opportunity, I would like to find another job.

I do not enjoy this job and have been searching for other positions.

*I hope that I can find another job in the same industry.

*Layoffs are a typical occurrence around here.

*People often get fired from this organization without good reason.

Affective Commitment [30]

I would be very happy to spend the rest of my career with this organization.

I really feel as if this organization's problems are my own.

I do not feel a strong sence of "belonging" to my organization. (R)

I do not feel "emotionally attached" to this organization. (R)

I do not feel like "part of the family" at my organization. (R)

This organization has a great deal of personel meaning for me.

Continuance Commitment [30]

*Right now, staying with my organization is a matter of necessity as much as desire.

It would be very hard for me to leave my organization right now, even if I wanted to.

Too much of my life would be disrupted if I decided I wanted to leave my organization now.

I feel that I have too few options to consider leaving this organization.

*If I had not already put so much of myself into this organization, I might consider working elsewhere.

*One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.

Normative Commitment [30]

*I do not feel any obligation to remain with my current employer. (R)

Even if it were to my advantage, I do not feel it would be right to leave my organization now.

I would feel guilty if I left my organization.

This organization deserves my loyalty.

I would not leave my organization right now because I have a sense of obligation to the people in it.

I owe a great deal to my organization.

Job Satisfaction [31]

I consider my job pleasant.

I feel fairly-well satisfied with my present job.

I definetely like my work.

My job is pretty interesting.

I find real enyojment in my work.

Perceived Organizational Support [20]

The organization values my contribution to its well-being.

The organization fails to appreciate any extra effort from me.

The organization disregards my best interests when it makes decisions that affect me.

The organization really cares about my well-being.

Even if I did the best job possible, the organization would fail to notice. (R)

The organization cares about my general satisfaction at work.

The organization shows very little concern for me. (R)

The organization takes pride in my accomplishments at work.

Job Stress [4]

I feel emotionally drained by my job.

I feel burned-out by my job.

I feel frustrated at my job.

I feel tense at my job.

I lose my appetite because of my job-related problems.

Job-related problems keep me awake at night.

Job-related problems make my stomach upset.

Job-related problems make my heart beat faster than usual.

(*) items extracted for structural model analysis

(R) items reverse-coded

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