Impact of Stressors on Turnover Intention: Examining the Role of Employee Well-Being

Tooba Qasim, Uzma Javed, Muhammad Safder Shafi

Abstract—This study empirically examines the differentiating impact of challenge-hindrance stressors on turnover intention through job satisfaction in IT industry of Pakistan. Moreover, perceived job alternatives were tested as a moderator in the relationship between job satisfaction and turnover intention. Primary data was collected from 186 randomly selected IT professionals, working in project-based IT organizations of Islamabad and Rawalpindi. Results indicated significant: (1) positive relationship between challenge stressors and job satisfaction, (2) negative relationship between hindrance stressors and job satisfaction, (3) negative relationship between job satisfaction and turnover intention, (4) Job satisfaction fully mediates the relationship between challenge stressor and turnover intention, (5) Job satisfaction partially mediates the relationship between hindrance stressor and turnover intention. However, it was observed that perceived job alternatives do not have any moderating effect. Proper balancing of two stressors may help top management to increase the job satisfaction and reduce the turnover intention of IT professionals.

Keywords—Challenge Stressors, Hindrance Stressors, Job Satisfaction, Perceived Job Alternatives, Project-based organizations, Turnover Intention.

I. INTRODUCTION & BACKGROUND

TODAY'S world is characterized by 'Highly Competitive Economy' because of the rapid advancement and broad usage of technology in business. This fact has increased the competition among the organizations. Majority of the organizations strongly depend on the projects to carry out their business operations. Such kind of organizations is known as 'Project-Based Organizations' e.g. Construction and IT industry. IT is a dynamic industry whose success does not depend on heavy machinery and complex tools but on the skilled workforce. Human resources are the main asset of any organization. So, it is important to retain them to avoid additional costs of recruiting and training. Personnel employed in IT organizations are responsible for driving its advancement. The IT workforce has to be high performer in order to cope up with market needs. These external as well as some internal factors leads to stress. Stress in the workplace has grown because of the increased complexity and demanding nature of the job. IT personnel experienced increased workload, time pressure and responsibility to complete their projects on time. All these factors are identified

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as stressful. These workplace stressors have devastating attached cost for an organization.

Stressors are always considered as bad and have a deteriorating effect on employee's productivity and performance. But, two-dimensional stressor framework i.e. challenges and hindrances was proposed in 2000, by Cavanaugh et al. [1]. It was stated that both stressors are differently related to job attitudes (i.e. job satisfaction, organizational commitment) and withdrawal cognitions (i.e. turnover intentions and actual turnover) [1], [2].

From the literature review, it was identified that job satisfaction and turnover intentions are the main consequences of two-dimensional stressors. In this study, we are proposing a mechanism in which all the factors are integrated in one framework. Job satisfaction and turnover intentions are widely studied in traditional turnover models. So in the current study, an effort has been made to combine the challenge-hindrance framework with the turnover process model. Early work conducted in this area identified two factors as the main reason of turnover: (1) Desirability of movement: influenced by job satisfaction, (2) Ease of movement: influenced by job alternatives [3]. So, the variables which became the part of current study are: (1) Challenge-Hindrance stressor, (2) Job satisfaction, (3) Perceived job alternatives and (4) Turnover intentions.

Even though there are sufficient number of studies independently conducted in the area of stressors and turnover in the context of different countries and industries. Still limited amount of work has been done to integrate the two independent studies. Moreover, most of the studies focusing on these aspects are widely researched in health, education and banking sector. This theory needs to be tested in IT industry of Pakistan. It has been identified from the literature review that challenge stressors reduce turnover intention whereas hindrance stressors lead to increase turnover intention [4], [2]. So the main problem is to examine whether these two-dimensional stressors have a differentiating impact on turnover intention through job satisfaction and perceived job alternatives.

II. RESEARCH OBJECTIVES

The objectives of this research are: (1) To examine challenge-hindrance framework and turnover process model through literature review. (2) To examine the type of relationship between (a) challenge-hindrance stressor and job satisfaction, (b) job satisfaction and turnover intention. (3) To determine whether perceived job alternatives moderates the relationship between job satisfaction and turnover intention.

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(4) To identify the relationship between two-dimensional stressors and turnover intention in the presence of mediating and moderating variables and, to provide recommendations and implications of this research.

III. LITERATURE REVIEW

The review would be providing the definitions of important concepts from the existing literature. As well as elaborate challenge-hindrance framework and the main theories of turnover that formed the basis of development of theoretical framework. The next section will begin with a discussion on challenge-hindrance framework leading to primary consequences of stressors and concluding with the framework linking two-dimensional stressors with the turnover intention through mediating and moderating variables. Job satisfaction plays the role of mediator. However, perceived job alternatives acts as moderator in the present study.

A. Challenge-Hindrance Framework

Stress is defined as an event when a person believes that demands are more than resources or there is an inadequate balance between both demands and resources[5]. It has always been considered that stressors are bad and an effort should be made to not only prevent but also to eliminate them. In 2000, Cavanaugh et al. [1] proposed a two-dimensional stressor framework. They stated that both challenge and hindrance stressors are different in nature and their effect on work-related outcomes is different too. They defined challenge stressors as "work-related demands or circumstances that, although potentially stressful, have associated potential gains for individuals". They had characterized challenge stressors as: job overload, time pressure and job responsibility[1]. According to Wallace et al [6], these attributes are labeled as challenges because these stressful demands are supposed to be under the control of an individual and serve as a source of personal development. However, hindrance stressors are defined as "work-related demands or circumstances that tend to constrain or interfere with an individual's work achievement and that do not tend to be associated with potential gains for the individual" [1]. They identified hindrance demands as: role ambiguity, role conflict, organizational politics, red tape and job insecurity [1]. Hindrance demands are those stressful events which are not under the control of an individual and may act as constraints for their personal accomplishments [6].

B. Consequences of Stressors

Many of the researchers indicated that both stressors results in emotional exhaustion, job satisfaction and turnover intention. Cavanaugh et al. [1] in their study among US managers found significant positive relationship between challenge stress and job satisfaction. And they also found a negative relationship between challenge stress and voluntary turnover, but it was insignificant. For hindrance stress, they found a significant negative relationship with job satisfaction and positive relationship with voluntary turnover. Boswell et al. [4] found both stressors were significantly positively related to psychological strain. They observed hindrance stressors were significantly negatively related to loyalty as well as positively related to intention to quit and vice versa for challenge stressors among the administrative, maintenance and computer support staff of Western university. Podsakoff et al. [2] linked the stressors with the retention-related criteria in their meta-analysis of 183 samples. According to them, there are not enough studies which show the conceptual link between stressors and retention-related criteria. They report in their study that both challenge and hindrance stressors are positively related to strains. But they have different effects on job attitude and retention i.e. challenge stressors are positively related to job attitudes (job satisfaction, organization commitment) and negatively related to retention (turnover intention, actual turnover) whereas hindrance stressors are negatively related to job attitudes and positively related to retention. They further specify these different relationships between stressors and retention is because of the mediating effects of strain and job attitudes. Webster et al. [7] reported that challenge stressors are positively related to job satisfaction and self-efficacy, while hindrance stressors are negatively related to job satisfaction and self-efficacy. Hence, from the above mentioned evidences, it is clear that job satisfaction and turnover intention are the most common consequences of two-dimensional stressors. These factors are defined as:

1. Job Satisfaction

It is considered as a complex issue of human resources in any organization. It refers to the individual's feeling about their current job. They also have certain attitude towards the different facets and dimensions of their job like pay, promotion, policies etc. All these factors influence the suitability between individual and organization [8]. It is defined as the state of pleasure when one perceives that they have achieved their job values or received some achievement [9]. The complexity of job satisfaction is realized when it is measured through different perspectives. Falkenburg & Schyns [10] also states that job satisfaction can be seen as a multifaceted concept, as it has different aspects associated with it regarding job and work situation.

2. Turnover Intention

Turnover is defined as the individual estimated probability of leaving the organization. Turnover intention is defined as the "degree of individual movement across the membership boundary of a social system" [11]. Turnover intention is not clear like actual turnover. Turnover intention is said to be the best predictor of actual turnover, as it is observed, that a positive relationship exists between turnover intention and actual turnover [12]–[15]. It also refers to the conscious willfulness to look for other opportunities outside the organization [9].The cost associated with employee turnover can be described in terms of hiring (the new workforce), training and diminished effectiveness of an organization. Moreover, employee turnover can lead to a social capital loss, which negatively impacts the organization effectiveness as well as success of an organization [16].

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C. Proposing a Framework to Explain the Mechanism from Stressors to Turnover Intention

Numerous studies have been conducted independently to explain the challenge-hindrance stressors and turnover process models. In the present study, we are proposing a framework that explains the relationship from two-dimensional stressors to turnover intention through a: (a) mediating role of job satisfaction, (b) moderating role of perceived job alternatives.

1. Challenge-Hindrance Stress and Job Satisfaction

As it was discussed earlier, both challenge and hindrance stressors have differential effects on work-related outcomes [1], [2], [4], [6], [7]. Challenge stressors are considered as an opportunity and lead to positive work-related outcomes. It results in increase job satisfaction and enhances employee's motivation. Whereas, hindrance stressors are also considered as obstacles and hinders the performance of individuals. It leads to negative work-related outcomes and reduces job satisfaction of an employee.

2. Job Satisfaction and Turnover Intention

In order to explain the relationship between job satisfaction and turnover intention, it is important to describe the turnover models as they provide a basic foundation for these variables. Turnover model proposed by March & Simon [3] is one of the earliest work conducted in this area. Many of the studies focusing on turnover adopt the major variables or antecedents proposed in March & Simon framework. They suggest, if there is no balance between the inducements provided by an organization and employees contribution then individuals choose to leave the organization. This state of equilibrium between organizational inducements and an employee's contribution leads to two motivational parts i.e. desirability of movement and ease of movement. They suggest desirability of movement is influenced by job satisfaction as well as organization size. Furthermore, they claimed ease of movement is influenced by the evaluation of job opportunities outside the organization. They suggest employees decide to leave or stay in an organization on the basis of their cost-benefit evaluation of the available alternatives in the labor market.

Mobley [17] also suggests job satisfaction leads to turnover intention, assessment of cost of quitting and expectation of finding another job. Price [11] considered: (1) Pay structure, (2) Integration, (3) Instrumental communication, (4) Formal communication, and (5) Centralization as the primary determinants of job satisfaction. He suggests satisfaction plays a role of mediator and job alternatives works as a moderator in the relationship between job satisfaction and turnover.

According to Lee & Mowday [18] turnover intention is directly related to actual turnover; but this relationship is said to be moderated by job alternatives or opportunities i.e. if an individual perceives more opportunities are available within or outside the organization then his expectations from the current job change.

Trevor [19] also follows the basic framework of turnover proposed by March & Simon. They suggest that there is a significant strong negative relationship between job satisfaction and voluntary turnover in the presence of general job availability. Tanova & Holtom [20] also measured desirability of movement by job satisfaction. Their findings suggest that desirability of movement significantly predicts turnover across four European countries. Moreover, it was suggested that dissatisfied employees are more likely to leave an organization when lots of alternatives are available for them [11], [21]. Wheeler et al. [22] states employees who believe that lots of jobs opportunities are available and are dissatisfied with their job reports higher intention to leave. De Cuyper et al. [23] emphasized on perceived employability which refers to the perception of individual to get another job on the basis of their skills and abilities.

Koslowsky [24] in their sample of knowledge workers (i.e. computer scientists, accountants, engineers, consultants etc.) in high-tech and low-tech industry also follows the March & Simon approach and used ease of movement. They also interpreted ease of movement as the alternatives available outside the organization. Moreover they found ease of movement significantly predict turnover intention.

D. Literature Gaps

It has been identified from the above discussed literature review that much of the research has been independently conducted in the developed westernized countries. Very limited amount of studies have specifically focused on the challenge-hindrance stressors in Pakistan. Some of the studies focused on the relationship between job satisfaction and voluntary turnover [3], [11], [19], [20]. Labor market and economic conditions are known to be the influencers of actual turnover, which shows that voluntary turnover would not provide us with accurate vision about the effect of job satisfaction [10]. Turnover intention is said to be a representative of a person psychological state and is less affected by outside factors [24]. Job satisfaction is the main factor which contributes towards the development of plan or individual willfulness to leave an organization [19]. Subsequently, we chose to use turnover intention in this research, keeping in mind that previous studies propose that turnover intention significantly predicts actual turnover. Moreover, despite of the lots of support for two-dimensional stressors, little attempt has been made in integrating it with retention criteria [2]. Numerous studies have concentrated on the impact of challenge-hindrance stressors on job attitudes. But there is a lack of research on the impact of two-dimensional stressors on turnover intention through job satisfaction and moderating role of job alternatives.

IV. CONCEPTUAL MODEL & HYPOTHESIS

Based on the above examined literature, following theoretical framework was developed for this study. The theoretical framework developed was consistent with the objectives of this study. The framework shown in Fig. 1 is the graphical representation of the conceptual model on which this whole research study is based. The model outlines: (i) two independent variables (i.e. challenge and hindrance stressors),

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(ii) job satisfaction acts as the mediating variable, (iii) perceived job alternatives as the moderating variable, (iv) lastly, turnover intentions as the dependent variable.
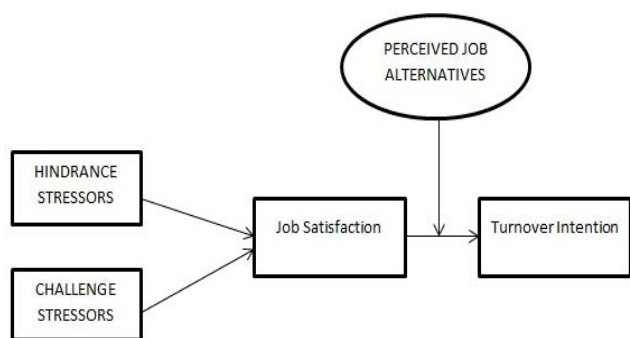

Fig. 1 Conceptual Model

Following hypotheses are drawn from above mentioned theoretical framework:

Hypothesis 1(a): Challenge stressors are positively related to job satisfaction.

Hypothesis 1(b): Hindrance stressors are negatively related to job satisfaction.

Hypothesis 2: Job satisfaction is negatively related to turnover intention.

Hypothesis 3: Perceived job alternatives moderate the relationship between job satisfaction and turnover intention.

Hypothesis 4: The negative relationship between challenge stressors and turnover intention is mediated by job satisfaction.

Hypothesis 5: The positive relationship between hindrance stressors and turnover intention is mediated by job satisfaction.

V. METHODOLOGY

This section gives insight about the population, sample, research instruments and data collection procedures. This study adopted a deductive research approach. All the details are explained below:

A. Sample and Procedure

The population of this study comprises of all IT professionals working in different project-based IT organizations of Pakistan. This study is purely deductive. As this study is quantitative in nature, so it encompasses the more structured and formal plan for data collection. The main purpose of this research was to find out the relationship between challenge-hindrance stressors and turnover intention in the presence of job satisfaction. The moderating effect of perceived job alternatives was also tested. This quantitative data was mainly collected by self-administered questionnaire survey tool. That questionnaire was constructed through already established instruments and was filled through both online and manual approach. The data was collected through random sampling technique from the IT professionals working in the project-based IT organizations, operating in Islamabad/Rawalpindi. A list of 75 project-based organizations situated in Islamabad and Rawalpindi was prepared via internet and PSEB (Pakistan Software Export Board) website. It was expected to receive at least three responses from every organization, so overall 225 responses were expected to be received. But in actual, total 186 responses were received for data analysis. So, the total response rate was calculated as 75%. Moreover, this study was cross-sectional in nature, since the data was gathered only once. The unit of analysis was IT professionals working in different project-based IT organizations.

B. Measurement of Variables

All the items were measured using 7 point Likert scale. Challenge and hindrance stressors were measured by the instrument developed by Cavanaugh et al [1]. This instrument consists of 12 items. Job satisfaction was measured using 10 items [25], [26]. Seven items of this scale were adapted from 'Workplace Employment Relations Survey' (Jones et al [25]) and other three from Job Descriptive Index (Smith [26]). Percieved job alternatives was measured using 6-scale item developed by Mowday et al. [27]. And lastly, turnover intention was measured using 3-scale item adapted from Mobley et al [28].

VI. RESULTS

This section covers the descriptive statistics, internal consistency and correlation analysis of different research variables. Hierarchal moderated regression test was used to test the interactional effect of job satisfaction and perceived job alternatives on turnover intention. Moreover, mediated effect of job satisfaction was tested through Baron & Kenny [29] test. Sobel [30] test was used to determine the significance of indirect effects.

A. Descriptive Statistics, Reliabilities, and Correlational Analysis

Descriptive statistics, reliabilities and correlation of research variables were calculated for demographics and research variables. A total of 186 IT professionals participated in the survey. Respondents (N = 186) comprised of 143 males (76.9%), followed by 43 females (23.1%). This shows that population of the study was mainly dominated by male respondents. Most of the respondents were from private organizations. 24 respondents (12.9%) belonged to public-type organizations. However, total 162 respondents (87.1%) were from private-type organizations. Out of 186, 72 respondents (38.7%) mentioned their salary was over 50,000. 51 respondents (27.4%) reported their salary range in between 40,000-49,999, 36 (19.4%) indicated 30,000-39,999 and lastly 27 (14.5%) reported their present salary range as 20,000-29,999. The average age of organization, where respondents were currently employed was estimated as 17.93. The respondents had an average of 3.24 years long tenure with the present organization and an average of 5.54 years work experience as IT professionals on IT projects. The average number of employees working in those organizations was 13443.4. Respondents had received an average of 16.55 years

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education. It has also been revealed: (a) Respondents reported average amount of stress experienced through both challenge (Mean = 3.94) and hindrance stressors (Mean = 3.90), (b) Average respondent reported that they are neither satisfied nor dissatisfied with certain aspects of their job (Mean = 4.31) and, (c) Lastly, average respondent reported that they neither agree nor disagree about the perceived job alternatives (Mean = 4.39) and their intention to leave the organization (Mean = 4.26).

Reliabilities of major concepts are shown in Table I. The reliability of all these major variables was measured by Cronbach's alpha. Value of Cronbach's alpha, greater or equal than 0.7 is considered as good and reliable [31]. Total 12 items were used to measure challenge-hindrance stressors, from which six items were challenge related and other six were used to measure hindrance stressor. In the present study, both challenge (α = 0.848) and hindrance stressors (α = 0.822) showed high reliability, as the Cronbach's alpha was greater than 0.7. Job satisfaction (α = 0.895) was measured using ten items; perceived job alternatives (α = 0.821) by five items; and lastly turnover intention (α = 0.884) was measured using three items. Furthermore, one item of perceived job alternatives was removed as it was affecting the reliability of overall concept. With 6 items, Cronbach's alpha for perceived job alternatives was estimated as 0.613. Hence, the final scales for all variables had indicated a good reliability and the items for each instrument was averaged together to compute the composites of each concept.

TABLE I
RELIABILITY AND CORRELATIONAL ANALYSIS

Variables	1	2	3	4	5
1. CS	(0.848)	0.113	0.193**	-0.161*	-0.180*
2. HS	0.113	(0.822)	-0.520**	0.167*	0.421**
3. JS	0.193**	-0.520**	(0.895)	-0.153*	-0.345**
4. PJA	-0.161*	0.167*	-0.153*	(0.821)	0.530**
5. TI	-0.180*	0.421**	-0.345**	0.530**	(0.884)

N = 186, S.D = Standard Deviation.
Reliabilities are mentioned in parenthesis on the diagonal.
CS = Challenge stressor, HS = Hindrance stressor, JS = Job satisfaction, PJA= Perceived job alternatives, TI = Turnover Intention.
*significant at 0.05 level (2-tailed), **significant at 0.01 level (2-tailed)

Correlation among major concepts is also shown in Table I. In the present study, the findings were parallel to the discussed literature review. It was found: (a) Challenge stressors (r = 0.193, p < 0.05) were significantly positively related to job satisfaction, (b) Challenge stressors (r = -0.180, p < 0.05) were significantly negatively related to turnover intention, (c) Hindrance stressors (r = -0.520, p < 0.05) were significantly negatively related to job satisfaction, (d) Hindrance stressors (r = 0.421, p < 0.05) were positively related to turnover intention. (e) Job satisfaction (r = -0.345, p < 0.01) was found to be significantly negatively related to turnover intention.

B. Direct Regression Analysis

Table II shows the regression analysis conducted using challenge-hindrance stressors, job satisfaction and perceived job alternatives as independent variables, and turnover intention as a dependent variable. Gender, organization type and present salary range have been used a control variables. Regression analysis was performed in two steps. In the first step, control variables were entered into the model. And in the second step, independent variables were entered.

To test hypothesis 1(a) and 1(b), both challenge and hindrance stressors were regressed on job satisfaction. Firstly, the impact of challenge stressors on job satisfaction was tested (column 2), then later it was tested for hindrance stressor (column 3). This regression was performed in two steps (column 1-2) for challenge and (column 1 & 3) for hindrance stressor. Firstly, it was found control variables did not have any significant impact on job satisfaction (p > 0.05). Control variables accounted for 3.9% variance in job satisfaction. Secondly, challenge stressor was entered into the model. In the presence of challenge stressor, none of the control was found to have a significant impact on job satisfaction except that of organization type (β = -0.46, p < 0.05). Challenge stressor explained an additional 3.3% variance in job satisfaction. It was observed that challenge stressor have a significant positive impact on job satisfaction (β = 0.17, p < 0.05). Moreover, hindrance stressor was entered in column 3. After entering hindrance stressors, organization type was observed to have a significant negative impact on job satisfaction (β = -0.39, p < 0.05). Whereas, hindrance stressor was observed to have a significant negative impact on job satisfaction (β = -0.47, p < 0.01) and explained an additional 23% variance in it. Thus, hypothesis 1(a) and 1(b) have been supported.

To test hypothesis 2, job satisfaction was regressed on turnover intention. Firstly, it was found, other than present salary range i.e. 20,000-29,999 (β = 0.79, p < 0.05), none of the control variables had any significant impact on turnover intention (p > 0.05). Control variables accounted for 4.1% variance in turnover intention. Secondly, job satisfaction (column 6) was entered into the model. In the presence of job satisfaction, none of the control was found to have a significant impact on turnover intention except that of present salary range i.e. 20,000-29,999 (β = 0.73, p < 0.05). Job satisfaction explained an additional 10.1% variance in turnover intention. It was observed that job satisfaction have a significant negative impact on turnover intention (β = -0.47, p < 0.05). Thus, hypothesis 2 has been supported.

Additionally it was found; none of the control variables had any significant impact on perceived job alternatives (column 4). Perceived job alternatives (column 7) explained an additional 53% variance in turnover intention. Moreover, both job satisfaction and perceived job alternatives (column 8) explained 35% variance in turnover intention. Job satisfaction (β = -0.46, p < 0.01) had a significant negative and perceived job alternatives (β = 0.73, p < 0.01) had a significant positive impact on turnover intention. It was also observed hindrance stressors and job satisfaction explained more variance in turnover intention.

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TABLE II
DIRECT REGRESSION ANALYSIS INCLUDING CONTROL VARIABLES

Variables	JS			PJA		TI				
Column no.	1	2	3	4	5	6	7	8	9	10
	β	β	β	β	β	β	β	β	β	β
Gender	-0.006	0.027	0.05	0.20	0.05	0.056	-0.097	-0.09	0.02	0.007
Organization Type	-0.42	-0.46*	-0.39*	0.07	0.05	-0.14	0.002	-0.16	-0.10	-0.08
Salary Range: 20,000-29,999	-0.12	-0.01	0.032	0.06	0.79*	0.73*	0.74*	0.69*	0.64	0.62
30,000-39,999	0.16	0.22	0.117	-0.27	-0.08	-0.004	0.09	0.14	-0.05	0.002
40,000-49,999	0.22	-0.15	-0.12	0.06	0.35	0.24	0.30	0.21	0.19	0.20
CS	-	0.17*	-	-	-	-	-	-	-0.14	-
HS	-	-	-0.47**	-	-	-	-	-	-	0.43**
JS	-	-	-	-	-	-0.47*	-	-0.46**	0.44*	-0.25*
PJA	-	-	-	-	-	-	0.78**	0.73**	-	-
R²	0.039	0.072	0.27	0.022	0.041	0.14	0.53	0.35	0.15	0.20
R² Change	-	0.033	0.23	-	-	0.101	0.24	0.31	0.11	0.16
F- Statistics	-	2.137*	10.47**	-	-	4.58*	11.1**	12.94**	4.22**	6.22**

CS = Challenge stressor, HS = Hindrance stressor, JS = Job satisfaction, PJA = Perceived job alternatives, TI = Turnover Intention
*significant at 0.05 level (2-tailed)
**significant at 0.01 level (2-tailed)

C. Moderating Effect of Perceived Job Alternatives

In the present study, hierarchal moderated regression was conducted by adding independent variable (i.e. job satisfaction) in step 1. Moderator (i.e. perceived job alternatives) was included in step 2 along with job satisfaction. And lastly, in step 3, interactional term (i.e. job satisfaction * perceived job alternatives) was included into the model along with the already entered variables in step 2. The main analysis of this section is to determine whether the interactional effect of (job satisfaction * perceived job alternatives) is significant in the model. Table III shows the results of hierarchal moderated regression.

TABLE III
RESULTS OF HIERARCHAL MODERATED REGRESSION

Variables	STEP 1	STEP 2	STEP 3
(Constant)	(6.446**)	(2.712**)	(4.435**)
JS	-0.505**	-0.396**	-0.792*
PJA		0.743**	0.377
Interaction term (JS*PJA)			0.085
R²	0.119	0.353	0.357

JS = Job satisfaction, PJA = Perceived job alternatives
Step 1: dependent variable (turnover intention), independent (job satisfaction)
Step 2: dependent variable (turnover intention), independent (job satisfaction, perceived job alternatives)
Step 3: dependent variable (turnover intention), independent (job satisfaction, perceived job alternatives), and moderating variable (Interaction term i.e. Job Satisfaction*Perceived Job Alternatives)
*significant at 0.05 level (2-tailed), **significant at 0.01 level (2-tailed)

In step 1, job satisfaction was entered into the model. It was observed job satisfaction ($\beta = -0.505$, $p < 0.01$) has a significant negative impact on turnover intention. Moreover, it accounted for 11.9% variance in turnover intention. In step 2, moderating variable i.e. perceived job alternatives was entered into the model. The regression coefficient of perceived job alternatives ($\beta = 0.7453$, $p < 0.01$) is also significant. The predictive power of model is also increased by including perceived job alternatives because value of R square is increased. Moreover, job satisfaction and perceived job

alternatives together explained 35.3% variance in turnover intention. In step 3, interaction effect was entered into the model. The interaction term denotes the moderating effect. And that interaction effect is calculated by multiplying the two predictors [32]. In the present study, job satisfaction and perceived job alternatives was multiplied to calculate the interactional effect. As shown in the Table III, the regression coefficient for interaction effect was estimated as ($\beta = 0.085$), but that term wasn't significant ($p > 0.05$). It is clearly evident that the interaction effect of job satisfaction and perceived job alternatives did not explained significant amount of variance in turnover intention. Thus, hypothesis 3 has not been supported. This shows that perceived alternatives does not play the role of moderator in explaining the relationship between challenge-hindrance stressors and turnover intention through job satisfaction.

D. Mediation Test

Table IV shows the indirect effect of challenge stressors on turnover intention through job satisfaction. Challenge stressors have a significant direct relationship with turnover intention (step 1) ($\beta = -0.251$, $p < 0.05$), and job satisfaction (step 2) ($\beta = 0.184$, $p < 0.01$). Step 3 shows that job satisfaction has a significant effect on turnover intention ($\beta = -0.505$, $p < 0.01$). Step 1-3 indicate the presence of an indirect link between challenge stressors and turnover intention. In step 4, job satisfaction has been used as a control variable. The results of multiple regression at step 4, shows that both challenge stressor ($\beta = -0.164$, $p > 0.05$) and job satisfaction ($\beta = -0.472$, $p < 0.01$) affect turnover intention. An insignificant relationship is observed between challenge stressors and turnover intention in step 4. This shows that job satisfaction fully mediates the relationship between challenge stressors and turnover intention. The test statistic for Sobel's test is estimated as -2.310519 (not shown in table). A Sobel's test indicated a significant indirect effect of challenge stressor on turnover intention through job satisfaction ($p < .05$). Thus, it is proved job satisfaction fully mediates the relationship between

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challenge stressor and turnover intention. And thus, hypothesis 4 is supported.

TABLE IV
RESULTS OF MEDIATED REGRESSION FOR CHALLENGE STRESSORS

Variables	STEP 1	STEP 2	STEP 3	STEP 4
(Constant)	(5.259**)	(3.585**)	(6.446**)	(6.950**)
Challenge Stressor	-0.251*	0.184**	-	-0.164
Job Satisfaction	-	-	-0.505**	-0.472**
R^2	0.032	0.037	0.119	0.133

Step 1: dependent variable (turnover intention), independent (challenge stressor)

Step 2: dependent variable (job satisfaction), independent (challenge stressor)

Step 3: dependent variable (turnover intention), independent (job satisfaction)

Step 4: dependent variable (turnover intention), independent (challenge stressor), mediator (job satisfaction)

*significant at 0.05 level (2-tailed)

**significant at 0.01 level (2-tailed)

Table V shows the indirect effect of challenge stressors on turnover intention through job satisfaction. Hindrance stressors have a significant direct relationship with turnover intention (step 1) ($\beta = 0.600$, $p < 0.01$), and job satisfaction (step 2) ($\beta = -0.506$, $p < 0.01$). Step 3 shows that job satisfaction has a significant effect on turnover intention ($\beta = -0.505$, $p < 0.01$). In step 4, job satisfaction has been used as a control variable. The results of multiple regression at step 4, shows that both hindrance stressor ($\beta = 0.472$, $p < 0.01$) and job satisfaction ($\beta = -0.253$, $p < 0.05$) affect turnover intention. Moreover, the effect of hindrance stressors has been reduced significantly. This shows that job satisfaction partially mediates the relationship between hindrance stressors and turnover intention. The test statistic for Sobel's test is estimated as 2.153562. A Sobel's test indicated a significant indirect effect of hindrance stressor on turnover intention through job satisfaction ($p < .05$). Thus, it is proved job satisfaction partially mediates the relationship between hindrance stressor and turnover intention. And thus, hypothesis 5 is supported.

TABLE V
RESULTS OF MEDIATED REGRESSION FOR HINDRANCE STRESSORS

Variables	STEP 1	STEP 2	STEP 3	STEP 4
(Constant)	(1.929**)	6.285**	(6.446**)	(3.517**)
Hindrance Stressor	0.600**	-0.506**		0.472**
Job Satisfaction			-0.505**	-0.253*
R^2	0.178	0.271	0.119	0.199

Step 1: dependent variable (turnover intention), independent (Hindrance stressor)

Step 2: dependent variable (job satisfaction), independent (Hindrance stressor)

Step 3: dependent variable (turnover intention), independent (job satisfaction)

Step 4: dependent variable (turnover intention), independent (Hindrance stressor), mediator (job satisfaction)

*significant at 0.05 level (2-tailed)

**significant at 0.01 level (2-tailed)

VII. DISCUSSION

This study aims to integrate the challenge-hindrance framework and turnover process model. In the present study, an effort has been made to empirically investigate the differentiating impact of two-dimensional stressor on turnover intention through job satisfaction. Moreover, perceived job alternatives were tested as a moderator. Models proposed by March & Simon [3], Price [11] and later researches conducted in the area of turnover has been considered.

Challenge stressor is known as positive-type stress which leads to improve performance. And hindrance stressors are commonly known as negative-type stress which leads to reduced employees motivation and performance. Hence, it can be concluded that challenge-hindrance stressors are differently related to job attitudes and withdrawal cognitions [1], [2], [4]. In the present study, it was found that challenge stressors have a significant direct positive effect on job satisfaction. However, hindrance stressors were observed to have a significant direct negative effect on job satisfaction. All these findings are also consistent with the past research of Boswell et al. [4], Cavanaugh et al. [1], Podsakoff et al. [2], and Webster et al. [7]. Hence, hypothesis 1(a) and 1(b) are supported.

As it was discussed earlier, job satisfaction was assessed through ten facets. However, three items were used to measure employee's turnover intention. The correlation test (Table I) indicated that IT professionals who are highly satisfied with the job reported lower intention to quit. Thus, in the context of project-based (IT industry) organizations of Pakistan, the correlation test proved the presence of negative relationship between job satisfaction and turnover intention. This relationship between job satisfaction and turnover intention was further assessed by regression (Table II). The results showed that job satisfaction significantly affects the turnover intention. This significant negative relationship between job satisfaction and turnover intention was consistent with the findings of March & Simon [3], Hom et al. [32] and Rilovick [13]. As most of the IT professionals have good educational backgrounds and they have high expectations towards the inducements, promotions and training. Employees would be dissatisfied, if their certain expectations towards the job wouldn't be met and thus results in increased intention to quit. Thus, hypothesis 2 has been supported.

The third hypothesis was regarding the moderating effect of perceived job alternatives in the relationship between job satisfaction and turnover intention. Price [11] also used perceived job alternatives as a moderator in their study. Perceived job alternatives interact with job satisfaction and weakens the turnover intention. It could be said that if there are lots of opportunities available outside the organization and employees are satisfied with their job, then they tend to have lower turnover intention. However, present study indicated different results. The results (Table III) showed a non-significant moderating effect of perceived job alternatives in the relationship between job satisfaction and turnover intention. The reason could be that IT professionals have neutral opinion about job alternatives at their current

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satisfaction level. Employees believe lots of opportunities are available, though they are very much satisfied from their job. This could be because of the existence of large number of IT project-based organizations in Pakistan. These organizations are very much competitive and provide lots of benefits which might enforce the employees to look for other job alternatives. So, it is concluded that Price [11] study about the moderating effect of perceived job alternatives in the relationship between job satisfaction and turnover intention cannot be generalized in to the project-based IT organizations of Pakistan. Thus, hypothesis 3 is not accepted and does not contribute in determining the differential relationship between challenge-hindrance stressors and turnover intention (through job satisfaction).

Last two hypotheses were about the mediating effect of job satisfaction in the relationship between challenge-hindrance stressors and turnover intention. This effect was tested in two parts for both independent variables. For challenge stressors (Table IV), the results showed that, job satisfaction fully mediates the relationship between challenge stressor and turnover intention. However, job satisfaction partially mediates the relationship between hindrance stressor and turnover intention (Table V). This shows that job satisfaction plays an important role in explaining the indirect effect of challenge-hindrance stressors on turnover intention. This result is also consistent with Podsakoff et al [2] study, as they indicate that the direct positive effect of challenge stressor on job satisfaction will lead to reduced turnover intention. Whereas, high degree of hindrance stressors, leads to decreased job satisfaction. And hence, results in increased turnover intention. Thus, hypothesis 4 and 5 has been supported.

VIII. PRACTICAL IMPLICATIONS, LIMITATIONS & FUTURE RESEARCH

This study has been helpful in understanding that challenge and hindrance stressors are distinct and they are important predictors of organizational outcomes. This research also underlines the importance of stress management programs in order to deal with hindrance stressors. It will also help in determining the ways which will lead to reduced turnover intention. This research will help the top management to design the jobs in a better way. Organization can devise different strategies to reduce the turnover intention of employees by balancing the stressors. Furthermore, organizations interested to improve job satisfaction and reduce turnover intention must lessen the intensity of hindrance stressors.

This study examines three aspects of challenge stressors (workload, time pressure and job responsibility) and four aspects of hindrance stressors (role ambiguity, role conflict, organization politics and red tape) as identified by Cavanaugh et al. [1]. Other dimensions are not tested because of the nature and scope of the study. Secondly, research sample is primarily collected from IT industry. So, results can't be generalizable to other industries in Pakistan. As well as true relationship between challenge-hindrance stressors and

turnover intention could not be reflected because of the consideration of only IT related organizations of Islamabad and Rawalpindi. In future, other major cities of Pakistan can be accessed to get a better idea of other project-based IT organizations across the nation. Thirdly, results reflected the view of people on what happened because of self-reported data. It is not necessarily similar to what they actually experienced. This could lead to biasness in the current study. Furthermore, as this study was cross sectional, results may have been exposed to causal ambiguity. Longitudinal studies could also be conducted to strengthen the causal inference and to check the consistency of findings. In future, other aspects of well-being (i.e. burnout, psychological strain) can be added in model to test the differentiating impact of challenge-hindrance stressors on turnover intention.

IX. CONCLUSION

This study has explored the extent to which challenge-hindrance stressors effects turnover intention in the project-based IT organizations of Pakistan. However, rare attempt has been made in examining these factors in IT industry of Pakistan. IT sector is playing a great role in strengthening the economy of a country. IT professionals are working on a multiple projects at a time. They experience extreme time pressure, responsibility and other difficulties to complete their projects on time. All these factors are identified as stressful and lead to both positive and negative work-related outcomes. Therefore, examining the impact of stressors in project-based IT organizations becomes important. This study makes an attempt in examining the effect of these two-dimensional stressors on turnover intention through the mediating role of job satisfaction. Furthermore, examining the moderating effect of perceived job alternatives was another objective of this study. The questions used to measure all the research variables were adapted from already established standardized instrument. Data was collected from 186 IT professionals, employed in project-based IT organizations in Islamabad/Rawalpindi, through a questionnaire-based survey. Correlation and regression analysis were applied on the collected data. All of the hypotheses, specifying direct effects were proved. Job satisfaction was identified as the most important factor in explaining the relationship between challenge-hindrance stressors and turnover intention. However, perceived job alternatives did not contribute in explaining this relationship. It acts as an independent variable and explained sufficient amount of variance in turnover intention.

REFERENCES

[1] M. A. Cavanaugh, W. R. Boswell, M. V. Roehling, and J. W. Boudreau, "An empirical examination of self-reported work stress among U.S. managers.," *J. Appl. Psychol.*, vol. 85, no. 1, pp. 65–74, 2000.
[2] N. P. Podsakoff, J. A. LePine, and M. A. LePine, "Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis.," *J. Appl. Psychol.*, vol. 92, no. 2, pp. 438–454, 2007.
[3] J. G. March and H. A. Simon, "Organizations Wiley," *N. Y.*, p. 262, 1958.

[4] W. R. Boswell, J. B. Olson-Buchanan, and M. A. LePine, "Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain," *J. Vocat. Behav.*, vol. 64, no. 1, pp. 165–181, Feb. 2004.

[5] R. S. Lazarus and S. Folkman, *Stress, appraisal, and coping*. Springer Publishing Company, 1984.

[6] J. C. Wallace, B. D. Edwards, T. Arnold, M. L. Frazier, and D. M. Finch, "Work stressors, role-based performance, and the moderating influence of organizational support.," *J. Appl. Psychol.*, vol. 94, no. 1, pp. 254–262, 2009.

[7] J. R. Webster, T. A. Beehr, and N. D. Christiansen, "Toward a better understanding of the effects of hindrance and challenge stressors on work behavior," *J. Vocat. Behav.*, vol. 76, no. 1, pp. 68–77, Feb. 2010.

[8] P. E. Spector, *Job satisfaction: Application, assessment, causes, and consequences*, vol. 3. Sage, 1997.

[9] E. A. Locke, "What is job satisfaction?," *Organ. Behav. Hum. Perform.*, vol. 4, no. 4, pp. 309–336, 1969.

[10] K. Falkenburg and B. Schyns, "Work satisfaction, organizational commitment and withdrawal behaviours," *Manag. Res. News*, vol. 30, no. 10, pp. 708–723, Sep. 2007.

[11] J. L. Price, *The study of turnover*, vol. 19771. Iowa State University Press Ames, 1977.

[12] S. Coverdale and J. R. Terborg, "A Re-Examination of the Mobley, Horner & Hollingsworth Model of Turnover: A Useful Replication.," 1980.

[13] C. Y. Rilovick, "Effects of Career Plateauing on Turnover: A Test of a Model," 2005.

[14] W. H. Mobley, R. W. Griffeth, H. H. Hand, and B. M. Meglino, "Review and conceptual analysis of the employee turnover process.," *Psychol. Bull.*, vol. 86, no. 3, p. 493, 1979.

[15] R. W. Griffeth and P. W. Hom, "The employee turnover process," *Res. Pers. Hum. Resour. Manag.*, vol. 13, no. 3, pp. 245–93, 1995.

[16] B. C. Holtom, T. R. Mitchell, and T. W. Lee, "Increasing human and social capital by applying job embeddedness theory," *Organ. Dyn.*, vol. 35, no. 4, pp. 316–331, 2006.

[17] W. H. Mobley, "Intermediate linkages in the relationship between job satisfaction and employee turnover.," *J. Appl. Psychol.*, vol. 62, no. 2, p. 237, 1977.

[18] T. W. Lee and R. T. Mowday, "Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover," *Acad. Manage. J.*, vol. 30, no. 4, pp. 721–743, 1987.

[19] C. O. Trevor, "Interactions among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover," *Acad. Manage. J.*, vol. 44, no. 4, pp. 621–638, 2001.

[20] C. Tanova and B. C. Holtom, "Using job embeddedness factors to explain voluntary turnover in four European countries," *Int. J. Hum. Resour. Manag.*, vol. 19, no. 9, pp. 1553–1568, Sep. 2008.

[21] R. W. Griffeth, R. P. Steel, D. G. Allen, and N. Bryan, "The development of a multidimensional measure of job market cognitions: the Employment Opportunity Index (EOI).," *J. Appl. Psychol.*, vol. 90, no. 2, p. 335, 2005.

[22] A. R. Wheeler, V. C. Gallagher, R. L. Brouer, and C. J. Sablynski, "When person-organization (mis) fit and (dis) satisfaction lead to turnover: The moderating role of perceived job mobility," *J. Manag. Psychol.*, vol. 22, no. 2, pp. 203–219, 2007.

[23] N. De Cuyper, S. Mauno, U. Kinnunen, and A. Mäkikangas, "The role of job resources in the relation between perceived employability and turnover intention: A prospective two-sample study," *J. Vocat. Behav.*, vol. 78, no. 2, pp. 253–263, Apr. 2011.

[24] M. Koslowsky, "Ease of movement and sector affiliation as moderators of the organizational and career commitment: Turnover intentions link," *Int. J. Manpow.*, vol. 33, no. 7, pp. 822–839, 2012.

[25] M. K. Jones, R. J. Jones, P. L. Latreille, and P. J. Sloane, "Training, job satisfaction, and workplace performance in Britain: Evidence from WERS 2004," *Labour*, vol. 23, no. s1, pp. 139–175, 2009.

[26] P. C. Smith, "The measurement of satisfaction in work and retirement: A strategy for the study of attitudes.," 1969.

[27] R. T. Mowday, C. S. Koberg, and A. W. McArthur, "The psychology of the withdrawal process: A cross-validation test of Mobley's intermediate linkages model of turnover in two samples," *Acad. Manage. J.*, vol. 27, no. 1, pp. 79–94, 1984.

[28] W. H. Mobley, S. O. Horner, and A. T. Hollingsworth, "An evaluation of precursors of hospital employee turnover.," *J. Appl. Psychol.*, vol. 63, no. 4, p. 408, 1978.

[29] R. M. Baron and D. A. Kenny, "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.," *J. Pers. Soc. Psychol.*, vol. 51, no. 6, p. 1173, 1986.

[30] M. E. Sobel, "Asymptotic confidence intervals for indirect effects in structural equation models," *Sociol. Methodol.*, vol. 13, no. 1982, pp. 290–312, 1982.

[31] J. F. Hair and B. B. Black, *B., Anderson, R. and Tatham, R.(2006). Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice-Hall.

[32] P. W. Hom, R. W. Griffeth, and C. L. Sellaro, "The validity of Mobley's (1977) model of employee turnover," *Organ. Behav. Hum. Perform.*, vol. 34, no. 2, pp. 141–174, 1984.