

# Investigating the Influence of Transformational Leadership and Ergonomic Safety on Intention to Stay

Md Lazim Mohd Zin, Faizuniah Pangil, and Siti Zubaidah Othman

**Abstract** – The influence of environment factors such as business growth, imbalance between demand and supply, and high turnover rate have forced many ICT companies in Malaysia to seriously consider the issue of retaining skilled information technology (IT) employees. Thus, the current study aims to investigate the influence of transformational leadership and ergonomic safety on intention to stay. Multiple regression results from 178 participants indicated that transformational leadership and ergonomic safety were significantly positively related to intention to stay. Implications of the findings, potential limitations of the study, and directions for future research are suggested.

**Keyword**--Intention to stay, transformational leadership, ergonomic safety, information technology workers.

## I. INTRODUCTION

THE retention of IT professionals is a main problem in information and communication industry (ICT) in Malaysia. This is because the influence of environment factors such as business growth, imbalance between demand and supply and high turnover rate among IT professionals have made retaining them becoming more crucial. For instance, a high turnover rate was recorded in the ICT based-business such as outsourcing and shared business services between 32 to 39 percent per annum in 2008 [18], [23].

Since organizations won't be able to function properly with inadequate information technology workers, it is important for the organizations to prevent this problem from continuing, and to do so organizations need to know what factors may influence intention to stay among IT professional. The examination of factors associated with intention to stay is important because there is a great potential for managers to develop interventions that may facilitate the intention to remain in organizations and subsequently prevent the costs associated with staff turnover.

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Furthermore, a study of employee retention for IT professional in ICT industry has yet been conducted, so it is imperative to seeks various elements in organization as a strategy to retain them.

In this study, transformational leadership and ergonomic safety are tested against intention to stay. Generally, leadership is one determinant of employee retention because an employee seeking to stay with an organization where he or she feels comfortable with the goals, mission and charismatic attitudes of their managers or leaders in organization. Nevertheless, very few studies and companies list leadership as a top priority in their retention programs [4], [9].

Regardless of the industry or the size of the company, the important of ergonomic safety in organization is obvious. This is because applied ergonomics can help the organization to enhance the satisfaction, and employees will be safe from hazards and ergonomics risk factors. However, very few previous studies related ergonomic safety directly to intention to stay [21], [22].

## II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### A. Intention to Stay

In general terms, intention to stay is the perception of the estimated likelihood of continued membership in an organization [8]. In this study, intention to stay refers to the desire of workers to remain working in the current organization [10], [13]. A review of currently available literatures has showed that many studies focuses on intention to leave instead of intention to stay [2], [25]. Previous studies have also used the concept of intention to stay as a proxy to explain employee retention [8], [10], [13]. This approach provides further validation to the assumption by Ajzen [3] that intention is the strongest cognitive precursor of behavior. Based on this premise, the present study used the same approach where intention to stay is a proxy for understanding employee retention. In addition, intention to stay is more relevant in the current research because of the difficulties encountered by organization in retaining their IT professional, and also previous study did not specifically examines the intention of IT professional to stay in organization [18], [23].

### B. Leadership Style and Intention to Stay

Transformational leadership refers to a leader who seek to increase employee awareness of job outcomes, activate the

employee's needs and well-being, and stimulate employees to act in the interest of organization [24]. Though discussions on transformational leadership and intention to stay have been widely discussed by previous researchers [9], [11], very little is known about the linkage between transformational managerial leadership behaviors on intention to stay among IT professional. The premise saying that effective transformational leadership will positively influence employee intention to stay was supported by the work of Avolio et al., [4]. In their study, they found that managerial consideration for the employees needs, motivation and well-being can encourage employees to stay in organization. Thinking along the same line, Bass [6], also believed that transformational leadership raises employee motivation to stay through exchange values, and gives personal advice, attention and opportunity [6]. Therefore, the following hypothesis is proposed:  
H1: Transformational leadership have positive effect on intention to stay.

### C. Ergonomic safety and Intention to Stay

Ergonomic safety refers to employees' perception of safety management that encompasses of ergonomics training, monitoring, dissemination of information and problem solving related to ergonomic safety in the workplace [21]. Organization's role in providing an ergonomic working environment is directly reflects the organization's commitment to safety in organization [16]. Although previous studies are less clear about the influence of ergonomic safety practices on intention to stay, several studies have shown that organization's commitment towards safety in the workplace has a significant negative relationship with intention to quit [22]. This finding can be used as a proxy for assuming the influence of ergonomic safety practices on the intention to stay. Based on the theoretical premises of organizational support, organizational readiness in ensuring such a conducive working environment will provide an insight to the employees regarding organization commitment and support [12]. The effect of that, workers will show positive behavior by remain working in the organization [3]. Therefore, the following hypothesis is proposed:

H2: Ergonomic safety have positive effect on intention to stay.

## III. METHOD

### A. Sampling Design, Study Sample and Procedures

The study population includes all IT professional in the software development sector with MSC status in Malaysia. A cluster sampling method was used to select the sample for this study. A total of 832 questionnaires were mailed to a representative of the organization who agreed to participate in this study. The representative will then distribute the questionnaires to their IT employees. Each participant received one set of questionnaire with cover letter attached, explaining the purpose of the study and the instructions on how to answer the questionnaire. Participants were also provided with a pre-addressed and postage-paid envelope so that they could post the questionnaire back to the researcher. A total of 220 questionnaires were returned, and only 178

were usable for further analysis, representing a response rate of 21.39%.

### B. Measures

*Intention to stay* - Intention to stay refers to employees' conscious and deliberate willingness to stay with the organization [8], [10]. To measure participants' intention to stay, three items were adapted from Coombs [10], and another three items from Stassen and Ursel [26]. Each of the adapted questions asked how strongly the respondents agreed or disagreed with the intention to stay statements on a five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree.

*Transformational leadership* - Transformational leadership is operationally defines as the extent to which managers motivate and encourages employees to use their judgment and intelligence to solve works related problems and express appreciation for good performance and were measured by 20 items developed by Bass and Avolio [7]. Responses to items were made on a 5-point scale whereby 1 = not at all and 5 = frequently, if not always.

*Ergonomic safety* - Ergonomic safety is operationalized as employees' perception of ergonomics safety management in the workplace. This perception is measured at the individual level and using six items adapted from Hayes et al., [17]. All these items were measured based on five point Likert scale of 1 = "strongly disagree" to 5 = "strongly agree".

### C. Method of Analysis

In this study, the hypotheses were tested using multiple regressions. Multiple regression analysis involving the testing of the relationship between a dependent variable and two or more independent variables [15]. Prior to conducting analysis, the data was tested for normality, linearity, homoscedasticity, and independence of the error terms.

## IV. RESULTS

### A. Profile of Respondents

Out of 178 participants, 53.9% were males. 54.2% were unmarried and 76.4% hold a bachelor degree. Software engineer constitute 19.7% of the survey participants, followed by 18.5% system programmers and 16.3% system analyst. The average age of participants was 31 years old. On average, the participants had been in their present position for 4.99 years, and had served their organization for 4.21 years.

### B. Factor Analyses

To address the validity of the measure, a factor analysis with principle component analysis employing an orthogonal varimax rotation was carried out on five constructs. The criteria used by Igarria et al. [19] were adapted to identify and interpret the factors. Each item should load 0.50 or greater on one factor and 0.35 or lower on the other factor. A factor analysis was first carried out on intention to stay measures.

TABLE I  
FACTOR ANALYSIS OF INTENTION TO STAY

Intention to Stay Items	Component 1
1. I have the desire and intend to remain working at this company.	.89
2. I plan to continue working for this company in the future.	.87
3. For me, continuing to work for this company is very likely.	.86
4. I expect to work at my present company for as long as possible.	.84
5. Barring unforeseen circumstances, I would remain in this company definitely.	.78
6. If I were completely free to choose, I would prefer to continue working in this company.	
Eigenvalue	4.35
Percentage of variance explained (%)	72.48
Kaiser-Meyer-Olkin	.92
Bartlett's Test of Sphericity Approx. Chi Square	738.42
df	15
Significance Level	.000

TABLE II  
FACTOR ANALYSIS OF TRANSFORMATIONAL LEADERSHIP

Transformational Leadership Items	Component 1
1. My manager re-examines critical assumptions to question whether they are appropriate.	.931
2. My manager seeks differing perspectives when solving problems.	.863
3. My manager gets me to look at problems from many different angles.	.862
4. My manager suggest new ways of looking at how to complete assignment.	.834
5. My manager talks optimistically about the future.	.729
6. My manager talks enthusiastically about what needs to be accomplished.	.859
7. My manager articulates a compelling vision of the future.	.797
8. My manager express confident that goals will be achieved.	.767
9. My manager spends time teaching and coaching me.	.751
10. My manager treat me as an individual rather just as a member of a group.	.743
11. My manager considers me as having different needs, abilities and aspirations from others.	.734
12. My manager helps me to develop my strengths.	.623
13. My manager talks about their most important values and beliefs.	.724
14. My manager instills pride in me for being associated with him/her.	.799
15. My manager specifies the importance of having a strong senses of purpose.	.512
16. My manager goes beyond self-interest for the good of the group.	.654
17. My manager considers the moral and ethical consequences of decisions.	.567
18. My manager displays a sense of power and confidence in organization.	.721
19. My manager emphasizes the importance of having a collective sense of mission.	.645
20. My manager provides me with assistance in exchange for efforts.	.711
Eigenvalue	3.21
Percentage of variance explained (%)	75.063
Kaiser-Meyer-Olkin	.940
Bartlett's Test of Sphericity Approx. Chi Square	2503.789
df	190
Significance Level	.000

As shown in Table I, the result showed single factor solution with eigenvalues greater than 1.0 and the total variance explained was 72.48%. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.92 indicating sufficient intercorrelations while the Bartlett's Test of Sphericity was significant (Chi square=738.42,  $p < 0.01$ ). These results confirm that intention to stay is unidimensional and all items used to measure a particular construct loaded on a single factor.

Factor analysis with varimax rotation was also run to validate the dimensionality of transformational leadership. A single factor solution explaining 75.06% variance was found. KMO measure of sampling adequacy was 0.94 indicating sufficient intercorrelations while the Bartlett's Test of Sphericity was significant (Chi square = 2503.789  $p < 0.01$ ). The result is shown in Table II.

Finally, factor analysis with varimax rotation was run to validate the dimensionality of ergonomic safety. As indicated in Table III, a single factor solution explaining 89.11% variance was found for ergonomic safety dimension. KMO measure of sampling adequacy was 0.89 indicating sufficient intercorrelations while the Bartlett's Test of Sphericity was significant (Chi square = 681.54  $p < 0.01$ ).

TABLE III  
FACTOR ANALYSIS OF ERGONOMIC SAFETY

Ergonomic Safety Items	Component 1
1. The organization provides enough ergonomic safety training in the work place.	.89
2. The organization conduct frequent ergonomic safety inspections.	.84
3. The organization investigates ergonomic safety problems quickly.	.84
4. The organization respond quickly to ergonomic safety concerns.	.83
5. The organization provides ergonomic safety information.	.82
6. The organization keeps workers informed of ergonomic hazards.	.76
Eigenvalue	4.15
Percentage of variance explained (%)	69.11
Kaiser-Meyer-Olkin	.89
Bartlett's Test of Sphericity Approx. Chi Square	681.54
df	15
Significance Level	.00

### C. Regression Results

To test H1 and H2, a multiple regression was conducted. Specifically, for H1, and H2 intention to stay was regressed on three independent variables, namely transformational leadership and ergonomic safety. Table IV presents the results of this analysis. It is noted that 43.6% of the variance in intention to stay had been significantly explained by the transformational leadership, and ergonomic safety. In the model, all two measures were statistically significant, with transformational leadership recording a higher beta value ( $\beta = .457$ ,  $p < .05$ ), and followed by ergonomic safety ( $\beta = .376$ ,  $p < .05$ ). Thus H1, and H2 were supported.

TABLE IV  
REGRESSION RESULTS

Independent variables	Dependent variable (Intention to stay)
Transformational leadership	.457**
Ergonomic safety	.376**
R <sup>2</sup>	.436
Adj. R <sup>2</sup>	.427
F value	29.281**

Note: \* p<.05, \*\*p<.01

## V. DISCUSSION

The aim of this study was to examine the direct effect of transformational leadership and ergonomic safety on intention to stay. In this study, it was found transformational leadership to influence IT skilled workers' intention to stay. One possible explanation may be that they prioritize the leadership characteristics that managers have such as clear goals, charismatic, and have high self-confidence. Besides assisting in skill development, the manager's main job as a leader is to stimulate employees to do their best work. This is supported by several previous studies that employees in managerial and professional levels consider a vision, goals, values, and he must honor the goals of the business and be likable at the same time. They have to reconcile the needs of top management and the needs of the followers [5], [20].

The current study also found the significant relationship between ergonomic safety and intention to stay. This results shown that ergonomic safety in the organization can provide a new tool to enhance retention programs. This aims can be achieved by adequately identify and control ergonomic stressors and enhancing safety management programs in the workplace [21].

### A. Research Implications

The current research findings have several implications for both theoretical and practice. From the theoretical perspective, the present study has contributed new information to the body of literature especially one that related to employee retention. The present findings have provided with empirical evidence on the direct relationships between transformational leadership, ergonomic safety and intention to stay. In terms of implications for practice, the current research findings have several implications for the managers. The research results demonstrate that IT skilled workers can be retained when managers focus more leadership, and ergonomic safety development programs.

Apart from that, managers should also focus on good leadership skills and ergonomic office environment especially in managing professional and skilled IT workers. Employees who perceived their employers as uncaring or not supporting their needs and well-being may not be happy working with the organization and the tendency for them to leave the organization will be high. In conclusion, it is hoped that results from the study will encourage new thinking among the managers on how to retain their skilled workers.

### B. Limitations and direction for future research

There are limitations in the design of this study that might influence the interpretations and generalizations of these

findings. First, the findings were from employees' perceptions, and thus, subject to possible biases. Second, the data were collected from one particular group of employees (information technology workers) within ICT companies with MSC status, and thus, the findings cannot be generalized to other types of skilled workers or IT workers in other types of companies. Also, the study is limited with the number of variables tested. Therefore, there is a need for future research to extend the exploration of the influence of transformational leadership ergonomic safety on other types of skilled workers in other types of organizations, or to include other variables into the study. In summary, while there are some limitations associated with the approach used here and given the exploratory nature of the study, the results of this research provide useful findings that should be of interest to both researchers and practitioners.

## VI. CONCLUSIONS

The aim of this study was to investigate factors that may influence the intention of IT skilled workers to stay in organization. The main concern of this study was the direct influence of transformational leadership and ergonomic safety on intention to stay, Since all two factors are related with intention to stay, management of organization should consider the importance of good leaderships, and ergonomic safety in the organization. It is hope that through the examination of these factors on intention to stay, a complete understanding of the best approach to retain employees will be achieved.

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