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Article in *International Journal of Academic Research in Economics and Management Sciences* - July 2018

DOI: 10.6007/IJAREMS/v7-i3/4542

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ISSN: 2226-3624

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To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v7-i3/4542>

DOI: 10.6007/IJAREMS/v7-i3/4542

Received: 02 August 2018, Revised: 21 September 2018, Accepted: 23 September 2018

Published Online: 29 September 2018

In-Text Citation: (Rajapakshe, 2018)

To Cite this Article: Rajapakshe, W. (2018). An Analysis of Major Factors Affecting Labor Turnover in the Apparel Industry in Sri Lanka: Policy Alternations for Solving the Problem. *International Journal of Academic Research in Economics and Management Sciences*, 7(3), 214–231.

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Vol. 7, No. 3, July 2018, Pg. 214 - 231

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An Analysis of Major Factors Affecting Labor Turnover in the Apparel Industry in Sri Lanka: Policy Alternations for Solving the Problem

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Abstract: The objective of this study is to investigate and analyze factors, which affect the labor turnover in the apparel industry in Sri Lanka and policy alternations for solving the problem. Population of this study is employees who are currently working in the apparel industry in Sri Lanka. Data was collecting through the questionnaire. The Cronbach's α value of the variables are in the range of 0.75 to 0.93. To test the hypotheses the structural equation modeling approach (SEM) was applied. According to the literature review thirteen research hypotheses were formulated and out of these nine hypotheses were accepted. Given the findings, employees' turnover in the apparel industry is determined by living and social condition, personal characteristics and HRM activities. Among these three variables HRM activities has highest effect on turnover. The impact is moderating with job satisfaction and absenteeism. Hence, apparel industry should heavily focus on the HRM activities. This study suggests that the policy makers of this country should improve the existing laws and regulations regarding basic human rights, Recruitment and selection procedure, career planning and development, motivation, early socialization, labor administration, retirement benefits, and welfare of workers and legislation.

Keywords: Employee Turnover, Structural Equation Modeling, HRM practices, Policy Alteration, and Absenteeism

INTRODUCTION

The development policies laid out by the government in Sri Lanka continuously fostered the growth of the apparel industry. Therefore the apparel industry was rapidly increased and the ultimate result was economy of the Sri Lanka has depended on textile earning. The Central Bank of Sri Lanka in 1977 recorded that the growing rate in apparel sector was 18.7 percent comparing with 5.1 percent growth in 1976. After four decades, in 2017, the Central Bank Report shows that manufacturing activities in this sector expanded by 5.7 percent. According to the Index of Industrial Production (IIP), the production is increased by 4.7 percent in 2017 (Central Bank of Sri

Lanka, 2017). In addition, by December 2017 total export revenue in this sector grew by 19.4 percent (Central Bank of Sri Lanka, 2017).

DailyFT (2018) highlighted that apparel sector has contributed 40 percent of all export in 2017. In addition, the article highlighted that over 300,000 employees are directly working in this sector and majority of them are women. MAS Fabric Park (2018) in their study explains that near 15 percent workforce in Sri Lanka working in the apparel sector and out of that 85 percent is women. However in recent years it has been recognized that labor turnover in the apparel industry is increasing rapidly especially among women workers. Madurawala (2017) explained that labor shortage is excessive in apparel industry due to low social recognition and bad reputation for the job. Further, this report highlighted that female unemployment rate was 7.6 percent in 2015, while male unemployment rate was 3 percent. Even though, there are job opportunities in the sector, women refused to join to the industry or leaving within very short period of time after joining the industry. Dheerasinghe (2003) shows that total average turnover is 60 percent per annum in the industry. However after shifting from one factory to another factory, net turnover is counted as 25 per cent still shows very high. The labor Demand Survey 2017 conducted by Department of Census and Statistics (2018) revealed that there is very high demand for Sewing machine operators, nearly 40 percent of total demand. It is the highest demanded occupation, while second largest demand for other manufacturing labor is only 14.4 percent.

To reduce the labor turnover and increase employee satisfaction, many successive governments in Sri Lanka make policies. To reduce the issues related to the housing facilities “200 garment factories in rural area” program launched in 1994, but in 1996 only 164 factories were in operation and in 2017 most of the factories were closed due to lack of labor (Dailymirror, 2016). To maintain stable income for the workers, minimum wages rate was introduced to the sector. However, still they are struggling, with wages, housing facilities, career development, job security, over work load, transportation facilities and bad reputation for the sector etc. (Rajapakshe, 2015).

Many turnover studies have focused on causes and effects in many other industries. To date, comprehensive and substantial studies have not been conducted to determine the direct causes of turnover in the garment industry in Sri Lanka, though some women’s researchers and organizations have undertaken studies on women’s problems in the workplace. This lack of research could be attributed to the fact that, even though labor turnover causes financial losses and social issues, the problem is often ignored because the issues are indirect and hidden.

Thus, the need for an empirical survey in this industry is essential to identify employees’ real causes for leaving the apparel industry in order to alteration for policy to reduce turnover. This study focuses on the problem of labor turnover in the apparel industry in Sri Lanka. It attempts to identify real causes for higher labor turnover. Until now, no other researchers have attempted to do this sort of comprehensive study and this is the first study to be conducted in this field.

The industrial policy in Sri Lanka, which was announced in 1977, has considered private sector as the engine of growth. To achieve this main objective, government provides incentives for the investors, but pay less attention to labor related issues. Especially none of the government pay attention to formulate government policy to overcome issues relate to the labor turnover in the apparel industry. Major arguments are why labor turnover in the apparel industry

is unusually high and why government does not interfere to grasp this problem strategically by formulating a policy? Therefore need of empirical survey is essential to identify major causes of labor turnover and alterations for existing policies to overcome the issue. The objectives of this study are to identify major factors affecting labor turnover in the apparel industry in Sri Lanka and to recommend a public policy alteration for solving labor turnover issue in the industry.

LITERATURE SURVEY

In every society, there must be existed some problems in many areas and as a result unhappiness of the society can be seen time to time. To address these issues, government intervention is important if it is caused direct among citizens. In order to maintain sustainability and well-being of the citizen most of the government makes public policies. Anderson (2014) defined public policy as “a positive courses of action followed by an actor or set of actors in dealing with a problem or matter of concern”. It is important to attempts to make policies otherwise it may be converted into many socio- economic issues. According to the Anderson (2014) policy problem is “a condition or situation that produces needs or dissatisfaction among people and for which relief or redress is sought”. In the light of a given societal problem, public policy guides and determines present and future public decisions as well as private individual or private business institutional actions, decisions or behavior. To formulate public policy, government has to identify policy problem and formulate policy proposals. Legitimizing public policy is the final step of the policy process. “Policy formulation involves developing pertinent and acceptable proposed courses of action for dealing with public problems” (Anderson, 2014).

The causes and correlates of employee turnover were studied by many different writers in different perspectives. The economists may focus on the relationship between average wages and turnover rates by type of industry. The policy planners may look at turnover rates by occupational category, length of service etc. The sociologist may compare such variables as occupational group, work group size, or communication pattern. The industrial organizational psychologist may study such individual determinants of turnover as job dissatisfaction, or behavioral intentions to leave. Each of these perspectives contribute to understanding of variables for formulate a public policy for employees’ voluntary turnover (March & Simon, 1958; Price, 1975; Mobely, 1977; Bloch, 1979; Cooke, 1980; Ragan & Smith, 1981; William, 1982; Pasternak, 1994; Stum, 1998; and Rajapakshe, 2015).

In many studies on labor turnover identify amount of wages as one of the major causes affect to quit from the job (March & Simon, 1958; Price, 1975; Mobely, 1977; Bloch, 1979; Cooke, 1980; Ragan & Smith, 1981; William, 1982; Pasternak, 1994; Stum, 1998; and Rajapakshe, 2015). These findings support that employees pay considerable attention to wage amount comparing with industry wage levels. However, correlation between wages amount and turnover rates does not itself indicate that leavers migrate to higher paying jobs. But above mentioned scholars were explained that this factor was one of the major causes comparing other causes related to the turnover.

Ragon & Smith (1981) revealed that the difference of wages among gender was another cause for turnover. They mentioned that there was evidence that aggregate relationship between pay levels and turnover rates. This factor alone was not led employees’ to quit from the job. Weerasinghe, Batagoda & Nadeera (2012) found that a retention rate of machine operators in the apparel sector was closely related to the basic salary and welfare facilities

provided by the firm. Occupational category is another factor for employees' intention to quit. Price (1975) and William (1982) integrated published literature on labor turnover by occupational group. They concluded that there was some support for the generalizations for the turnover. Accordingly, turnover is higher: (a) among blue-collar workers than white-collar workers; (b) lower skill levels within blue collar; and (c) non-managerial categories. Sandeepanie & Ubayachandra (2015) found that retention rates of different occupations depend on mixed factors such as salaries, motivations, and promotions amongst other things.

Organizational size may be a cause for high labor turnover rates as well as low turnover rates. Employees in small organizations some time quit to find out job from larger organizations. On the other hand employees in the larger organization might be quit because of low group cohesion, communication problem etc. Even though empirically, some researches revealed this condition, organizational size was an indirect cause for labor turnover (Mobley, 1982; Price, 1975; and William, 1982). Porter & Steers (1973) and Bloch (1979) revealed that longer working periods or shifts may be lead to higher turnover. Work unit size also affected to turnover with intermediate variables such as group cohesion, personalization, and communication (Muchinsky & Tuttle, 1979). William (1982) explained that smaller work unit particularly at the blue-collar level have lower turnover rates.

Job content can be another cause for employee turnover. Main factors categorized in job content are job autonomy, responsibility, recognition and lack of task routinization which are lead to employee motivation (Jegade & Ola-Olorun, 2017). Price (1975), Mobley (1982) and Stum (1998) stressed that there is a weak but consistent positive relationship with routinization and turnover. William (1982) and Graen (1978) indicate a positive relationship between supervisory style and labor turnover. A person oriented supervisory style is negatively correlated with labor turnover while task oriented style has positive correlation. Levi (1984) and Mangione (1973) stress poor working condition such as excessive noise, heat or coldness, poor ventilation, inadequate lighting etc. might be correlated with turnover. William (1982) and Stum (1998) emphasize that there is higher labor turnover rate among casual workers than permanent workers. They mention that job security has strong relationship with turnover. Pasternak (1994) indicates that lack of career opportunities is one of the main causes for labor turnover. Stum (1998) supports and explains that opportunities for future growth directly affected to the retention of job.

Madurawala (2017) states that difficulty to find safe accommodation become less attraction for the apparel industry. Wijesekera (2017) stress that lack of suitable residential facilities lead many employees to quit from the apparel industry. Liyanage & Galhena (2014) in their study highlights that personal factors such as marriage and housing facilities is key to their quit.

Transportation facilities between work place and boarding house are another cause for high turnover. Blue-collar workers especially female who have night shifts become are more concern about transportation facilities (Jayasinghe, 1998; Madurawala, 2017; and Wijesekera, 2017). Cleanliness, social security in day and night around residential as well as working areas has positive correlation with turnover. Stum (1998), Kweller (1998), Madurawala (2017), and Wijesekera (2017) emphasized that this relationship was strong among female workers. Ranasinghe, Madurawala, Su & Senadeera, (2016) highlighted that bad reputation for the job was another issue in this industry. Female factory workers called as "Juki girls" frequently used

by society discourage female workers to continue their service. Madurawala (2017) stated that this term used by society to insult these women considering them as sex workers. Felix Fernando (Quoted in, Wijesekara, 2017), chairman of the Sri Lanka Apparel Exporters Association, says the reputation of the industry's work environment is so negative that even he was initially hesitant to join the business. Athukorala (2017) argued that social stigma against work in zones and difficulties to find reasonable accommodation discourage youth to accept jobs available in zones.

William (1982) and Kweller (1998) explain that marriage has a correlation with turnover. Fernando (Quoted in, Wijesekara, 2017) says. "Many families refused to accept a bride who worked in the apparel sector because of the bad reputation they were supposed to have." Stum (1998), Kweller (1998), Madurawala (2017) and Wijesekera (2017) stressed that child care and pregnancy was another main factor for female employees' to quit. William (1982) and Kweller (1998) further highlight that personal illness especially unable to recover would be lead to quit from the job.

Cooke (1980), Price (1975), William (1982), Mobley (1982), and Stum (1998) emphasize in their studies that one of the major causes affected to the turnover was opportunity to get new job with higher payment or higher grade or match with their career goals. Mobley (1977), Price (1975), and William (1982) argued that neither a strong nor a consistent relationship between education and turnover was evident in the literature. As many turnover studies were based on individuals with similar education, a relationship between turnover and education was difficult to establish. But Bloch (1979) identified that turnover tend to be positively associated with education. He further stresses that number of years of education or more educated employees always try to seek advance career opportunities. "With higher educational qualifications, young girls don't want to come to a garment factory and be a sewing operator," Madurawala (2017) says. "They look for other jobs where they can work on computers or they can interact with people." Therefore, turnover ratio might be increased.

Human resource management activities of any organization can support to decrease turnover and increase employee productivity (Reynolds, 2018). The processes by which, employees select and recruit for jobs offer number of opportunities for more effective turnover management. William (1982) and Wanous (1992) argued that the organizational entry process was one of the determinant factors matching individual and organization. Cheng & Brown (1998) on their empirical survey found out that in proper selection and recruitment was the major cause for turnover. Therefore it is needed to select essential suitable employees for a job and it is necessary human resource function (Reynolds, 2018).

Motivation is an important factor for labor turnover. Kweller (1998); Stum (1998) and Cheng & Brown (1998) explain that motivated employees' turnover is less than demotivated employees'. Early socialization is another cause for employee turnover. Turnover is higher among new recruiters. Socialize them to new environment would take several months but very important. Turnover generates higher cost for recruitment, training and replacement. Lefkowitz (1967), Stum (1998), and (Reynolds, 2018) indicate in their studies familiar to job through early socialization has direct impact on employee retention.

The Mobley (1982) model of turnover highlighted that turnover was related to present satisfaction, and future expectations. Schein (1978), Cheng & Brown (1988) explained that future development was one of the major causes, which may be negatively correlated with turnover. Stum (1998) stressed that out of five ingredients for retention, opportunity for personal growth

was one. Bloch (1979), Cooke (1980) and (Reynolds, 2018) mentioned that training was lead to reduce turnover through their productivity improvement and because of salary increments. (Reynolds, 2018) in his study stressed that tracking method can introduce to identify employees' weaknesses and overcome them might led to reduce turnover.

The Proposed Conceptual Framework

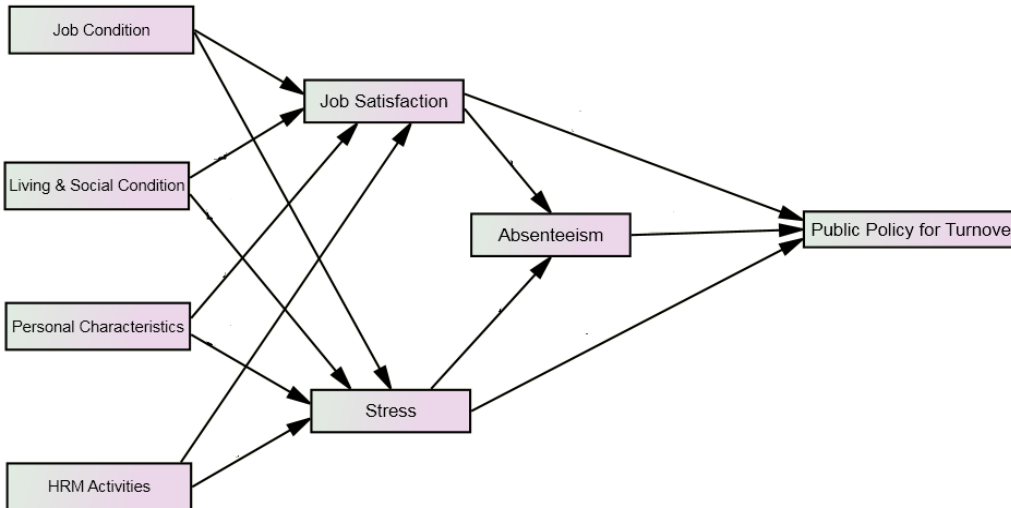


Figure 01: Hypothesized Model relating Public Policy Framework for Labor Turnover

After reviewing the literature above conceptual framework is developed to alterations for public policy to solve labor turnover issue in the apparel industry in Sri Lanka as shown in Figure 01. The apparel industry in Sri Lanka has inherent issues such as low salaries, lack of career opportunities, drawbacks on human resource management practices, unfair social perception and poor living condition etc. Considering those factors after reviewing related literature, four groups of causal factors identified to do alterations for public policy for solving labor turnover issue.

It is basically defined labor turnover as the compound of those four major domains: Job Condition (JC), Living Condition and Social Environment (LS), Human Resource Management Activities (HR) and Personal Characteristics (PC). Among wide variety of causes related to the labor turnover which were identified by early studies, more frequent and more important causes are introduced to the propose model. Observed exogenous variables are as follows.

- **Job Condition:** Salary and other benefits, salary equity, occupational category, number of working hours or shifts, work unit size, job content, working condition, supervision, job security, career opportunities.
- **Living Condition and Social Environment:** residential facilities, transportation facilities, physical environment, social recognition.
- **Human Resource Management Activities:** recruitment and selection, orientation, motivation and training and development.
- **Personal Characteristics:** civil status, childcare and pregnancy, personal illness, new job opportunities, returning to the education.

Observed endogenous variables which are considered as intervening variables are job satisfaction, absenteeism, and stress as shown in the model (Figure 01) that helps explain the relationship between independent variables and dependent variable; public policy for turnover.

Hypotheses

In order to achieve research objectives, it is intended to test the validity of the following hypotheses.

H₁: Job Condition has a positive effect on job satisfaction

H₂: Job Condition has a negative effect on stress

H₃: Living and Social Condition has a positive effect on job satisfaction

H₄: Living and Social Condition has a negative effect on stress

H₅: Personal Characteristics has a positive effect on job satisfaction

H₆: Personal Characteristics has a negative effect on stress

H₇: Human Resource Management Activities has a positive effect on job satisfaction

H₈: Human Resource Management Activities has a negative effect on stress

H₉: Job Satisfaction has negative effect on absenteeism

H₁₀: Stress has positive effect on absenteeism

H₁₁: Absenteeism has positive mediating effect to alteration for labor turnover policy

H₁₂: Job Satisfaction has negative mediating effect to alteration for labor turnover policy

H₁₃: Stress has positive mediating effect to alteration for labor turnover policy

RESEARCH METHODOLOGY

The methodology used for this paper is non-experimental study using survey data collected from sample of apparel industrial workers in Sri Lanka who work in Colombo-Katunayake Free Trade Zone. The data from the sample used for model development, testing and validation. The sample of apparel factories selected judgmentally. It was selected a small number of sample factories from a larger population. Therefore, it is considered appropriate to select the sample on the basis of researchers' own knowledge of the total organizations and the nature of the research objectives. From the selected organizations, 200 apparel workers selected randomly and 181 was responded. Both primary and secondary data used to achieve research objectives. A questionnaire was used to collect data leading to the variables, which are presented in the conceptual model. Secondary data, which are relevant to the study included in the published materials are gathered by way of reference and used for the study.

The explanation of this study was taken place the form of deductive nomological explanation which, approach to causal model. In order to test the validity, the questionnaire is analyzed by path analysis of a policy alteration for turnover causal model. The Structural Equation Modeling (SEM) technique was employed to test the mediating effect of the dependent and independent variables in the analysis. All the hypotheses were tested using path analysis. All the collected data was analyzed with the Statistical Package for Social Sciences (SPSS) and AMOS software. Various fit indices were used to assess the overall fit of the model.

The reliability of the variables in the questionnaire was tested by distributing the questionnaire to the selected number of employees of the sample. The raw data was coded, and the computation has done by using SPSS program of the reliability test. Reliability tests are useful for two purposes. The calculated reliability coefficient, Cronbach's alpha, helps determine the acceptability of the measure. The test procedure also yields a reliability coefficient calculated when each of the items are excluded. If the computed alpha has a value that is greater than the .7 where all the items are included, that respective item is excluded from the scale. Modifications in this fashion are made to improve the internal consistency of the measurement scales. The

Cronbach's α values of the all variables in this study are in the range of 0.75 to 0.93, all of which are above 0.7, and are consistent with the suggested level of 0.7 by Hair, Black, Tatham, Babin and Anderson (2014).

RESEARCH FINDINGS

Descriptive Analysis of Data

The general characteristics of the respondents are showed that 42.7 percent of them are between 18 and 22 years old, and 29.8 percent are between 22 and 26 years old. Nearly 82 percent are less than 27 years old. This indicates that the majority of apparel workers are young women. For marital status, 91 percent are single and the rest are married. For length of service, 31 percent have less than one year of service while 22 percent have between one and two years. Regarding family income per month, 41 percent earned less than US \$20 in family income, while another 41 percent earned between US \$20.01 and 40.00 in family income. With respect to their educational level, 72 percent have passed the G.C.E (O/L) or grade 10 and 19 percent have passed the G.C.E (A/L) or grade 12. Only 9 percent have received a primary education.

These demographic data indicate that the majority of these employees are young, unmarried, less educated, and from lower income family groups. Regarding the length of service, over 50 percent have less than two years of service in the present position. This indicates that the majority is immature and less experienced. These unmarried female workers have a high propensity for resigning from the job. Further, because of the younger age, they may be less responsible in general. Most of them do not survive their probationary period and resign during it. This condition positively affects turnover.

Structural Equation Modeling Analysis

In order to test the proposed conceptual framework, a path analysis was conducted. The indices used for estimating goodness of fit of the model were Chi-square goodness of fit value >3 Straub (1989), Goodness-of-fit Index (GFI) >0.9 (Bentler & Bonett, 1980), Comparison of Fit Index (CFI) >0.9 (Bentler & Bonett, 1980), Tucker Lewis Index (TLI) <0.95 (Hu & Bentler, 1999), Normed Fit Index (NFI) >0.9 , Root Mean Square Error of Approximation (RMSEA) <0.08 (Browne & Cudeck, 1993) and Root Mean Square Residual (RMR) <0.05 (Marsh, Balla & McDonalds, 1988).

The acceptable values for a good fit of the model values for each indices are; Chi-square/Degree of Freedom ($\chi^2/ d.f.$) = 5.2; Goodness-of-fit Index (GFI) = .943; Comparative Fit Index (CFI) = .973; Tucker Lewis Index (TLI) = .918; Normed Fit Index (NFI) = .968; Root Mean Square Error of Approximation (RMSEA) = .154 and Root Mean Square Residual (RMR) = .008. There are no recommended measures of model fit. The results of RMSEA = .154 in this model, is shown that a model fit is neither good nor bad because it is falling between the range of 0.08–0.10 (Cangur & Ercan, 2015). However, according to the literature, these all other six indices of model fit were in accepted level. On the whole, the various fit indices indicate that the research model has a good model fit.

Path Analysis - Hypothesis Testing Results

Figure 02 and Table 01 show the results of path analysis. It indicated that nine out of 13 hypotheses were accepted. Among the external variable of job satisfaction, job condition and personal characteristics did not significantly influence on job satisfaction with β values of .08 and

-.07 respectively ($p > .05$) and living and social condition and HRM activities has significant positive relationship with job satisfaction with β values of .28 and .68 ($p < .05$) respectively. These two variables together with explain 81% of the variance of job satisfaction ($R^2 = 81\%$) and HRM activities is the most influential factor for job satisfaction. Out of four external variables of stress job condition ($\beta = .15$, $p > .05$) and living and social condition ($\beta = .28$, $p > .05$) did not significantly affect employees' stress. However, personal characteristics as well as HRM activities has negative significant relationship with stress with β values of -.27 and .44 ($p < .05$) respectively. Among these two variables HRM activities has more influence on stress and both variables explain 32% of the variance for stress ($R^2 = 32\%$).

The mediating variable of the model absenteeism is depended on job satisfaction and stress. Both of these variables are significantly influence on absenteeism. Job satisfaction has significant positive effect with β values of .60 ($p < .05$) and stress has significant negative effect with β values of .13 ($p < .05$). Among them effect of job satisfaction is higher than stress. Finally, alteration of public policy for labor turnover is jointly predicted by absenteeism ($\beta = .82$, $p > .05$), stress ($\beta = -.10$, $p > .05$) and job satisfaction ($\beta = .20$, $p > .05$) and these three variables together explain 86% of the variance in labor turnover public policy. Among these three variables, absenteeism is the highest influential factor for turnover policy.

Table 01 Hypothesis Testing Results

			Path Coefficient	P	Supported
H ₁	Job Satisfaction	<--- Job Condition	.076	.103	No
H ₂	Stress	<--- Job Condition	.153	.086	No
H ₃	Job Satisfaction	<--- Living and Social Condition	.283	.002	Yes
H ₄	Stress	<--- Living and Social Condition	.278	.106	No
H ₅	Job Satisfaction	<--- Personal Characteristics	-.070	.295	No
H ₆	Stress	<--- Personal Characteristics	-.268	.037	Yes
H ₇	Job Satisfaction	<--- HRM Activities	.677	***	Yes
H ₈	Stress	<--- HRM Activities	.445	.040	Yes
H ₉	Absenteeism	<--- Job Satisfaction	.599	***	Yes
H ₁₀	Absenteeism	<--- Stress	.129	.043	Yes
H ₁₁	Public Policy for Turnover	<--- Absenteeism	.824	***	Yes
H ₁₂	Public Policy for Turnover	<--- Job Satisfaction	.198	***	Yes
H ₁₃	Public Policy for Turnover	<--- Stress	-.101	.002	Yes

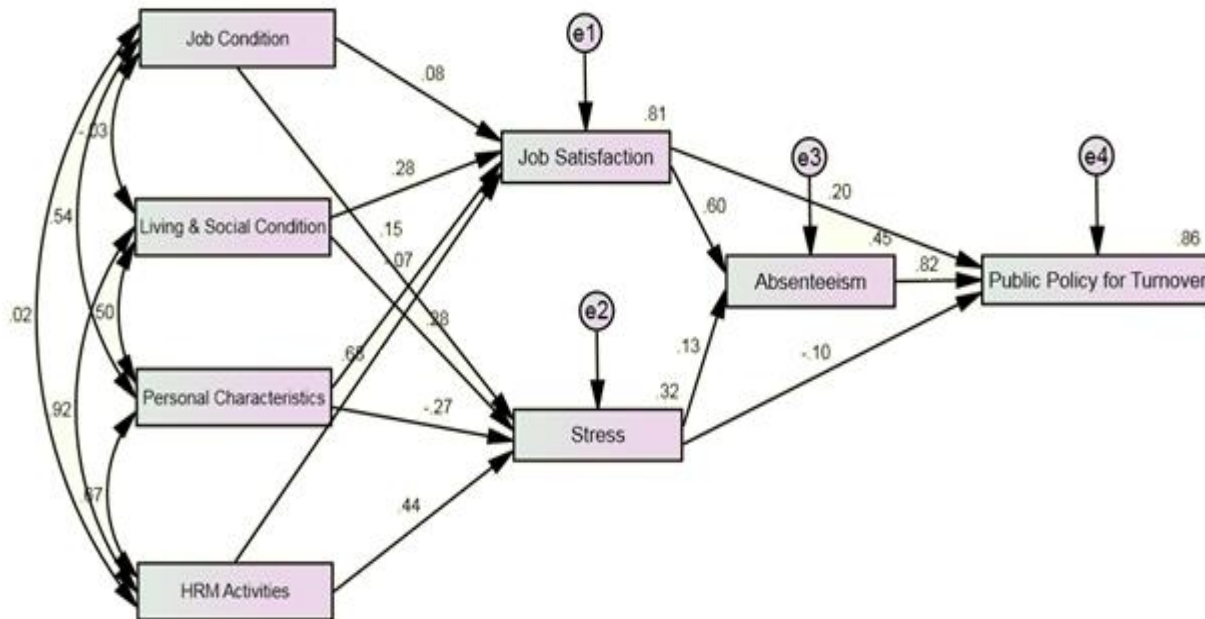


Figure 02: Standard Path Coefficient of the Research Model

In a path diagram, causal effect of the latent variables can be described with direct effect, indirect effect and total effect (Bollen, 1989). As shown in Table 02, HRM activities have a 0.445 direct effect shown a medium significant effect on stress. The four determinants account for approximately 32% of the variance in stress to adopt the proposed turnover model, with direct effects of 0.445, -0.268, 0.278 and 0.153, respectively. However, last three variables, personal characteristics, living condition and social condition and job condition have no significant influence on turnover model. HRM activities have a .677 direct effect on job satisfaction indicates that large impact on job satisfaction. Personal characteristics, living condition and social condition and job condition have respectively, -.070, .283 and .076 direct but no significant effect on turnover policy. However, these four variables together explain 81% of the variance in job satisfaction to adopt turnover policy. This shows that HRM activities have a large impact on labor turnover policy in apparel industry.

As shown in Table 02, absenteeism determines on six variables approximately explained 45% variance to adopt public policy for turnover. Among them HRM activities have .463 indirect effects shown a medium significant effect. In addition, job satisfaction has .599 direct and large effects on absenteeism. All other variables which have indirect effect as shown in Table 02, personal characteristics (-.077), living condition and social condition (.205) and job condition (0.065) do not have significant impact. Stress has direct impact (.129) also not significant.

Public policy for turnover is determined by seven variables with approximately 86% of the variance. This is largely due to the effects contributed by HRM Activities (.471), absenteeism (.824) and job satisfaction (.692), thus stressing the importance of the relationship among these three variables. However, for stress (.005), this endogenous variable shows no significant effect on public policy for turnover compared to the other two endogenous variables; job satisfaction and absenteeism, as shown in Table 02. Personal characteristics (-0.50), living condition and social condition (.197) and job condition (.054) are observed exogenous variables do not have

significant effect on labor turnover policy. However, HRM activities, a exogenous variables has indirect but positive medium effect (.471) on labor turnover policy as shown in Table 02.

Table 02: Standardized Causal Effects

Dependent Latent Variables	Independent Latent Variables	Standardized Estimates		
		Direct	Indirect	Total
Stress (R ² =0.32)	HRM Activities	.445	---	.445
	Personal Characteristics	-.268	---	-.268
	Living and Social Condition	.278	---	.278
	Job Condition	.153	---	.153
Job Satisfaction (R ² =0.81)	HRM Activities	.677	---	.677
	Personal Characteristics	-.070	---	-.070
	Living and Social Condition	.283	---	.283
	Job Condition	.076	---	.076
Absenteeism (R ² =0.45)	HRM Activities	---	.463	.463
	Personal Characteristics	---	-.077	-.077
	Living and Social Condition	---	.205	.205
	Job Condition	---	.065	.065
	Stress	.129	---	.129
	Job Satisfaction	.599	---	.599
Public Policy for Turnover (R ² =0.86)	HRM Activities	---	.471	.471
	Personal Characteristics	---	-.050	-.050
	Living and Social Condition	---	.197	.197
	Job Condition	---	.054	.054
	Absenteeism	.824	---	.824
	Stress	-.101	.106	.005
	Job Satisfaction	.198	.494	.692

DISCUSSION AND CONCLUSION

When the export oriented industrialization strategy was introduced in Sri Lanka, as a full package after 1977, the main assumptions made were that reduce poverty and large unemployment were due to lack of capital, technology and access to international market. Even though it has not planned, it was identified that apparel industry was became the major sector comparing other manufacturing industries. However, it has been recognized that high labor turnover of this industry. The purpose of this research is to uncover employees' attitudes towards the labor turnover and develop and tests casual to make recommendations for government action to resolve this problem.

The result of the structural equation modeling approach shows that strong evidence for the theoretical validity of variables. The estimate of 0.81 for the job satisfaction (R² = 81%); 0.45 for the absenteeism (R² = 45%); 0.32 for stress (R² = 32%), for these paths shown good support for the labor turnover policy. The estimate of 0.86 for the public policy for labor turnover (R² = 86%) shows that labor turnover as perceived by apparel workers are both directly and indirectly

mediated by job satisfaction, stress and absenteeism as shown in the Figure 02. Therefore, as a whole, the model has strong explanatory power for altering policy for labor turnover within the proposed conceptual framework. According to the literature review thirteen research hypotheses were formulated to achieve the objectives. Out of these thirteen hypotheses nine hypotheses are accepted. Therefore, these rejected variables have been eliminated from the models as a result of the lack of significance with the dependent variable, the labor turnover.

The results of the observed endogenous variables indicate that job satisfaction ($R^2 = 81\%$) is the most significant factor influencing labor turnover. In addition, absenteeism ($R^2 = 45\%$) and stress ($R^2 = 32\%$) has moderate impact on labor turnover. Comparing with direct and indirect effect of observed exogenous variables, HRM activities has high impact. HRM activities have direct moderate effect on stress, absenteeism and turnover and higher direct effect on job satisfaction as shown in Table 02. These results prove with Cheng & Brown (1998), Williams (1982), Wanous (1980) who emphasized that recruitment and selection had impact on labor turnover. Kweller (1998), Sum (1998) and Cheng and Brown (1998) revealed that employee motivation had direct impact on labor turnover. In addition, another HRM activity early socialization had impact on labor turnover was highlighted by Lefkowitz (1967), Stum (1998), and Reynolds (2018). Mobley (1977), Schein (1978), Cheng & Brown (1988), Stum (1998), Bloch (1979), Cooke (1980) and (Reynolds, 2018) mentioned that career planning and development is another important HRM activity which influenced turnover. Accordingly, it is proved that result of this study is matched with the previous research findings. HRM activities are inferred to be the biggest determinant among the antecedent constructs of labor turnover policy. That is, job satisfaction is the strongest predictor of labor turnover, followed by absenteeism, and stress.

Job satisfaction depend on job condition (H_1), living and social condition (H_3), personal characteristics (H_5), and HRM activities (H_7). However, the results of the analysis shows that job condition (H_1) and personal characteristics (H_5) were rejected. These findings is not matched with the previous studies like, March & Simon (1958), Price (1977), Mobely (1977), Bloch (1979), Cook (1980), Ragan & Smith (1981), William (1982), Pasternak (1994), Stum (1998), and Rajapakshe (2003). However, living and social condition (H_2) and HRM activities (H_4) have significant correlation at the 0.05 level of significant on job satisfaction. These findings matched with the research of Rajapakshe (2015), Madurawala (2017), Wijesekera (2017) and Liyanage & Galhena (2014).

According to the current study, stress depend on job condition (H_2), living and social condition (H_4), personal characteristics (H_6), and HRM activities (H_8). The results show that there is no correlation between job condition (H_2) and living and social condition (H_4) with stress. This is not matched with the previous studies like Stum (1998), Kweller (1998), Rajapakshe (2015), Madurawala (2017) and Wijesekera (2017) who highlighted that job condition has a significant factor for stress among employees. Moreover, a result of the H_4 shows that living and social condition has no impact on stress. This finding of the current study is not match with the studies who mention that social decimation and bad reputation might be a cause for turnover (Rajapakshe, 2015; Madurawala, 2017; Senadeera, 2016 and Athukorala, 2017). Finding of the hypotheses related to personal characteristics (H_6), and HRM activities (H_8) has accepted and the analysis shows that there is a significant correlation between stress and these two variables at the 0.05 level of significance. These results are matched with the findings of the previous studies like (Rajapakshe, 2015; Madurawala, 2017; Senadeera, 2016 and Athukorala, 2017).

Comparing with the observed exogenous variables, job condition has not impact on job satisfaction as well as stress. Living and social condition has impact on job satisfaction only and personal characteristics have impact on stress only. However, the results show that HRM activities are significantly correlated with job satisfaction (.677) as well as stress (.445) and has direct effect (0.471) on turnover at the 0.05 level of significance. This means that HRM activities of the apparel industry are the most significant affect for employees the intention to quit.

H₉ and H₁₀ show the relationship between job satisfaction and stress on absenteeism. Both these hypotheses were accepted at the 0.05 significant levels. Among these two variables job satisfaction has 0.599 high total effect on absenteeism but total effect on stress over absenteeism is low (.129). H₁₁, H₁₂ and H₁₃ show that relationship between absenteeism, stress and job satisfaction over labor turnover. All these three hypotheses were accepted at the 0.05 level of significance. Among these three endogenous variables, absenteeism (.824) and job satisfaction (.692) has higher total effect than stress (.005).

Given the above findings, employees' turnover in the apparel industry is determined by living and social condition, personal characteristics and HRM activities. The impact is moderating with job satisfaction and absenteeism. Hence, apparel factories should heavily focus on the HRM activities such as recruitment and selection, employee motivation, early socialization as well as career planning and development. These issues and challenges go beyond what most government policy-makers and theorists have not yet recognized. Thus, government intervention to solve the labor turnover issue is largely an unanswered challenge. Reviewing the findings, government intervention would effectively help to reduce the existing labor turnover problem. The apparel industry is a major player in the economic activity of Sri Lanka. Its present vibrant nature is a combination of its own initiative and facilities granted by the government. The industry enjoys benefits and the government receives revenues. Both parties, therefore, have a specific role to play on labor issues. However, these results show that there is impracticality in existing rules and regulations. Thus, the government attention has to be led to revise and develop long term policy to resolve the problem. It is imperative that the policy makers of this country should formulate a long-term policy on the labor turnover in the apparel industry. This should encompass basic human rights, recruitment and selection procedure, career planning and development, motivation, early socialization, labor administration, retirement benefits, and welfare of workers and legislation.

CONTRIBUTION TO THE FIELD

This study provides contributions to theory as well as to measurement. The questionnaire used in the study is a worthy contribution to the field. The construct validity of all the scales were tested with confirmatory factor analysis. Reliability tests also provide high scores, over .7 for all variables. These high alpha values provide better evidence of the reliability of the measurement. The scale used to measure the labor turnover index was derived from Stum (1998:2) and modified to match the employees' intentional behavior to quit and the culture of the garment industry in Sri Lanka. Thus, this new labor turnover index is a valuable addition to the measurement field.

The public policy process starts from problem identification. This study provides empirical evidence to show how practical problems can be identified to formulate policy. Further, it was clearly showed with a public issue. The labor turnover of apparel employees' first

emerged at the individual level. However, with the EPZs being in Sri Lanka for over 40 years, this has turned into a public issue, and the government pays a lot of attention to solving this issue. This study provides sufficient knowledge to public policy makers on how they can identify determinant factors to develop sound policies and solve problems.

This study is well grounded in the existing turnover theories, and the results are empirically sound from personal experience. Thus, this model provides better understanding of the existing employees' intention to quit. Managers can use this model to determine why employees' leave and which causes are more related to these movements. This information is helpful to managers to predict their turnover and take necessary actions to solve this problem.

REFERENCES

- Anderson, J. E. (2014). *Public policymaking: An introduction*. 8th Ed., Cengage Learning.
- Athukorala, P. (2017). Manufacturing Exports from Sri Lanka: Opportunities, Achievements and Policy Options. Working Papers in Trade and Development. *Working Paper No. 2017/03*, Australian National University. Retrieved from https://acde.crawford.anu.edu.au/sites/default/files/publication/acde_crawford_anu_edu_au/2017-04/2017-03_athukorala_sl_export_12april2017.docx.pdf.
- Bentler P.M. and Bonett D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88 (3), 588-606.
- Bollen, K. A. (1989). *Structural equation modeling with latent variables*. New York, NY: John Wiley.
- Bloch, F.E. (1979). Labour Turn Over in US Manufacturing Industries. *The Journal of Human Resource Management*. XIV (2), 236-246.
- Browne, M.W. and Cudeck, R. (1993). *Alternative ways of assessing model fit*. In K.A. Bollen and S. Long (eds), *Testing Structural Equation Models*, (pp: 136- 162). Newbury Park: Sage.
- Central Bank of Sri Lanka (CBS). (2017). *The Annual Report*. Central Bank Publications, Sri Lanka.
- Cheng, A. and Brown, A. (1998). Labor Turn over in Hotel Industry: A Comparative Study of Australia and Singapore. *The International Journal of Human Resource Management*. 9(1), 136-154.
- Cooke, W.N. (1980). Turnover and Earnings: The Scientist and Engineer Case. *The Journal of Human Resource Management*. XV (3), 435-443.
- Cangur, S. and Ercan, I. (2015). Comparison of Model Fit Indices Used in Structural Equation Modeling Under Multivariate Normality, *Journal of Modern Applied Statistical Methods*, 14 (1), 157. Retrieved from <https://digitalcommons.wayne.edu/cgi/viewcontent.cgi?article=1810&context=jmasm>.
- DailyFT, (2018). Sri Lanka achieves record exports in 2017. DailyFT e-paper. Retrieved from <http://www.ft.lk/top-story/Sri-Lanka-achieves-record-exports-in-2017/26-647750>.
- Department of Census and Statistics, (2018). *Labor Demand Survey 2017*. Ministry of National Policies and Economic Affairs. pp: 29. Retrieved from http://www.statistics.gov.lk/industry/Labour_Demand_Survey_2017_Report.pdf
- Dheerasinghe, R. (2003). Garment Industry in Sri Lanka Challenges, Prospects and Strategies, *Staff Studies* No. 33. pp: 52. Retrieved from <https://ss.sljol.info/article/10.4038/ss.v33i1.1246/galley/1141/download/>

- Graen, G.B. (1978). *Role-Making Processes within Complex Organizations in Handbook of Industrial and Organizational Psychology*. Rand Macnally, (Eds). (pp:25-26). US: Prentice Hall.
- Hair, J.F., Black, W.C., Tatham, R. L., Babin, B.J. and Anderson, R.E. (2014). *Multivariate Data Analysis*. 7th Ed., Pearson.
- Hu, L., and Bentler P.M., (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6 (1),1-55.
- Jayasinghe, R.S. (1998). Employees Experience of 20 years FTZs in Sri Lanka, *Sunday Lankadeepa News Paper*. Wijaya News Paper Press.
- Jegade, A and Ola-Olorun, O. (2017). Effects of Work Content and Work Context on Job Motivation of Hospital Pharmacists, *Global journal of Pharmacy and pharmaceutical Science*. 1 (3). DOI: 10.19080/GJPPS.2016.01.555561
- Kweller, D.S. (1998). The Emerging Models of Absence Management. *HRFocus*. 75(8).
- Levi, L. (1984). Stress in Industry, Causes, Effects and Prevention. *International Labor Office. Geneva*. Retrieved from http://ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_250130.pdf
- Lefkowitz, J. (1967). *How to Diagnose and Control Personnel Turnover*. New York: BFS Executive Communications.
- Liyanage, D. and Galhena, B. (2014). Determinants of Turnover Intention of Sewing Machine Operators: Case from leading Apparel Company. *Kelaniya Journal of Management*. 1(2), 107–123. DOI: <http://doi.org/10.4038/kjm.v1i2.6535>.
- Madurawala, S. (2017). Dwindling Stitching Hands- Labor Shortages in Apparel Industry in Sri Lanka. *Daily Mirror (e-edition)*. Retrieved from <https://www.pressreader.com/sri-lanka/daily-mirror-sri-lanka/20170404/282660392268319>.
- Mangione, T.W. (1973). *Turnover: Some Psychological and Demographic Correlates*, University of Michigan Press. US.
- March, J.G. and Simon, H.A. (1958). *Organizations*. New York: Wiley.
- Marsh, H.W., Balla J.R., and McDonald R.P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: the effect of sample size. *Psychological Bulletin*, 103 (3), 391-410.
- MAS Fabric Park, (2018). *Textile and Apparel Industry*, Retrieved from http://www.masfabricpark.com/textile_apparel_industry.html
- Mobley, W.H., (1977). Intermediate Linkages in the Relationship between Job Satisfaction and Employee Turnover. *Journal of Applied Psychology*. 62 (2), 237:240.
- Mobley, W.H., 1982. *Employee Turn Over: Causes, Consequences and Control*. USA: Addison-Wesley Publishing Co; Ltd.
- Muchinsky, P.M., and Tuttle, M.L., (1979). Employee Turnover: An Empirical and Methodological Assessment. *Journal of Vocational Behavior*. 22, 263-90.
- Pasternak, C., 1994. Turnover Treat. *HR Magazine*. 22:20.
- Porter, L.W., and Steers, E. E., (1973). Organizational Work and Personal Factors in Employee Turnover and Absenteeism. *Psychological Bulletin*. 22 (2), 151-76.
- Price, J.L., (1975). *A Theory of Turnover, Labor Turnover and Retention*. B.O. Pettman, (Eds.) U.K: Biddles Ltd. pp: 51-72.

- Ragan, J.F., and Smith, S.P., (1981). The Impact of Differences in Turnover Rates on Male/Female Pay Differentials. *The Journal of Human Resource Management*. XVI, (3), 343-363.
- Ranasinghe, A., Madurawala, S., Su, J.J., and Senadeera, T., (2016). An Empirical Investigation of Labor Shortage in the Manufacturing Sector in Sri Lanka. (Eds.) Rohde, N., and Naranpanawa, A., *Discussion Paper Series No. 2016-5, Griffith Business School*. Retrieved from https://www.researchgate.net/profile/Sc_Thushara/publication/316981955_An_empirical_investigation_of_labor_shortage_in_the_manufacturing_sector_in_Sri_Lanka/links/591b92b6aca272bf75c7a457/An-empirical-investigation-of-labor-shortage-in-the-manufacturing-sector-in-Sri-Lanka.pdf
- Reynolds, M., (2018). The Impact of HR on Turnover and Productivity, *Chron.com*. Retrieved from <http://smallbusiness.chron.com/impact-hr-turnover-productivity-60562.html>
- Rajapakse, W., (2015). *An Alternative Model for Employees' Voluntary Turnover*. Germany. LAP Lambert Academic Publishing
- Schein, E.H., (1978). *Career Dynamic: Matching Individual and Organizational Needs*. Reading, USA: Wesley Press.
- Sandeepanie, M.H.R. and Ubayachandra, E.G., (2015). Different Factors affecting on Employee Motivation in Sri Lankan Apparel Manufacturing Sector. *Proceedings of 8th International Research Conference. KDU*. pp: 168-176.
- Straub, D.W., (1989). Validating instruments in MIS research. *MIS Quarterly*. 13 (2), 147-169.
- Stum, D.L, (1998). Five Ingredients for and Employee Retention Formula, *HRFocus*, 75 (9), s9-s12.
- Wanous, J. P., (1992). *Organizational entry: Recruitment, selection, orientation, and socialization of newcomers*. Reading, MA: Addison Wesley
- Weerasinghe, T.D., Batagoda, C.K. and Nadeera, M.G.N.L., (2012). Impact of Rewards on Retention of Workers: A Study of Operative Level Employees in the Apparel Industry, *Proceedings of Jaffna University International Research Conference (JUICE-2012)*, pp: 79-86.
- Wijesekera, M., (2017). Sri Lankan Garment Factories Boost Wages and Benefits as Labor Shortage Looms, *Global Press Journal*, Sri Lanka. Retrieved from https://globalpressjournal.com/asia/sri_lanka/sri-lankan-garment-factories-boost-wages-benefits-labor-shortage-loom/?utm_content=bufferbe5bcandutm_medium=socialandutm_source=facebook.comandutm_campaign=buffer
- William, M.H., (1982). *Employee Turnover: Causes, Consequences and Control*. Addison-Wesley Publishing Co; Ltd.

Acknowledgement

The authors acknowledge the support provided by the Sri Lanka Institute of Information technology (SLIIT) Sri Lanka for carrying out the research work. The author also is highly thankful to the panels and anonymous reviewers and editors for valuable and on earlier version of this manuscript.

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