

Management Issues, Volume 3 -Issue(I), December -2018

Research Publication **Management Issues**



The Open University of Sri Lanka
Faculty of Humanities and Social Sciences
The Department of Management Studies
Nawala, Nugegoda

ISSN 2513-2377

Management Issues

Volume 3-(Issue I), December 2018.

Editor in Chief

Dr. H.D.D. Champika Liyanagamage

Editorial Board

Dr. L.P.S. Gamini
Dr. S. Sapukotanage
D.L. Bataduwa Arachchi
C.P. Weerasekera

Advisory Board

Senior Professor H.D. Karunaratna
Senior Professor R. Lalitha S. Fernando
Professor V.Sivalogathan
Professor Nalin Abeysekera

Panel of Reviewers

Professor V.Sivalogathan
Professor Nalin Abeysekera
Dr L.P.S. Gamini
Dr. S.J.M.P.U. Seneviratne
Dr. S. Sapukotanage
Dr. S.S.K. Edirisinghe
K.P. Nishantha
K.P.J.M. Pathirana
C.P. Weerasekera
W.A.R. Senevirathna
H. M. J. C. B Heenkenda
D.L. Bataduwa Arachchi

Language Editing

D.L. Bataduwa Arachchi

Copyright © The Open University of Sri Lanka

ISSN 2513-2377

Reprints and permissions: deanfms@ou.ac.lk

Published by:

Faculty of Management Studies,
The Open University of Sri Lanka
Nawala, Nugegoda.

Management Issues

Volume 3-(Issue I), December 2018

Contents

	Page
Editors' Note	<i>iii</i>
The Mediation Effect of Work-Life Balance on the Relationship between Psychological Empowerment and Job Satisfaction among Female Bank Employees of Sri Lanka <i>De Zoysa W. M. and Sivalogathan V.</i>	<i>1-8</i>
Investigating the Level of Consumer Ethnocentrism among Milk Powder Consumers in Sri Lanka with Special Reference to Panadura City <i>Chamali W.A.D.N., Rodrigo H.E and Lakmali A. A. I.</i>	<i>9-23</i>
The Critical Success Factors of Service Delivery in Offshore Outsourced IT Projects in Sri Lanka: From an IT Worker's Perspective. <i>Gamini L.P.S and Lisk D.</i>	<i>24-30</i>
Patients' Satisfaction of the Service Quality of Pharmacy in the Government Hospitals in Sri Lanka <i>Kumaranayake S., Senevirathne W.A.R and Silva G.A.J.</i>	<i>31-42</i>
Impact of Work Life Balancing Determinants on Job Satisfaction of Accountants: Special Reference to Employee's Personal, Family and Work Engagement <i>Nilanka P.G.K. and Bataduwaarachchi D.L.</i>	<i>43-51</i>
Innovation Practices of Large-Scale Manufacturing Organizations Located in Industrial Estates in the Western Province Of Sri Lanka. <i>Ranaweera S. and Sivalogathan V.</i>	<i>52-68</i>

Editors' Note

“*Management Issues*”, a research publication proudly completing its third year, the result of a genuine effort made by the Faculty of Management Studies of the Open University of Sri Lanka to fill the vacuum that exist in the field of management, has come a long way since the inception. . Over the past two years, the editorial board of the journal has strived hard to contribute to the academic discourse surrounding management issues encountered by numerous business organizations by publishing articles of both students and established scholars in the faculty.

As the new editor in chief in this journal I would like to acknowledge and appreciate the effort of the previous editors of *Management Issues* for creating a strong vision and infusing a wealth of knowledge through the journal. The process of editing an academic journal makes the editor to be mindful of the finer areas in the field of research. This editorship provided me with an opportunity to bring into light how the research can be directed to bring about practical solutions to various management issues encountered by modern day organizations.

Turning to our current issue, we again present a diverse selection of stimulating articles from both scholars and students. *Management Issues* Volume 3 provides a really exciting opportunity to gain true knowledge on interdisciplinary nature of management issues faced by organizations that operate in dynamic business environment.

Our editorial board has left no stone unturned in ensuring that both authors and readers get satisfying experience through this publication. While thanking the support extended by our advisors, reviewers and the editorial staff in finalizing this publication, we proudly present Volume 3 of the annual research publication of the Faculty of Management Studies, and sincerely hope that this tripartite support will continue in the future to make *Management Issues* one of the leading research publications in Sri Lanka.

Dr. H.D.D. Champika Liyanagamage

Editor-in Chief

**THE MEDIATION EFFECT OF WORK-LIFE BALANCE ON THE
RELATIONSHIP BETWEEN PSYCHOLOGICAL EMPOWERMENT AND JOB
SATISFACTION AMONG FEMALE BANK EMPLOYEES OF SRI LANKA**

De Zoysa W. M.¹ and Sivalogathan V.²

*Faculty of Management Studies,
Open University of Sri Lanka, Nawala, Sri Lanka.*
¹manjulie.dezoysa@gmail.com ²vsiva@ou.ac.lk

Abstract

The objective of this empirical study is to identify the Mediation Effect of Work-Life Balance on the Relationship between Psychological Empowerment & Job Satisfaction among Female Bank Employees of Sri Lanka. With the increasing work pressure, “one of the major challenges”, faced by today’s working women is to have more vigilant and individualized job responsibilities along with the initiatives taken to balance their personal and domestic or family life obligations. This milieu is more apparent in the banking industry, where work pressure is seemingly higher. This is mainly due to the stringent and strict controlling measures taken to safe guard the deposit liabilities and to avoid any unlawful transactions, in addition to maximizing shareholder wealth while safeguarding stakeholder interests. This has resulted in potential operational risks, substantial financial losses and reputational concerns .Probability sampling method, namely cluster random sampling was used to select the sample target population of 300 female banking employees serving at middle-management level. With the time and accessibility constrains a well-designed questionnaire was distributed among 300 target population i.e. 200 in Western and 50 each in Central and Southern provinces only. The data was analysed by SPSS Version 20. Results confirmed the existence of Significant Positive Correlations among 1) Psychological Empowerment and Work–Life Balance, 2) Work–Life Balance and Job Satisfaction, 3) Psychological Empowerment and Job Satisfaction and 4) The mediation effect of Work–Life Balance to the relationship between Psychological Empowerment and Job Satisfaction.

Keywords: Psychological Empowerment, Job Satisfaction, Female Bank Employees, work life balance, work engagement.

Introduction

The reference to this study was based on the “Women at Work: The Course for Sri Lanka’ (ILO 2018), which emphasizes barriers faced by female employees in contributing towards the National Economy of Sri Lanka. Sri Lankan Banking sector is a highly labour-intensive industry which is the driving force of the economy with a female participation of 45% approx.(table 1) that is higher than the general composition of female worker participation in the labour force (table 2) of Sri Lanka.

Table 1: Employment Details of Major Banks in Sri Lanka – 2017

	Name of the Bank	No. of Male	%	No. of Female	%	Total
1	BOC	3,262	43	4,325	57	7,587
2	PEOPLES	3,382	40	5,072	60	8,454
3	NSB	2,459	55	2,011	45	4,470
4	HNB	2,615	60	1,733	40	4,348
5	COMMERCIAL	3,769	75	1,213	25	4,982
6	SAMPATH	2,611	65	1,400	35	4,011
7	SEYLAN	1,855	58	1,344	42	3,199
8	NDB	1,329	61	840	39	2,169
9	NTB	1,766	60	1,177	40	2,943
	Sub Total	23,048	54.66	19,115	45.33	42,163

Female Bank Employees 45 % of 50,163 = 22,573
 Union/Cargill’s/Citi/Deutsche/Rural/Sanasa/Foreign, etc.)
 reports 2017 of respective Banks & Central Bank of Sri Lanka

Table 2: Employment Details of Labour Force of Sri Lanka

Carder	Number (mn)	%
Male	5,328,290	64.20
Female	2,971,621	35.80
Total	8,299,911	100.00

Source: Page vii Highlights Sri Lanka Labour Force Survey Quarterly Report 2017 Fourth Quarter Department of Census & Statistics Ministry of National Policies and Economic Affairs

Job Satisfaction of female employees in this industry is directly affected by 365 x 24/7 and weekend banking. Adhering to the stringent controls of the regulatory authorities and legal frame work while meeting the intense demands from customers and stakeholders further adds a tremendous pressure on these employees. Employee's Job Satisfaction and Job Stress considered as two main work place issues (Hoboubi et.al 2017). There is a positive association between WLB and Job and Life satisfaction. (Har et.al, 2014). An employee or manager's mental and physical well-being of empowerment is being influenced by their work-life balance. (Akdağ, 2012). WLB becomes more challenging for female employees to make their career versus family decision with the very high degree of gender stereotyping, especially in this part of the world (Dessler, 2006). Therefore Female bank employees are affected by the consequences of the favourable or adverse effects of managing their Work-Life balance of personal lives and job-related demands. The said factor has a retrospective effect on their psychological Empowerment and Job Satisfaction.

Literature Review

Psychological Empowerment: is "an intrinsic self-feeling of motivation of an individual, which is reflected upon the sense of self-discipline of an employee, related to their job, which has an active involvement or impact on their job role". The four dimensions of Psychological Empowerment model are (Dessler, 2006), an employee feels that they have (a) self-determination or Autonomy, (b) personal "Meaning", (c) "Competence" and (d) "Impact" An employee feels that he/she posses the above to perform their job for self and employer's satisfaction. These four dimensions of PE, are independently and distinctly interrelated and yet, mutually reinforcing. This captures the qualities of a dynamic state or active orientation towards work. Any business is under strenuous pressure to increase performance of their employees to gain competitive advantage (Akdağ, 2012). Psychological empowerment improves an employee's sense of own control and persuades he/she to perform better with higher motivation for a more positive managerial thus overall organizational outcomes (Quinn & Spreitzer, 1997).

Work-Life Balance: This could be defined as 'the fit' between multipel life rolles of an individual and its satisfaction (Clarke et al 2004). The contenment of an individual is derived out of by being able to have a balance within their life's roll of employment and personal life or having minimum role conflicts in those two domains. Imbalances occur when the dissatisfaction emmerges out of by not being able spend sufficient time requird for each domain. That is where the presure from one of those rolls leads to a difficulty in complying with the demand for the other (Greenhaus & Beutell, 1985). Work and Family Life Balance could be detailed as an "Personal comfortable state of equilibrium in individual is achieved between an individual's personal or domestic life priorities and with the Job demands and obligations towards their employment or profession" or "The absence of unacceptable levels of conflict between work and non-work demands" (Wessels, 2012). The concept of work-life balance focuses on the quality of individuals working life and their personal life (Akdağ, 2012). This is highly a sensitive and subjective aspect dependent upon an individual's life style and upbringing. The most influential and researched theory of WLB is the spill-over approach which specifies the interconnections in work and non-work domains of an employee (positive or negative) in emotional or behavioural aspects, that influence on one another despite any physical or temporal boundaries (Wessels, 2012).

Job Satisfaction: Employees are the basis for the competitive advantage of any organization. The organizational viability and efficiency is highly dependent upon outcomes of employee's performance. Moreover, employee performance is instrumental to organizational development and productivity (Inuwa 2016). People with intrinsically negative personalities are more prone to gain less satisfaction in their Jobs rolls than those who are with positive personality traits. Further productivity, work commitment, employee turnover, absenteeism and the end result

of the employment, i.e. customer satisfaction have a direct correlation and these influence the JS of an employee (Robbins et al, 2007). The commonly accepted notion for JS, i.e. “The pleasurable emotional state resulting from the perception of one’s job as fulfilling or allowing the attainment of one’s important job values (Locke, 1976).

Hypothesis Development

Psychological Empowerment and Work Life Balance: Psychological empowerment occurs when employees perceive that they exercise some control over their work lives or an perceived orientation of an individual towards their work (Spreitzer, 1995) and furthermore empowerment is defined as intrinsic motivation manifested in four cognitions reflecting an individual's orientation to his or her work and family role. The negative interference in between employment and personal life affaires are being significantly affected by the low level of psychological well-being and physical health (Grant-Vallone & Ensher, 1998).

H1: There is a positive relationship between Psychological Empowerment and Work-Life Balance

Work-Life Balance and Job Satisfaction: The present conflicting situation between work and home life of an employee results in their job dissatisfaction. This creates an increasing tendency in organizations to use (WLB) initiatives at the recruitment and to also retain key personnel (Smith, 2007). Higher the level of an individual’s ability to attain a balance in their work and personal lives, the higher will be his/her job commitment and job satisfaction or work life balance conditions and therefore, job satisfaction is having a deep impact on an individual (Pathak 2019).

H2: There is a positive relationship between Work-Life Balance and Job Satisfaction.

Psychological Empowerment and Job Satisfaction: It is the belief that the Job Satisfaction can be well-thought-out as a universal feeling about the job or the attitude about numerous aspects or characteristics of a job (Sivalogathan, 2011). The JS is a positive or pleasurable personal status arising out of appraisal of their Job or work (Wickramasinghe, 2018) There is a significant relationship between psychological empowerment and job satisfaction and the impact and meaning cognitions significantly explain the job satisfaction. (Abidisa et al, 2016)

H3: There is a positive relationship between Psychological Empowerment and Job Satisfaction.

Mediation effect of Work -Life Balance on the relationship between Psychological Empowerment and Job Satisfaction: Job Satisfaction and good functioning at work and home with a minimum of role conflict create a work-life balance (Wessels 2012). And Job Satisfaction is an essence within an organization that affects the life of people within the organization (Wickramasinghe, 2018) and outside personal lives. Further an active orientation of an individual towards their work is determined by an individual’s Psychological Empowerment, (Sivalogathan, 2011) and an individual’s ability to manage their personal life. In such scenario, any favourable or adverse effect in any domain of work-life balance has the same spill over effect on their Job Satisfaction and psychological empowerment.

H4: Work-Life Balance mediate the relationship between Psychological Empowerment and Job Satisfaction

Research Design

Banking sector was selected for this study based on the significant contribution made by them towards the service industry labour demand of the nation and 45% of banking employee carder comprises of Female employees (table 3). For this research target population was selected from the female middle management level employees of Licensed Commercial Banks, both

government and private sector in the Island based on a cluster random sampling of probability sampling method. The Total Target Population (TTP) was n=300 in which n=100 were from Western province and n=50 each from Southern and Central provinces.

Table 3: Employee Composition of Major Banks in Sri Lanka 2017 - Western, Southern and Central Provinces

Name of the Bank	Western			Southern			Central		
	No of Branches	Male	Female	No of Branches	Male	Female	No of Branches	Male	Female
BOC	125	1,434	2,025	64	192	439	67	237	346
PEOPLES	216	1,270	2,055	86	322	563	96	343	546
HNB	104	1,423	1,336	25	207	53	25	230	81
COMMERCIAL*	125	1,500	500	21	180	60	22	200	66
SAMPATH	151	1,614	1,024	23	181	89	22	183	85
Total	721	7,241	6,940	219	1,082	1,204	232	1,193	1,124

* Approximate Figures

Source: Annual Reports of Banks, 2017

The well-structured questionnaire consisted of two parts, Work Life balance, Psychological Empowerment and Job Satisfaction were measured using five point Likert scale and demographic details were assessed in the second part. Since there was no universally agreed index for WLB, (Brough et al.2009) a self-constructed indicator of this researcher was used based on Netemeyer et.al.,(1996) (FWC) & (WFC) scales of Fisher et.al.,(2009), for Psychological Empowerment, questionnaire (05 items) developed by Spreitzer (1995) was used. Job Satisfaction was measured by JDI index of Smith et.al 1969. Out of 300 questionnaires distributed only 229 completed ones were returned (76.33%) i.e. Western province 158 (69%), Central 39 (17.03%) and Southern 32 (13.97 %). SPSS version 20 was used to analyse data and the relationships were identified through Pearson Correlation. Reliability and Validity were at acceptable levels in the pilot test of 56 questionnaires. In that Work life balance, Psychological Empowerment and Job Satisfaction had .831 .628 and .864 Cronbach Alpha values respectively.

Analysis and Findings

Descriptive statistics of the Study

Government-Sector participation was at 128 (55.9%) while Private-Sector 101(44.1%), for all the participants, the age was above 18 years. All of them had GCE A/L or University Degree/Professional qualifications. Out of the total sample 86 (37.6%) had worked for 16-25 years and 73 (31.9%) had 5-15 years' experience. Preponderance age was 36-45 years, 89 of the sample confirmed this, and as a percentage this is 38.9%. Out of the sample, 176 (76.9%) of the respondents were married & 44 (19.2%) were unmarried. From the total respondents 89 (38.9%) or majority had 2 dependents. Income preponderance was 112 and as a percentage 48.9% of employees earned between Rs101, 000 to Rs150, 000 for a month.

Inferential Statistics of the study

The statistical significance of Hypothesis established that, the reliability of all three variables were greater than 0.706 (Table 4) and they were within acceptable levels. The descriptive statistics for PE was in between mean 3.86 to 4.17 (SD 1.04 to .80) , WLB mean 2.88 to 3.78 (SD 1.13 to 1.34) and JS mean 3.43 to 3.87 (SD 1.02 to 1.15)

Table 4: Reliability Statistics –All Variables

Variable	Cronbach Alpha	Cronbach Alpha Based on Standardized Items	N of Items
<i>Psychological Empowerment</i>	.706	.705	5
<i>Work – Life Balance</i>	.840	.839	5
<i>Job Satisfaction</i>	.870	.869	6

Source: Survey Data

Table 5: Correlations among Variables

	Psy ,Emp	WLB	JS	N
<i>Psychological Empowerment</i>		.368**	.428**	229
<i>Work Life Balance</i>	.368**		.531**	
<i>Job Satisfaction</i>	.428**	.531**		

** . Correlation is significant at the 0.01 level (2-tailed). (Pearson)

Source: Survey Data

The table 5 indicates the correlation among the variables confirming the Hypothesis. That is the existence of positive relationship between, (HI) Psychological Empowerment and Work–Life Balance, ($r = 0.368, p < 0.01$), (HII) Work-Life Balance and Job Satisfaction ($r = 0.531, p < 0.01$), (HIII) Psychological Empowerment and Job Satisfaction ($r = 0.428, p < 0.01$). Table (1.5) indicates (H4) the mediation effect of Work life balance on Psychological Empowerment and Job Satisfaction. The decline in beta value of PE from .586 to .368 after considering the effect of WLB specifies existence of the mediating effect of WLB. The decline of beta value to .883 from 1.299 in relation to PE was a clear indication of the effect of the mediating effect of the WLB. Further, increase of “F” value from 50.82 to 59.30 also is an evidence towards the existence of the mediation effect of work life balance on the relationship between PE and JS which was further signified by the Sobel test 4.64(<0.001).

Table 6: Work-Life Balance mediates, Psychological Empowerment and Job Satisfaction

	Model 1	Model 2	Model 3	Model 4	Sobel Test
Variables					
	α		α	α	
Job Satisfaction					
Psychological Empowerment	.586 (.000)	.591 (.000)		.368 (.000)	
Work –Life Balance		A	.454 (.000)	.369 (.000)	
B	1.299	.883	2.161	.973	
R [^]	.183	.136	.282	.344	
F	50.82	35.64	89.07	59.30	
Sig.	.000	.000	.000	.000	
Sobel Test					4.64(<0.001)

Source: Survey Data

According to this study, significant positive relationships were identified among the independent variables psychological empowerment and work-life balance and the dependent variable job satisfaction with the mediation effect of work-life balance on the relationship between variables psychological empowerment and job satisfaction.

Job satisfaction and psychological empowerment of all the employees are directly affected by any degree of variant change in work-life balance consequences. This study signifies the direct influence each variable has on the other two variables. That is the significant positive relations the work-life balance has on the psychological empowerment and the significant positive relationship of psychological empowerment variables’ on job satisfaction. Retrospectively, job satisfaction is dependent on the psychological empowerment and psychological empowerment is significantly and

positively related to work life balance variable. And the significant positive mediation effect on the relationship between Psychological Empowerment and Job Satisfaction further identifies positive effect of Work-Life balance on those variables. These significant positive inter-relations among all these three variables identified the ‘work life cycle’ of an employee. According to the findings of this research the existence of significant positive relations among Psychological Empowerment, Work-life Balance & Job Satisfaction and the mediation effect of Work-Life Balance on the relationship between Psychological Empowerment and Job Satisfaction and the concept “Work-Life Cycle of an Employee” could be established.



Figure 1: Work-Life Balance Cycle

Source: Survey data /Author's construct

Findings of this study show the direct influence each variable tested has on the other two variables. This can be attributed to the close-connection of an employees work-life balance interferences on their personal life /domestic life activities and employment related activities, having on their psychological empowerment which has a directly association with the job satisfaction. Retrospectively, an employee's job satisfaction is dependent on the level of an individual' psychological empowerment capabilities and psychological empowerment is subject to the variations of the consequence of the quality and its direct/indirect out-comes of work life balance initiatives and measures of an individual.

Conclusion

According to the findings of this study all Four (4) Hypothesis were accepted with significant positive correlation among them i.e. (H1) Psychological Empowerment and Job Satisfaction, (H2) Work- Life Balance and Job Satisfaction, (H3) Psychological Empowerment and Job Satisfaction and (H4) The mediating effect of Work –Life Balance on the relationship between Psychological Empowerment and Job Satisfaction. Findings of the study identified a significant association among the sample population of female banking employees in the western, central and southern provinces of Sri Lanka. The positive correlation among all three variables signifies the effect of interdependency of them on each other and the existence of mediation effect shows the significant positive influence of work – Life Balance on Psychological Empowerment and Job Satisfaction of the female employees. In line with the findings, any imbalances in Work-Life and Domestic Life activities of these employees undoubtedly have a spill-over effect on their Psychological Empowerment and Job Satisfaction. The adverse effects of any domestic and personal lives obligations of these female workers have its retrospective effect to psychological empowerment, which ultimately affects their job satisfaction. Further, the employment-life of female employees determines their decision to be in the work force. The significant positive mediation effect of work-life balance on the relations between psychological empowerment and job satisfaction contributes to their level of satisfaction of the employment and domestic front obligations of female bankers. This research identified the factor that determines the level of valuable contribution female banking employees make to the labour force of the nation.

The concept of work-life balance is highly subjective and a personalized individual scenario, unique to any employee. In that connection, the level of satisfaction of an employee is dependent on maintaining their work-life balance for their life-satisfaction and this is a psychological contentment an individual aims at attaining. This psychological attainment or the tested psychological empowerment is undoubtedly affected and influenced by the job satisfaction these female bank employees getting by involving in their employment activities, thus as a cyclical effect of one of these variables impact the other two variables in many varying degrees. Since a clear distinction of psychological connectedness with each individual domain cannot be distinguished in relation to visible boundaries of work-life and domestic-life of an individual. The satisfaction or the dissatisfaction on one of these domains is the deciding factor of contribution of female bank employees to the national economy of Sri Lanka. Findings show that there is a significant relationship between psychological empowerment and employees' job satisfaction.

This could be one of the major reasons that works as a barrier towards the level of contribution of female workers to national economy. This broadly justifies the ILO (2018) statement that, forty eight per cent (48%) of females out of five hundred (500) interviewed, who had been employed before, had given up their employment due to the reason of home-making.

According to the findings of this study, employers are recommended to take timely initiatives on improving Job Satisfaction, Work Life Balance and to empower employees through their employment. This assists individual female employees to improve their performance and have a better commitment towards their work. In turn, this will lead to improve the actual level of participation and commitment of economically active female population to the nation labour force.

References

- Abdissa G., Fitwi T.,(2016) The Impact of Psychological Empowerment on Employees' Job Satisfaction: *Pyrex Journal of Business and Finance Management Research* Vol 2(7) pp.65-80
- Akdağ F., (2012)Impact of Empowerment on Work-Life Balance and Employee Well-Being., *Cambridge Business and Economic conference 2012*,Yeditepe University, Faculty of Economics and Administrative Sciences, Department of Business Administration, Istanbul, Turkey.
- Brough,P. & Timms, C. & Sarah B. Rosie.(2009). Measuring work-life balance Validation of a new measure across five Anglo and Asian samples. *The International Journal of Human Resource Management*. Volume25,-Issue19.
- Clarke, M., Koch, L., & Hill, E. (2004), The work–family interface: Differentiating balance and fit. *Family and Consumer Sciences Research Journal* 33(2), 121-40. [cited 25.04.2020]
- Dessler G., (2006) *Framework for Human Resource Management*, A, 4th Edition., Prentice Hall, 2005.
- Fisher, G. & Bulger, C. & Smith, S. C. (2009). Beyond Work and Family: A Measure of Work/Non work Interference and Enhancement. *Journal of occupational health psychology*. 14. 441-56. 10.1037/a0016737.
- Grant-Vallone, E.J., & Ensher, E. (1998), The effect of work and personal life conflict and organizational support paper presented at the *Academy of Management Conference*, San Diego, CA.
- Greenhaus, J.H., Collins, K.M., & Shaw, J.D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63(3), 510-531.[cited 26.04.2020]
- Hoboubi, N., Choobineh, A., Ghanavati, F. K.,Keshavarzi S., Hosseini A.,(2017) The Impact of Job Stress and Job Satisfaction on Workforce Productivity in an Iranian Petrochemical Industry., *Saf Health Work*. 2017 Mar; 8(1): 67–71. Published online 2016 Jul 30. doi: 10.1016/j.shaw.2016.07.002PMCID: PMC5355527[Cited 24.04.2020]
- Har, J M., Tusso, M., Sune, A., and Ollier-Malatre, A., (2014). Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures., <https://doi.org/10.1016/j.jvb.2014.08.010>., <https://www.sciencedirect.com/science/article/abs/pii/S0001879114001110> .[cited 25.04.2020]

- Inuwa M. (2016), Job Satisfaction and Employee Performance: An Empirical Approach, *The Millennium University Journal*, https://www.researchgate.net/publication/321966659_Job_Satisfaction_and_Employee_Performance_An_Empirical_Approach
- Locke, E. (1976). The Nature and Causes of Job Satisfaction. *The handbook of industrial and organizational psychology*. 31
- Netemeyer. R.G., Boles, J.S. and McMurrian, R. (1996). Development and validation of 43 Work - family conflict and family-work conflict scales. *Journal of Applied Psychology*. Vol. 81 No. 4, pp, 400-10.
- Pathak A., Dubey P., Singh D.,(2019),Work Life Balance & Job Satisfaction: A Literature Review,10.6084/m9.figshare.12016704, *International Journal of Computer Sciences and Engineering*.
<https://www.researchgate.net/publication/332112828> [cited 26.04.2020]
- Quinn, R.E., & Spreitzer, G.M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, 26(2), 37-48. [cited 25.04.2020]
- Robbins, S. P., Judge, T. A. (2007). *Organizational Behaviour*. Upper Saddle River, NJ:Pearson Education Inc.
- Sivalogathan, V., (2011). Psychological Empowerment in the work place: A study on Empowerment effect on critical work outcomes of High Tech Manufacturing Context In Sri Lanka. ICASS 2011) in Changsha , China, 19-20 March, 2011.
- Smith J., Gardner D., (2007). Factors Affecting Employee Use of Work-Life Balance Initiatives. *New Zealand Journal of Psychology* Vol. 36, No. 1, March 2007.
- Spreitzer, G.M. (1995b). An empirical examination of a comprehensive model of psychological Empowerment in the workplace, *American Journal of Community Psychology*, Vol No.5,pp.601-629.
- Wessels C., (2012)Getting Engaged: It's more than saying "Yes" to your Organization How Work Engagement and its Influencers affect Work-Life Balance and Job Satisfaction and the Moderating role of Flexible Working, Msc. Organizational Change & Consulting Erasmus University Rotterdam Rotterdam School of Management
- Wickramasinghe, W.M.K.G.A, Khatibi, A, Azam, S.M.F, Dharmaratne, I, (2018), Psychological Empowerment, Psychological Capital and Job Satisfaction among Administrative Staff: Government Universities in Sri Lanka, *International Journal of Advance Engineering and Research Development* Volume 5, Issue 04, April -2018
ILO 8 March 2018, https://www.ilo.org/colombo/info/pub/pr/WCMS_558635/lang--en/index.htm

INVESTIGATING THE LEVEL OF CONSUMER ETHNOCENTRISM AMONG MILK POWDER CONSUMERS IN SRI LANKA WITH SPECIAL REFERENCE TO PANADURA CITY

.Chamali W.A.D.N¹, Rodrigo H.E² and Lakmali A. A. I.³

Faculty of Management Studies,
Open University of Sri Lanka, Nawala, Sri Lanka

[1harsha.rodrigo@tripack.com.pk](mailto:harsha.rodrigo@tripack.com.pk) [2chamali.rodrigo@gmail.com](mailto:chamali.rodrigo@gmail.com) [3aalak@ou.ac.lk](mailto:aalak@ou.ac.lk)

Abstract

The aims of this study are to investigate the level of ethnocentrism among milk powder consumers in Sri Lanka and explaining how significant the determinant of consumer ethnocentrism in Sri Lankan milk powder consumers in terms of socio demographic variables such as age, and disposable income. Consumer ethnocentrism represents normative beliefs of consumers in the superiority of their own countries' products. The dimensions of consumer ethnocentrism operationalized in this study were Pro – Sociality, Cognition, Insecurity, Reflexology and Habituation. Convenient sampling method was adopted and 114 respondents were reached using a researcher administered questionnaire in the city of Panadura. Statistical analysis to establish the reliability of the measurement properties was employed and descriptive statistics were utilized to explain the sample profile better. One sample t- test and ANOVA were used to analyze the collected data. Results suggested that the level of Ethnocentrism among Sri Lankans on Milk powder products is high. Similarly, the study established the fact that the higher level of Pro – Sociality, Reflexiveness and Habituation contribute to enhance the level of Ethnocentrism of Sri Lankan consumers, while Insecurity and Cognition are insignificant in making any impact on the level of consumer ethnocentrism. Further it was found that Sri Lankan consumers are equally ethnocentric irrespective of the age. This implies that local milk powder producers should pay attention to Pro – Sociality, Reflexiveness and Habituation dimensions to enhance the consumer ethnocentrism.

Key Words: Consumer Ethnocentrism, Milk Powder Products, Sri Lanka

Introduction

Of recently there has been considerable attention by researchers to investigate effects of country of origin on consumer product choice decision (e.g: Wanninayake & Chovancová, 2014; Klein, Ettenson & Krishnan, 2006; Orth & Firbasova, 2003; Shimp & Sharma, 1987). As a result, many of the scholars have paid attention on the concept of consumer ethnocentrism as the key concept that contributes to the growing body of knowledge on effects of country of origin (Shimp & Sharma, 1987). According to Shimp & Sharma (1987) Consumer ethnocentrism refers to the suitability, and question of true morality of purchasing foreign made products. Therefore, this concept is being used here to represent normative beliefs of consumers in the superiority of products of their countries. This concept emerged with the observation made during the periods of 1970s and 1980s, when several studies indicated that in most of the developed, Western countries consumers had a more favorable evaluation for domestic products than foreign-made ones (Supphellen & Rittenburg, 2001). However, in recent years the world has gone through a number of drastic changes. As our lives go through significant transformation, the term “GLOBALIZATION” has become extremely popular as a concept describing various phenomena in the world. The concept or process by which businesses or other organizations develop internationally or start operating in an international scale is referred as globalization (Machida, 2012). Globalization created the trade across the nations or in other words international trade and business. This has made available many foreign produced capital as well as consumable product alternatives from

other countries in domestic markets. Thus, Sri Lanka, a developing country with the multicultural disciplines, consumers receive a broader access to foreign products since the introduction of open economy (Wanninayaka & Dissanayake, 2012) and at a time where the local manufacturers are being thrown out from the home soil due to rapid globalization, sheer negligence of this area has received little attention.

On the other hand, widening trade balance of the country is disastrous and it happens mainly due to the purchase habits of the consumers of foreign products. In the year 2007 a negative trade balance of \$ 3.56 billion was recorded and since then the gap has been widening considerably. The highest ever negative figure in the history, i.e. \$ -10.3 was recorded in year 2011 and it slightly dropped to \$ - 9.81 billion in year 2012. It dropped to \$ 7.79 – billion in 2013 and since then it has been widening and a trade deficit of \$ -9.62 billion was recorded in 2017 and this jumped to \$ - 10.34 in 2018, a continuous widening of the trade deficit (Plecher, 2018). This shows that country is far from making a positive trade balance in the near future. Widening trade balance is a result of heavy crude oil imports which accounts for about 9.8 percent of the total imports bill (Sri Lanka Exports, 2017). Rest of the others is the result of consumer's attitude towards the foreign products against locally manufactured products. Consequently the Sri Lankan manufacturers are faced with intense competition from foreign competitors in the home soil. This resulted in outflow of foreign exchange, closure of businesses, more competitive environment for local companies and loss of jobs.

Local markets are flooded with foreign products and people patronize the same. Thus, it's important to figure out to what extent people purchase local products? What could have been the reasons? Lack of alternatives, different priorities at decision-making situation, quality, price, prestige, workmanship, technology, and country of origin are the factors that affect choice process of consumers and quality comparisons of foreign against domestic products. Moreover, Patriotism and Ethnocentrism (moral obligation to purchase domestic products) are major determinants of product evaluations of consumers.

Ethnocentrism is a factor, which is categorized under the psychological factors of the person (Rani, 2014) . This influences the consumers to be loyal to one's own country and the consumer's purchasing behavior. Consumer ethnocentrism is a culturally biased judgment, which can be explained as a continuum that changes gradually or in very slight amounts without any clear dividing points. This unique construct can be measured by a scale that explains how ethnocentric? and not whether ethnocentric? Consumer ethnocentrism provides idea that buying imported products is wrong since it is unpatriotic and creates harmful effect to the domestic economy and employment (Supphellen & Rittenburg, 2001). Consumer ethnocentrism is a major factor that influences the consumer willingness to purchase foreign products. When purchasing a product, some consumers are less likely to consider products from foreign countries (Akdogan, Kaplan, Ozgener and Coskun, 2012). Ethnocentric consumers have the feeling towards their own country and consider that products are superior to from other countries (Silili & Karunarathne, 2014). Moreover, its relative vigor has been identified as the key factor, which affects the consumers choice process either positively or negatively towards domestically manufactured products.

Hence, determining the existing level of Consumer Ethnocentrism in the context of Sri Lanka has a strategic importance for promoting locally manufactured products. Because such analysis and knowhow are important for the country to make a blue print to persuade its nation to purchase domestically manufactured products against the foreign products.

Milk powder industry in Sri Lanka

Currently, the local dairy animal population in Sri Lanka is at 1.38 million (Agriculture and Environment Statistics Division 2019) and as reported on Daily Mirror (29 January 2019) Sri Lanka produces approximately 40 percent of the total annual dairy consumption of the dairy products. Smallholder dairy farmers dominate the livestock industry with an estimated 176,000 registered farmers and of this, 72,400 people depend solely on dairy as their main source of income (Agriculture and Environment Statistics Division 2019). Before the adoption of an open economy in 1977, Sri Lanka was 80 percent self-sufficient in fulfilling the milk requirements (Fernando, 2018) However, at present, Sri Lanka is around 40 percent self-sufficient.

Dicyandiamide contamination

Dicyandiamide (DCD) is a chemical compound used by farmers to reduce the negative effects of greenhouse gas emission and nitrate leaching into waterways. DCD combined chemicals sprayed on grass cows eating contaminated grass may produce milk with traces of DCD residues and ultimately this will end up in Milk powder produced using the milk that is taken from the cows. Sri Lanka is one of the very few countries in the world that still consumes milk powder and in contrast to countries such as the United States, Europe and even Australia and New Zealand very rarely sell powdered milk in retail stores. In 2013 and 2018, popular brands such as Anchor, Nespray, Milgrow and Maliban found positive with DCD content to a level not suitable for human consumption. These milk powder brands were imported mainly from Australia and New Zealand. As a result of that those companies were forced to withdraw two batches of milk powder in the market with immediate effect. On the other hand, due to DCD factor issue lot of consumers attention suddenly changed to the locally produced dairy brands. However, consumers didn't have adequate alternatives to switch at the time of DCD contamination was surfaced and therefore still compelled to rely on imported brands.

Research Problem and Objectives

As shown in Table 1, Sri Lanka imported nearly 98,000 metric tons of powdered milk to the island, spending more than Rs. 48 billion on Milk powder and milk products in year 2017. This jumped to 105,000 metric tons in year 2018, making the country to spend Rs. 58 billion (Department of Animal Production and Health Sri Lanka, 2018).

Table 1: Milk powder imports to the country

Milk Product	Value Rs. (Million) 2017	Value Rs. (Million) 2018
Milk and Milk Products	48,145	54,000
Milk and Milk Cream	239	272
Milk Cream Fat<1.5%	3,031	3,947
Milk Cream Fat>1.5%	41,849,	4,6342
Condensed Milk	12	5
Cheese and Curd	2,168,	2,572
Butter and Other Fats	572	632
Butter Milk and Curdled Milk	24	31

Source : Department of Animal Production and Health – Sri Lanka (2019)

According to the statistics of Department of Animal Production and Health, Sri Lanka (2019), total milk production in the country was 483 million liters in 2017 and this increased slightly in 2018 to 494 million liters. This was merely enough to cater to 40 percent of the total demand of the country. To be self-sufficient, Sri Lanka needs about 741 million liters of a milk production in the country, this refers to the fact that the country is short of 482 million liters of milk annually. In order to fill the gap dairy products are imported to the country mainly in the form of Milk powder. Milk powder importation costs Sri Lanka an unprecedented Rs. 48 billion (0.59 percent of GDP) and it is only secondary to sugar as a single food item. A total quantity of 105,000 metric tons of powdered milk was imported in 2018 costing about Rs.54.6 billion to the national economy and this is one of the single largest burdens to National Foreign Currency reserves. This figure is higher than the entire Sri Lankan free health service budget.

In such a situation it is worthwhile to explore the attitudes of Sri Lankan consumers towards purchasing imported products as against locally manufactured products. Such an examination would help the Sri Lankan consumers and manufacturers to assess the severity of the foreign competition towards the local industry and as a whole to the entire country. Thus, this study attempts to fill this gap by addressing two research questions mentioned below.

- Examine the level of consumer ethnocentrism in Sri Lanka and how it affects the product evaluation?
- Examine the Level of consumer ethnocentrism on Milk powder products and how it differs in terms of Age

Literature Review and Hypothesis

Consumer Buying Behavior refers to the buying behavior of the ultimate consumer and it is influenced by one's culture, subculture, social class, membership groups, family, personality, and psychological factors, etc. Further the purchasing behavior is influenced by cultural trends as well as his social and societal environment (Rani, 2014). Consumer behavior deals with why and why not an individual purchases particular products and services. Consumer buying behavior is considered to be an inseparable part of marketing and (Kotler & Keller, 2011). consumer buying behavior "refers to the buying behavior of final consumers, both individuals and households, who buy goods and services for personal consumption" (Kumar, 2010). Consumer's decision making process goes through five stages; it starts with Problem or need recognition, Information search, Evaluation of alternatives, Purchase and finally ends up with Post-purchasing behavior. Person's social, personal and psychological factors have an impact on the entire process. Psychological factors are such that Motivation, Perception, Learning, Personality and Attitudes are major concerns in consumer buying behavior that helps the person in identifying the need, information search and evaluation search. Among the factors discussed above Ethnocentrism is categorized as an attitudinal factor that affects consumers purchase intent favorably towards domestic product.

Consumer Ethnocentrism

Ethnocentrism is defined by Webster's dictionary as "an attitude that one's own group (race or people) is superior". Sumnor (1906) pointed out that Ethnocentrism is a belief that the norms, values, ideology, customs, and traditions of one's own culture or subculture are superior to those characterizing other cultural settings. William Graham Sumner in his Folkways (1906) coined this term. Nearly fifty years after the first conceptualization of ethnocentrism and based on the work of Sumnor, Adorno et al. (1950) further studies have been carried out on this and the concept of ethnocentrism is defined; "in terms of an individual who tends to be 'ethnically-centered', meaning, to strongly accept the culturally 'alike' and reject the culturally 'unlike'". However much of the work to identify what Ethnocentrism is really about was done by Shimp and Sharma. That was eighty years after the first conceptualization done by Sumnor in 1906 in his Folkways. In their own words the concept is best explained as:

"We use the term 'consumer ethnocentrism' to represent the beliefs held by American consumers about the appropriateness, indeed morality, of purchasing foreign-made products. From the perspective of ethnocentric consumers, purchasing imported products is wrong because, in their minds, it hurts the domestic economy, causes loss of jobs, and is plainly unpatriotic; products from other countries (i.e., out groups) are objects of contempt to highly ethnocentric consumers. To non-ethnocentric consumers, however, foreign products are objects to be evaluated on their own merits without consideration for where they are made (or perhaps to be evaluated more favorably because they are manufactured outside the United States)" (Shimp & Sharma, 1987).

As described above by Shimp, Sharma and Shin (1994), consumer ethnocentrism has following three characteristics

- Heavily bound and knitted with and concern about the home country and determined not to harm the local industry and economy through the large influx of imported goods.
- Tendency of not to purchase foreign products as much as possible
- Often unfair perception towards foreign products

Similarly ethnocentrism is described as a focus on one's ethnic group, in which this group is regarded as superior as and better than any other group (Bizumic.2014). "Ethnocentrism focuses

on “WE GROUP” feeling where the “IN GROUP” is the Centre and all other groups are judged in relation to it. The “in group” which natures attachment and loyalty to one’s own country” (Balabanis et al, 2001). Ethnocentrism determined why consumers select the local product instead of overseas. In fact, ethnocentrism assisted to identify the elements that have significant effect on the final consumers’ purchase decision Ghani and Mat (2017). Consumer ethnocentrism “indicates a general proclivity of buyers to shun all imported products irrespective of price or quality considerations due to nationalistic reasons” (Shankarmahesh, 2006). There’s a significant positive relationship between consumer ethnocentrism and purchase intention, thus, higher the level of consumer ethnocentrism, the higher is the intention to purchase domestic products (Silili, & Karunarathna, 2014).

Hence above literature explains the fact that Consumers with higher level of ethnocentric tendency are likely to believe that buying a foreign product is not right in a situation where domestic alternatives are available. Therefore, their normal tendency is to buy local products

Relationship of Ethnocentrism and Demographic factors

In studies conducted by number of researchers have identified that ethnocentrism is related to socio demographic variables. The most commonly used demographics are age, gender, education and income and it was found that, demographics are better predictors of consumer ethnocentrism (Balabanis et al. 2001). Findings of the study done by Sutikno and Cheng (2011) showed stronger ethnocentric tendencies amongst older consumers. In general women are found to be more Ethnocentric. The underlying logic is that women are more conservative and collectivistic about maintaining social harmony, quality of life and positive feelings amongst general society (Yoo & Donthu, 2005). Especially the older population is more ethnocentric than that of their younger generation. However, findings in a study conducted in Pakistan explains that gender and consumer ethnocentrism is significantly related, Aziz et al (2014). Similarly, the higher the household income level, the lesser is the tendency to be more ethnocentric, and purchase domestic product. Lowest income earners are the income group who seeks the domestically made products among all the income groups. (Silili, & Karunarathna, 2014). Several studies have reported that consumers with higher levels of income express lower ethnocentric tendencies than consumers with lower levels of income (Othman, Ong & Wong 2008); (Kumar, Fairhurst, & Kim 2011).

Use of ethnocentrism to curb imports

Capitalizing on the ethnocentric feelings of the consumers, many countries carried out government sponsored campaigns with a view to encouraging people to purchase domestic products. For instance Sri Lanka launched “GANAA APE DE” campaign with SOORIYA SINGHE LOGO to woo customers towards Sri Lankan made products. Similarly United states of America carried out “BUY USA” and Malaysian state sponsored “BUY MALAYSIAN GOODS” in 2010 and many others followed by. Because Ethnocentrism is the preference of local citizens towards purchasing the country’s own products.(Ghani & Mat, 2017)

Determinants of Consumer Ethnocentrism

Determinants of ethnocentrism were re visited by Siamagka & Balabanis (2015) and following indicators were established.

a. Pro- Sociality

Pro-sociality refers to behaviors that are intended to benefit others. Put simply, prosocial behaviors are those that benefit others. Things like donating time, money or even blood to people whom we don’t know are not just important for our sense of wellbeing, they are critical to a functioning and in creating a fair society. Ethnocentrism is linked with patriotic love and sacrifice for one’s country (Balabanis et al., 2001) Behaviors that can be described as prosocial include feeling empathy and concern for others and behaving in ways to help or benefit other people. It is associated with a kind of Pro - Sociality, in which the county’s interests take precedence over a person’s self-interest. In a consumption context, this ethnocentric self-image is enacted through

engagement in prosocial behavior that protects local employment and industry from the threat of imports. In applying the same principles of pro sociality to consumer behavior, ethnocentric consumers perceive the consumption of domestic products as a moral obligation to help their home country (Siamagka & Balabanis, 2015).

b. Cognition / Knowledge about one's own country and products

It is the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses. People, more patriotic tend to interpret the world from the point of view of their ethnic group. Hence their cognition is developed to view their country products more superior. Cognition is "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses (Siamagka & Balabanis, 2015).

c. Insecurity

It is the uncertainty or anxiety about oneself; lack of confidence. It can be further elaborated that it is the state of being open to danger or threat; lack of protection. Similarly the Pro – Country people think that they are in secured from being exposed to imports because the out siders are ripping off the country's wealth and they are at the threat of losing jobs and income. An important element fundamental to consumer ethnocentrism is the heightened perception of threat from foreign products (Shimp & Sharma, 1987). In general, consumers associate foreign products with threats to the domestic economy and to domestic workers. (Siamagka & Balabanis 2015).

d. Reflexiveness

For ethnocentric tendencies to be activated, learned ethnocentric associations need to already exist in one's cognitive structure. It is Consistent with the theory of spreading activation of memory, when exposed to a stimulus. When products are advertised continuously the ethnocentric tendencies are generally activated. Such automaticity is the product of a lifetime of repeated encounters with ethnocentrically biased information. For ethnocentric tendencies to be activated, learned ethnocentric associations need to already exist in one's cognitive structure. when exposed to a stimulus (e.g., a foreign product), consumers tend to automatically activate concepts stored in long-term memory (e.g., learned ethnocentric attitudes) to recall information and evaluate the given stimulus. A two-stage processing model comes into play: in the first stage, the perceptual part is automatic (i.e., activation of ethnocentric memories), and in the second stage, ethnocentric behavioral response is controlled by conscious choice (Devine, 1989). Ethnocentric buying behavior tends to be a conscious choice, but is based on automatically activated tendencies. (Siamagka & Balabanis, 2015).

e. Habituation

Habitual Buying Behavior refers to situations where a consumer has low involvement in a purchase, and perceivys very few significant differences between brands in a given product category. The well-established link of ethnocentrism with morality emphasizes the need to incorporate habit into the core of ethnocentrism. In addition, similar to general ethnocentrism, consumer ethnocentrism is learned from an early age (Shimp & Sharma, 1987). Consumers become accustomed to ethnocentrism through frequent repetition of or prolonged exposure to ethnocentric behaviors, such as repeated buying practices. Everyday interactions in different contexts (i.e., family, school, and friends) are the main socialization routes through which consumers implicitly develop ethnocentric biases (Siamagka & Balabanis, 2015).

Thus, it explained the fact that ethnocentrism depends on Pro –Sociality, Insecurity, Cognition, Reflexiveness and Habituation.

Based on the literature discussed above following hypothesis of the study were developed.

- H1: Higher level of Pro –Society attitude of consumers will lead to higher level of Ethnocentrism*
- H2: Higher level of Cognition / Knowledge about one's own country and products leads to higher level of ethnocentrism*
- H3: Heightened perception of threat from foreign products / Insecurity leads to enhance the level of ethnocentrism*
- H4: Reflexiveness / prolonged exposure to ethnocentric information will heighten the level of ethnocentrism*
- H5: Habituation / frequent repetition of or prolonged exposure to nationalistic behaviors will lead to higher level of ethnocentrism*
- H6: Older consumers are highly ethnocentric and ethnocentrism differs across the age*
- H7: Consumers exhibit a higher level of Ethnocentrism and positively evaluates locally manufactured Milk Powder Brands.*

Methodology

Research Design and Data Collection

The research is mainly descriptive in nature, as it requires ascertaining and describing the characteristics of the interested variables. The hypotheses developed were tested after having collected the data from the selected sample. Data collected through a researcher-administered questionnaire that has three sections namely A,B and C. Sample population is Milk powder consumers, residing in Panadura city where 182,285 people live in, more males than females. Non-Random, convenience sampling method was employed where – mostly the accessible and consumers deemed fit to the study were given the questionnaire to answer.

200 numbers of respondents were given the questionnaire and one hundred and thirty six (n=136) completed and usable questionnaires were received resulting an average response rate of 68 percent. 18 questionnaires were found with lot of missing values and these were not considered for the analysis. Balance 46 questionnaires were not received from the respondents due to many reasons.

Operationalization

Consumer Ethnocentrism was operationalized using multiple attributes namely Pro – Sociality, Cognition, Insecurity, Reflexology and Habituation. Pro – Sociality was measured using five (5) indicators and Cognition, Insecurity, Reflexology and Habituation were measured using three (3) indicators each. Each item of the dimension was measured using seven (7) point non comparative likert scale (1 = Strongly disagree , 2= Somewhat Disagree, 3 = Disagree, 4 = neither disagree nor Agree, 5 = Agree, 6 = Somewhat agree, 7= Strongly agree consistent with the study completed by Siamagka and Balabanis, in 2015.

In addition to the above, product evaluation was measured using six item (6) such as, Technical Advancement, Prestige, workmanship, Price , Reliability and Perceived value of the products from each country using five (5) point non comparative likert scale where it measured 1= Strongly Disagree , 2=Disagree , 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly agree.

Results and Discussion

Validation of Measurement properties

In order to ensure accuracy and adaptability of the scales adopted at the initial phase of the analysis psychometric properties were validated.

Reliability

As shown in the Table 2 Cronbach (α) was used to estimate the reliability of independent and dependent variables. The reliability (α) value for all the dimensions considered exceeded the required threshold level of Cronbach (α) hence values, highlighting that there is adequate internal consistency with all the dimensions used to measure the construct of ethnocentrism and uniformly applicable for measure the Ethnocentrism in Sri Lanka.

Table 2 : Construct Reliability

Dimensions	Cronbach Alpha	N of Items
Pro – Sociality Scale	0.914	5
Cognition Scale	0.721	3
Insecurity Scale	0.902	3
Reflexiveness Scale	0.865	3
Habituation Scale	0.753	3
Ethnocentrism	0.919	17

Descriptive analysis

Sample Profile

In response to the distributed 200 questionnaires, 136 completed and usable questionnaires were received. Characteristics of the 136 respondents are discussed below.

Age

Entire sample was divided in to five age groups. In which it was found that 45 percent of the sample fell in to the category of 18 to 30 age range and 26 percent of the sample fell in to 31 – 40 age group, 21% of the sample fell into the age category of 41 – 50. However only 8% of the sample fell within 51 – 60 age category and none in the sample came within 61 – 71 age category.

Table 3 : Sample Profile

Group		No of Respondents	%
Age Group	18 To 30	51	45
	31 To 40	30	26
	41 To 50	24	21
	51 To 60	9	8
Gender	Male	72	63
	Female	42	37
Income group	10,000 To 20,000	13	11
	21,000 To 30,000	32	28
	31,000 To 40,000	46	40
	41,000 To 50,000	13	11
	51,000 and Above	10	9

Gender

Out of 136 respondents 63 percent found to be males and the balance 37 percent was females.

Income

As shown in Table 3, 40 percent of the sample represented in the remuneration range of Rs.31, 000 - 40,000, while 11 percent of the sample earned between Rs.10, 000 – 20,000, 28% of the sample earned Rs.21, 000 – 30,000. Top end earners found to be less in the sample where only 11% earned between Rs. 41,000 to 50,000 and it's only 9 percent of the sample found to be earning over Rs . 51,000.

As shown in the Figure 1, 40 percent of the sample uses Anchor that is imported from New Zealand, 26 percent of the sample uses Highland, and 19 percent of the sample uses Pelwatta. Only 11 percent of the sample consumes Maliban, again it's an imported brand from Australia similar to the brand Nespray, which is consumed by 4% of the sample.

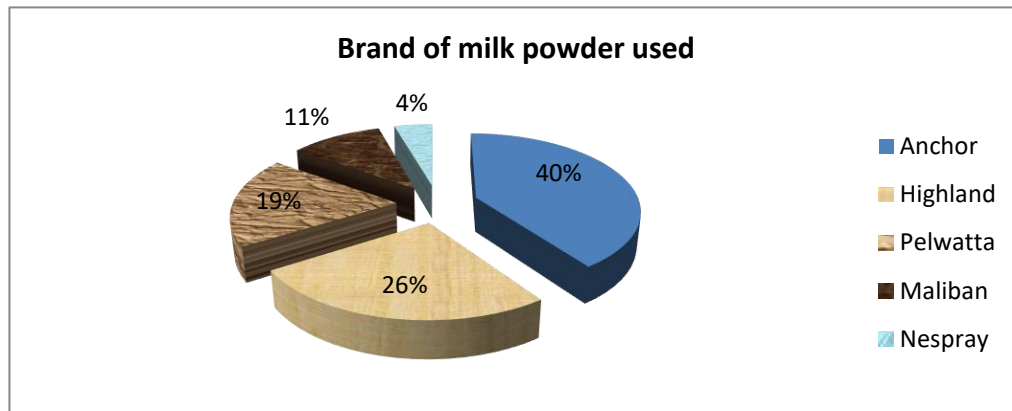


Figure 1: Brand of milk powder used

Measuring existing Level of Ethnocentrism

The model developed to measure ethnocentrism with five multiple independent variables and those variables found to be reliable in testing ethnocentrism in studies across the world. The five independent variables are Pro – Sociality, Cognition, Insecurity, Reflexiveness and Habituation upon which the Level of Ethnocentrism Depends. The Pro – Sociality variable consists of 5 items, and Cognition, Insecurity, Reflexiveness and Habituation consists of 3 items each. Average level of ethnocentrism of Sri Lankan consumers is explained in Table 4.

Table 4 : Mean score analysis for dimensions of Ethnocentrism construct

Dimension	Minimum Statistic	Maximum Statistic	Mean Statistics	Std Deviation Statistics
Pro - Sociality	1.6	7	5.05	1.27
Cognition	1	7	4.2	1.22
Insecurity	1	7	4.2	1.22
Reflexiveness	1	7	4.9	1.16
Habituation	2	7	4.56	1.04

Based on the above mean score analysis, on factors affecting Level of consumer ethnocentrism overall mean score of Level of Ethnocentrism was derived. This is explained in table 4.4 given below, where the level of ethnocentrism of consumer was categorized in to three groups “Low”, “Moderate”, and “High” . According to the results of the descriptive statistics presented in the Table 4.3, the mean scores and standard deviations of each independent variable are; the item Pro –Sociality recorded the highest mean score of 5.05 on the measurement scale with standard deviation of 1.27. Reflexiveness recorded a mean score of 4.9 with a standard deviation of 1.16 on the measurement scale and Habituation recorded 4.9 of a mean score with standard deviation of 1.16. Mean scores of both Insecurity Cognition were 4.2 with standard deviation of 1.22.

Table 5: Mean value Range

Mean value Range	Level of Ethnocentrism
1-3.49	Low
3.50 – 4.49	Medium
4.5 – 7	High

Above results explain that mean value of each dimension varies in relation to each variable and high standard deviation values of Pro – Sociality, Reflexiveness and Habituation explain the fact that level of ethnocentrism in people is influenced by the factors in varying degree. Similarly based on the overall mean score analysis, the number of respondents that falls in to each category is described in Table 5.

Accordingly 54% of the respondents found to be highly ethnocentric while 36.8% found to be moderately ethnocentric and 8.7% found to be less ethnocentric. This refers to the fact that majority of the Sri Lankan consumers are highly ethnocentric and it's only lesser than 10% of the population is less ethnocentric.

Table 6: Existing Level of Ethnocentrism

Level of Ethnocentrism	No of Respondents	Valid Percent
Low	10	8.77
Moderate	42	36.84
High	62	54.39
Total	114	100

Hypothesis testing and data analysis

Association of Ethnocentrism with Pro – Sociality, Cognition, Reflexiveness, Insecurity and Habituation

Consumer ethnocentrism is defined as “the beliefs held by consumers about the appropriateness, indeed morality of purchasing foreign-made products” (Shimp & Sharma, 1987). This study attempts to validate that ethnocentrism is a phenomena that exists in Sri Lanka as well. Ethnocentric Pro – Sociality, Cognition, Insecurity, Reflexiveness and Habituation affect this in varied proportions. The variables described above explain the variability of Level of ethnocentrism and therefore, hypothesis H1, H2, H3, H4, and H5, refers to as;

Higher the level of Pro – Sociality, Cognition (Knowledge about one’s own country), Insecurity, Reflexiveness (Prolonged exposure to ethnocentric information) and Habituation the higher will be the level of consumer ethnocentrism

Above hypothesis were tested using Independent sample t-test and the results are shown in Table 7 below and the outcome of the test results are discussed below.

Table 7: One-Sample Test

	Test Value = 4						
	T	Df	Sig. (2-tailed)	Mean value	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Pro Sociality	8.794	113	0.00	5.049	1.04912	0.8128	1.2855
Cognition	1.766	113	0.08	4.208	0.20175	-0.0246	0.4281
Insecurity	1.766	113	0.08	4.208	0.20175	-0.0246	0.4281
Reflexiveness	8.66	113	0.00	4.941	0.94152	0.7261	1.1569
Habituation	5.705	113	0.00	4.555	0.55556	0.3626	0.7485

Referring to the values shown in Table 07, the t- values of the dimensions of the level of consumer ethnocentrism construct remains at 4’ = neither satisfied nor dissatisfied where the neutral point that exists in the 7 point Likert scale has exceeded. The t- value of Pro Sociality =

8.794, Cognition = 1.766, Insecurity = 1.766, Reflexiveness = 8.660, and Habituation = 5.705. This explains the fact that the t- values of the items Pro – Sociality, Reflexiveness and Habituation exceeds the mean value, thus there is a significant difference exists ($p \leq 0.05$). Hence, null hypothesis of H1, H4, H5 are rejected and alternative hypothesis are accepted. However in contrast to the expectations the t- values of cognition = 1.766 and Insecurity = 1.766 found to be not significant ($p \geq 0.05$), hence null hypothesis accepted. Findings highlight the fact that there is no significant difference between the level of ethnocentrism and insecurity and also the level of ethnocentrism and cognition. Thus, null hypothesized H2 and H3 are accepted.

Relationship of demographics and consumer ethnocentrism

Previous studies explain that consumer ethnocentrism is widely influenced by Income, Education, Occupation, Age and Gender. This study focuses on studying the relationship that Ethnocentrism has with Age. Therefore, it was hypothesized that

H2: Older consumers are highly ethnocentric and ethnocentrism differs across the age.

Above hypothesis was tested using one-way ANOVA and it explains that level of ethnocentrism does not vary in line with the age group of the consumer. Findings are given below in detail.

Table 8 : Descriptive Statistics on Customer Ethnocentrism in terms of Age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18 To 30	51	4.829	0.954	0.134	4.561	5.098	1.882	6.412
31 To 40	30	4.671	0.930	0.170	4.323	5.018	2.059	6.118
41 To 50	24	4.502	0.825	0.168	4.154	4.851	2.765	6.412
51 To 60	9	5.437	0.638	0.213	4.947	5.927	4.471	6.235
Total	114	4.767	0.920	0.086	4.596	4.937	1.882	6.412

As indicated in Table 8 it was found that 51 respondents fall in to the age group of 18- 30, and 30, respondents fall in to the category of 31- 40 and 24 respondents found to be in the age range of 41 – 50. Only 9 respondents found to be in the age category of 51 -60 with the mean values of 4.829, 4.671, 4.502, and 5.437 with standard deviation of 0.954, 0.930, 0.825, and 0.638 respectively for each category.

Table 9: Oneway ANOVA: Level of Ethnocentrism in terms of Age

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.193	3	2.064	2.538	0.060
Within Groups	89.460	110	0.813		
Total	95.652	113			

When degree of ethnocentrism was tested against the age categories with one way ANOVA it was found that F value was 2.538 and it was not significant (0.060) as it was greater than the typical α level ($p > 0.05$). This refers to the fact that mean differences are not statistically significant and no significant difference exists between means of the four income groups with respect to their Level of Ethnocentrism. Hence the null hypothesis is accepted

In conclusion this refers to the fact that irrespective of the age, the level of Ethnocentrism remains unchanged or does not differ significantly across the Sri Lankan consumers.

Conclusion

Empirical studies indicate that consumer ethnocentrism strongly influences the purchasing behavior towards foreign products (Hamin & Elliott, 2006). Ethnocentrism being one of the main psychological constructs that influences purchasing behavior of consumers and this induces biasness towards domestic products. The highly ethnocentric consumer will prefer domestic products compared to foreign products, while mildly ethnocentric consumer is likely to purchase foreign products. Previous studies have shown that ethnocentric tendencies reduce consumers' intentions to purchase foreign goods (Klein, Ettenson & Krishnan, 2006; Vida, Dmitrovic' & Obadia, 2008). Furthermore, one of the oldest concerns among international marketers is that barriers to success in foreign markets remain, and ethnocentrism is one barrier. Further level of consumer ethnocentrism deals with the question of whether the "foreignness" of a product will make it less preferable to consumers?". In contrast, mean score of consumer ethnocentrism in USA (3.60), India (3.88), South Korea (3.7), China (3.74) and Russia (3.12) (Shimp & Sharma, 1987). This exhibits the fact that Consumers of milk powder in Sri Lanka have high level of ethnocentrism whereas the level of ethnocentrism remains moderate in most of the other countries. Costa, Fernando & Yapa (2018) in their study of consumer ethnocentrism in relation to handloom industry found that high ethnocentric customers showed a high tendency to purchase local handloom products than foreign handloom products. Further, they have found that higher the consumer ethnocentrism, the higher is the consumer preference. However, Sri Lanka suffered from a civil war against Tamil Tiger terrorists nearly for thirty years and few years ago the terrorism was totally rotted out from the home soil. This led to infuse the feelings of "OURS" in people, more than any time in the history of Sri Lanka. Usually the Sri Lankans are loyal to its country and patriotic. However, in contrast to the findings in the studies done across the globe, behavior of Sri Lankan consumers found somewhat different and the level of ethnocentrism of Sri Lankan consumer does not reflect in their purchasing habits of Milk Powder products. This behavior could have been resulted from the non-availability of domestic products for consumers to purchase. Thus, future researches can address the link between the consumer ethnocentrism and the purchase behaviour.

Prior researches (e.g: Watson & Wright, 2000; Javalgi, et al, 2005), have found that demographic variables such as gender, age, education level and income level have significant impact on consumer ethnocentrism. Shankarmahesh (2006), indicates consumers with lower income, education and less exposed for globalization have higher consumer ethnocentrism tendency than their counter parts. This finding is consistent with the findings of previous studies of (Balabanis et.al, 2001; Watson et.al, 2000), which confirmed that older consumers are more ethnocentric. Moreover, age was found to be significant on the consumer ethnocentrism (Azis et.al, 2014). In contrast to the studies discussed above Sri Lankan consumers found to be ethnocentric irrespective of their age. It was hypothesized This refers to the fact that irrespective of age Sri Lankan consumers are equally ethnocentric. This is a valuable phenomenon where the marketers can capitalize on in order to market locally manufactured products.

Contribution to Knowledge

As it was indicated in the introduction section the study discovered the fact that Sri Lankan consumers are more ethnocentric than it was expected. This is a favorable situation for the local manufacturers to craft a proper communication plan to get these feelings of ethnocentrism surfaced and to make use of these feelings to direct the consumers towards purchasing locally manufactured products. In order for this behavior to take place the communication should have to be on a direction where it touches to the deep patriotic feelings of the consumer.

In contrast to many studies done in the world it was discovered that Ethnocentrism is not related or rather has any association with Age in the consumers of Sri Lanka. This may be true to all the developing nations where they may be Ethnocentric irrespective of their age. Milk Powder comes under impulse goods category where consumers normally do not search for extensive information when planning to purchase milk powder products. This probably would have attributed in the findings that ethnocentrism has no relationship with regard to the preferred brand of Milk powder product.

Managerial Implications

Ethnocentrism is elevated with Pro – Sociality, this means having favorable attitude towards the in – group and Reflexiveness and Habituation. This means the prolonged exposure to ethnocentric or nationalistic information and behaviors. Since Sri Lankan consumers are highly ethnocentric it's important for marketers manufacturing products in Sri Lanka to combine it with MADE IN SRI LANKA identity so that consumers will be inclined to purchase it.

Further in marketing communications that runs for long period of time, if a message that has nationalistic feelings are communicated, that will contribute to enhance level of Ethnocentrism. Finally, it will be reflected in consumers final purchasing decision in favor of locally manufactured products. Similarly, if multinational companies wish to market their products in Sri Lanka it is recommended to hide their foreign identity and market their product under the guise of Sri Lankan identity bringing out nationalistic feelings and attitudes as it will be reflected in the final product evaluation and purchase.

Recommendations

Sri Lankan consumers found more ethnocentric than that of consumers in India, Pakistan, Bangladesh, Australia and Japan. Hence it is important to emphasize the fact, “Produced in Sri Lanka with pride” to influence the purchasing decision. It is recommended to include Nationalistic feelings and literature in education materials since childhood as it would enhance the level of ethnocentrism and educate the crowd with what are the products manufactured in Sri Lanka and Pros and Cons of the same. This comprehensive knowledge would lead the nation to prefer locally manufactured products in priority. It is recommended for local manufacturers to combine their marketing communication campaigns with nationalistic stories, so that the product will be automatically associated with Sri Lankan identity. Using ethnocentric appeals, the consumer could be persuaded to purchase domestic products.

References

- Akdogan, M.S., Kaplan, M., Ozgener.S., & Coskun.A. (2012). The Effects of Consumer Ethnocentrism And Consumer Animosity On The Re-Purchase Intent: The Moderating. *Emerging Markets Journal*. 2 (1), 1-12. Retrieved 10 September 2019 from doi :10.5195/emaj.2012.15.
- Azis, S., Bahadur, W., Sarwar, B., Farooq, R. & Arshad, M. (2014). Investigating the Role of Demographic Characteristics on Consumer Ethnocentrism and Buying Behavior. *International Review of Management and Business Research*, 3(2), 885-893. Retrieved 12 September 2019 from doi : 10.1.1.679.7051&rep=rep1&type=pdf
- Balabanis, G, Diamantopoulos, A, Mueller, R.D, Melwar.T.C. (2001). The impact of nationalism, patriotism and internationalism on consumer ethnocentric Tendencies. *Journal of International Business Studies*. (ABI/INFORM Research), 157 – 176. Retrieved 11 September 2019 from doi:10.1057/palgrave.jibs.8490943.
- Bizumic.B, (2014). Who Coined the Concept of Ethnocentrism? A Brief Report. *Journal of Social and Political Psychology*. 2 (1), 3-10. Retrieved 7 September 2019 from doi: org/10.5964/jspp.v2i1.264.
- Costa, Y.K.H. D., Fernando, P.I.N., & Yapa, U. A.S. (2018). The Effect of Ethnocentrism and Patriotism on Consumer Preference (Special Reference to Western Province Sri Lanka), *Journal of Management and Tourism Research*, I (II), 21-32. Retrieved 16 May 2020 from: https://www.researchgate.net/profile/Ruwan_Ranasinghe/publication/336020655_Journal_of_Management_and_Tourism_Research/links/5d8b139c299bf10cff0b3832/Journal-of-Management-and-Tourism-Research.pdf#page=5
- Ghani, N. H., & NikMat, N.K. (2017). Malaysian Consumers Ethnocentrism: The Measurement Scale and Index. *International Review of Management and Marketing*. 7 (1), 521-528, Retrieved 15 August 2019 from <https://ideas.repec.org/a/eco/journ3/2017-01-68.html>

- Goa, G., & Lin, Q. (2017). Consumers Become More or Less Ethnocentric? A Meta-Analysis on Level of Consumer Ethnocentrism. *International Journal of Business and Management*, 12 (2), 145-167. Retrieved 15 September 2019 from doi:10.5539/ijbm.v12n2p145.
- Plecher, H. (2018). Sri Lanka: *Trade balance from 2007 to 2017*. Retrived 29 April 2019 from: <https://www.statista.com/statistics/728554/trade-balance-of-sri-lanka>.
- Hamin, C. & Elliott G. A., (2006). A less-developed country perspective of consumer ethnocentrism and country of origin effects: Indonesian evidence. *Asia Pacific Journal of Marketing and Logistics*, 18(2), 79–92. Retrieved 12 August 2019 from doi:10.1108/13555850610658246
- Javalgi, R. G., Khare, V. P., Gross, A., & Schere, R. F. (2005). An application of the consumer ethnocentrism model to French consumers. *International Business Review*, 14(3), 325–344. Retrieved 12 July 2019 from doi: 10.1016/j.ibusrev.2004.12.006.
- Karunaratne, L., & Wanninayake, W. (2018). Consumer Ethnocentrism and Its Influence on Impulsive Buying Behavior in Sri Lankan Milk Powder Market: The Moderation Effect by the Consumer Impulsiveness Traits. *Kelaniya Journal of Management*, 7 (2), 1-13. Retrieved 14 September 2019 from doi: org/10.4038/kjm.v7i2.7574
- Klein, J.G., Ettenson R., & Krishnan, B.C. (2006). Extending the construct of consumer ethnocentrism: when foreign products are preferred. *International Marketing Review*. 23(3),305-321. Retrieved 10 August 2019 from doi : org/10.1108/02651330610670460
- Kotler P. (2000). *Marketing Management* (3rd ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Kotler, P., & Keller, K. (2011). *Marketing Management* (14th ed.), London: Pearson Education.
- Kumar, A., Fairhurst, A., & Kim, Y. K. (2011). Ethnocentric tendencies of Indian consumers: impact on preference for domestic versus foreign products. *The International Review of Retail, Distribution and Consumer Research*. 21 (4). 323-341. Retrieved 20 August 2019 from doi:org/10.1080/09593969.2011.595496
- Kumar, P. (2010). *Marketing of Hospitality & Tourism Services*. Tata McGraw-Hill Education.
- Lakmali, A.A.I., & Warnakulasooriya, N.B.F. (2014). *Sri Lanka Journal of Business Economics*, 5 (2), 36-55. Retrieved 10 October 2019 from <http://journals.sjp.ac.lk/index.php/sljbe/article/viewFile/3832/3030>.
- Orth, U.R., & Firbasová, Z. (2003). The Role of Consumer Ethnocentrism in Food Product Evaluation, *Agribusiness*, 19 (2), 137–154. Retrived 16 May 2020 from: doi: 10.1002/agr.10051
- Othman, M., Ong, F., & Wong, H. (2008). Demographic and Lifestyle Profiles of Ethnocentric and Non-Ethnocentric Urban Malaysian Consumers. *Asian Journal of Business And Accounting*, 1(1), 5-26. Retrieved 11 August 2019 from <https://ajba.um.edu.my/article/view/2183>
- Rani, P. (2014). Factors influencing consumer behavior. *International Journal of current research and academic review*, 9 (2), 52-61. Retrieved 12 October 2019 from http://www.academia.edu/download/49511049/case_study_factors.pdf
- Shankarmahesh, M. N. (2006). Consumer ethnocentrism: An integrative review of its antecedents and consequences. *International Marketing Review*, 23(2), 146–172. Retrieved 12 August 2019, from doi:10.1108/02651330610660065
- Shimp, T. A., & Sharma, S. (1987). Consumer Ethnocentrism: construction and validation of CETSCALE. *Journal of Marketing Research*, 24 (3), 280-289. Retrieved 21 August 2019 from doi: 10.1177%2F002224378702400304
- Shimp, T.A., Sharma, S., & Shin, J. (1994). Consumer Ethnocentrism: A Test of Antecedents and Moderators. *Journal of the Academy of Marketing Science*, 23 (1), 26 – 37. Retrieved 21 August 2019 from doi:10.1177%2F0092070395231004
- Siamagka, N.T., & Balabanis, G. (2015). Revisiting Consumer Ethnocentrism: Review, Reconceptualization, and Empirical Testing. *Journal of International Marketing*, 23(3), 66-86. Retrieved 14 August 2019 from doi: 10.1509/jim.14.0085
- Silili, E.P., & Karunaratna, A.C. (2014). Consumer Ethnocentrism: Tendency of Sri Lankan Youngsters. *Global Journal of Emerging Trends in e-Business, Marketing and Consumer*

- Psychology (GJETeMCP) An Online International Monthly Journal*, 1 (1), 11-70. Retrieved 10 October 2019 from http://globalbizresearch.org/files/gjetemcp_silili-ep_karunarathna-ac-29233.pdf
- Supphellen, M., & Rittenburg, T. L. (2001). Consumer Ethnocentrism When Foreign Products Are Better, *Psychology & Marketing*, 18(9), 907–927, Retrieved 16 May 2020 from: [doi/pdf/10.1002](https://doi.org/10.1002)
- Sutikano.b., Cheng.J.M.S, (2011). Towards Consumer Ethnocentrism and Animosity in Indonesia. *Scientific Information Database*. 1 (1), 15-18. Retrieved 16 August 2019 from <https://www.sid.ir/en/journal/ViewPaper.aspx?ID=205751>
- Vida, I., Dmitrović, T. and Obadia, C., (2008). The role of ethnic affiliation in consumer ethnocentrism. *European journal of marketing*, 42(3/4), 327-343. Retrieved 18 August 2019 from [doi/10.1108/03090560810852968/full/pdf](https://doi.org/10.1108/03090560810852968/full/pdf)
- Wanninayake, W.M.C.B., & Dissanayake, D.M.R. (2012). Impact of Developing Ethnocentric Brand Templates to Sustain the Local Brands - An Empirical Study, Retrieved 16 May 2020 from: [272683011_IMPACT_OF_DEVELOPING_ETHNOCENTRIC_BRAND_TEMPLATES_TO_SUSTAIN_THE_LOCAL_BRANDS-AN_EMPIRICAL_STUDY/links/554b43de0cf29752ee7c4db9.pdf](https://www.researchgate.net/publication/272683011_IMPACT_OF_DEVELOPING_ETHNOCENTRIC_BRAND_TEMPLATES_TO_SUSTAIN_THE_LOCAL_BRANDS-AN_EMPIRICAL_STUDY/links/554b43de0cf29752ee7c4db9.pdf)
- Wanninayake,W.M.C.B., & Chovancová, M. (2014). Exploring the impact of consumer ethnocentrism on impulsive buying decisions: with evidence from Sri Lanka. *Advances in Economics, Risk Management, Political and Law Science*, 4, 247-252. Retrieved 18 August 2019 from [doi : 10.4038/kjm.v7i2.7574](https://doi.org/10.4038/kjm.v7i2.7574)
- Watson, J.J., & Wright, K. (2000).Consumer ethnocentrism and attitudes toward domestic and foreign products. *European Journal of Marketing*, 34 9-10, 1149-1166. Retrieved 14 August 2019 from [doi/10.1108/03090560010342520/full/html](https://doi.org/10.1108/03090560010342520/full/html)
- Weerasiri, S., & Dissanayake, R. (2010). Effect of promoting country of origin as an ethnocentric appeal in developing local brands: special reference to telecommunication industry of Sri Lanka, *Perspectives of Innovations, Economics and Business (PIEB), Prague Development Center (PRADEC)*, vol. 4(1), 1-3, Retrieved 12 August 2019 from : [doi: 10.22004/ag.econ.94668](https://doi.org/10.22004/ag.econ.94668)
- Yoo, B., & Donthu, N. (2005). The effect of personal cultural orientation on consumer ethnocentrism: Evaluations and behaviors of U.S. consumers toward Japanese products. *Journal of International Consumer Marketing*, 18(1-2), 7–44. Retrieved 12 August 2019 from [:doi.org/10.1300/J046v18n01_02](https://doi.org/10.1300/J046v18n01_02)

THE CRITICAL SUCCESS FACTORS OF SERVICE DELIVERY IN OFFSHORE OUTSOURCED IT PROJECTS IN SRI LANKA: FROM AN IT WORKER'S PERSPECTIVE.

Gamini L.P.S¹ and Lisk D²

*Faculty of Management Studies,
Open University of Sri Lanka, Nawala, Sri Lanka.
lpgam@ou.ac.lk.¹, Deepika@yahoo.com²*

Abstract

This research investigates the Critical Success Factors (CSF) of Service Delivery in Offshore Outsourced IT Projects in Sri Lanka from an IT Worker's perspective. The CSFs for this study were selected through a preliminary literature survey of the success factors of Offshore Outsourced IT Projects and Global Software Development (GSD) ventures. Trust, efficient communication, cultural understanding, relationship management and efficient knowledge transfer are the five CSFs identified for the study. An exploratory analysis was conducted on quantitative data gathered through a survey questionnaire from a sample of 46 respondents attached to the IT field. The service quality was measured using the employee performance rank that includes and reflects the client's assessment of the performance of IT worker and quality of service delivery. The results indicate that all 5 CSFs selected for the study: trust, efficient communication, cultural understanding, relationship management and efficient knowledge transfer have a positive correlation to quality of service delivery. Further, the results show that Cultural Understanding is the most Critical Factor that has an impact on the quality of service delivery in offshore outsourced IT projects in Sri Lanka, from an IT Worker's perspective.

Key Words: Critical Success Factors, Outsourcing, Off shoring, Quality of Service delivery.

Introduction

Global software development and service delivery have become a way of life and this has resulted from the continuous advancement in Information Technology (IT). To remain competitive, modern day companies increasingly look at other locations to source the IT resources they need and to fill the gaps in skills and expertise of their own countries. The idea is to get the best source in terms of overall value. Outsourcing is the business arrangement where 'tasks and processes are contracted to be performed outside the boundaries of the firm. (Carmel & Tjia 2005). Off shoring refers to the relocation of organizational activities to a wholly owned subsidiary or an independent service provider in another country (Oshri et al. 2015). Offshore outsourcing involves handing over IT work to a 3rd party service provider that is located in a different country. In recent years, the global IT outsourcing market has grown rapidly, and further expansion in this is expected. The two main drivers of global sourcing are seen as technological advances and steady supply of skilled labor from developing countries at low cost (Oshri et al. 2015).

Sri Lanka is seen as an emerging destination for Global IT Offshore Outsourced Services. And, Sri Lanka is said to offer "a unique mix of extremely low costs - combined with a highly educated, English-speaking population with sophisticated technical skills, and a business environment and infrastructure that is superior to most of the other low-cost countries (Kearney 2012, p.2). The above facts confirm that global IT services is a fast growing industry in Sri Lanka with the potential to provide more IT jobs. This will create more opportunities for local IT workers to join the global workforce. Further to succeed in the global workforce, Sri Lankan IT workers and their organizations need to be aware of the factors that enhance the quality of service delivery.

The Industry stakeholders and government have identified IT as an industry, which has enormous potential for the future. Even though there is vast potential, the contribution of Sri Lanka

is still insignificant in the global arena and therefore continuous improvement is necessary. There is substantial research carried out globally on the Offshore Outsourced IT projects and the Critical Success Factors (CSFs) for service delivery, either from a client perspective or from a vendor's perspective, but rarely from an IT worker's perspective. Most research focused on the value proposition to the client and highlighted vendor selection criteria. Some studies have been carried out in relation to competitive markets such as India, China and Vietnam. However, no research has yet been carried out on the CSFs that impact service delivery of Global IT projects from the IT worker's perspective in Sri Lanka. So, what this research aims at doing is to ascertain - whether the Critical Success Factors identified by previous research impact the Service Delivery of Offshore Outsourced IT projects in Sri Lanka. This is from an IT worker's perspective. This research helps to ascertain whether the selected CSFs of service delivery are relevant for the company identified and whether these are the most critical factors that enhance the quality of service delivery. It also provides opportunity for further research in other organizations providing offshore outsourced IT services in Sri Lanka. Such research will help the offshore outsourced IT service providers in Sri Lanka to improve the quality of service delivery by improving individual worker performance.

Research Problem

Many Success Factors that impact service delivery of Global IT projects have been identified and researched over time. The researcher has observed certain difficulties faced by the IT workers when delivering services in the offshore outsourced IT projects. Therefore the researcher would like to ascertain, from an IT worker's perspective, whether the top CSFs identified by previous researches are relevant to the IT offshore outsourced service delivery in Sri Lanka. Therefore, the research focus is on: the extent to which the Critical Success Factors of offshore outsourced IT projects impact the quality of service delivery in offshore outsourced IT projects in Sri Lanka, from an IT worker's perspective.

The main research objective of this study is to ascertain whether the Critical Success Factors of offshore IT delivery have an impact on the quality of service delivery of offshore outsourced IT projects in Sri Lanka, from an IT worker's perspective.

Literature Review

This section discusses some Critical Success Factors (CSFs) most relevant to this study in the order: Trust, Efficient Communication, Cultural Understanding, Relationship Management and Efficient Knowledge Transfer. Accordingly, a research carried out by Mao et al (2008) in the Japan-China off shoring context, indicates that trust has a significant impact on project quality. Further, information sharing, communication quality, and inter-firm adaptation emerged as three significant contributors to the vendor's trust in the client. And, it seems that a high level of trust in a client is associated with higher quality standards and level of effort as shown in the following model.

Yang et al (2004) found that reliable communication is essential for the success of collaborative global software development efforts. The research is based on finding alternative methods so as to reduce the high dependency on communication, to avoid issues and delays in communication that may result in misunderstood requirements or missed project milestones. The study states that when customers and developers are in different geographical location, the feedback between them may not be timely enough and this may become a significant obstacle in smooth implementation of such projects. According to Wende & King (2015), social relationships between members benefit teams by preventing conflicts, achieving satisfaction, and improving adaptation. Social relationships will help to buffer conflicts and adapt to each other's cultures.

Huang & Trauth, (2007) conducted a study on Cultural Influences and Globally Distributed Information Systems Development and in this study, they identified three themes of cross-cultural challenges: 1) Complexity of language issues that affect global virtual teams 2) Culture, communication styles and work behaviors and 3) Cultural understanding at different levels. The findings also show that language barrier is simply not a case of 'knowing' or 'not knowing', but the influence of culture inhibits 'open' communication. The study "demonstrates that it is important for IT practitioners to develop cultural understanding at different levels. Gurung and Prater through the findings of their research established that the cultural impact on virtual teams is a socially complex phenomenon and this not only involves national culture, but also organizational and individual

cultures (Gurung et al. 2006, p.25). Winkler’s research shows that Leadership and Management of culture can reduce the impact of ‘cultural differences’ on project success by understanding and adapting to the different cultures.

Whende and King (2015) conducted a study on relationship building in offshore outsourced projects. They found that “Building relationships and establishing trust” are generally recognized as critical success factors of offshore project teams. Satisfaction with relationships is believed to be a primary determinant of the success or failure of client–service provider collaboration. In a study on global outsourced IT projects from North America, Europe and East Asia to India, Heeks et al (2001) find that successful relationships were those in which a high degree of congruence occurred between developer and client. This congruence could differ from relationship to relationship and covers a number of ‘contextual dimensions’ - coordination/control systems, objectives and values, capabilities, processes, information, and technology. They go on to record that they did not find total congruence in any of the global outsourced relationships, but the more successful ones were congruent relationships that delivered more successful projects.

In the exploratory study using a systematic literature review by Niazi et al. (2013), ‘Knowledge sharing’ was reported, as an important factor of offshore software outsourcing relationships. Knowledge sharing management is seen as an operation that helps to find, select, organize, disseminate and share important knowledge and expertise necessary for software activities. They go on to state that “By sharing knowledge in IT outsourcing environments, clients and vendors are able to confirm an effective outsourcing relationship over time”. In a paper that examines the team-level factors that influence knowledge integration (KI) in offshore outsourced projects by Balaji & Ahuja (2005), find that project success requires the business knowledge of the client to be combined with the technical knowledge residing with the vendor. “The integration of knowledge occurs after the recipient achieves satisfactory results with the transferred knowledge. Knowledge Integration is the process of absorbing knowledge from the client and blending it with the technical and business skills, know-how, and expertise that reside in the IT units of the vendor.

Research Methodology

Conceptual Framework

Based on the above literature, five Critical Success Factors (CSFs) were considered to develop the following conceptual framework for the study.

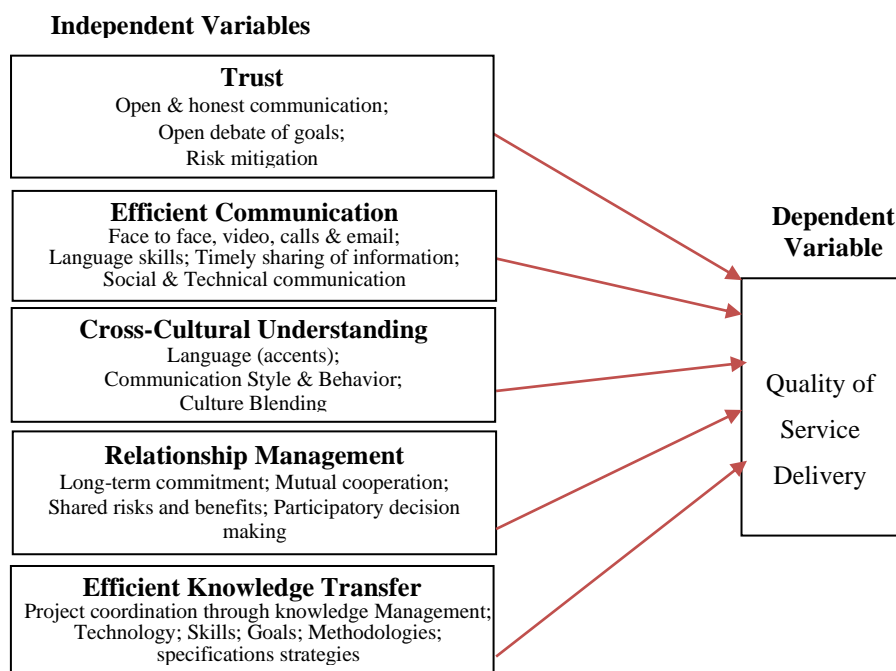


Figure 1: Conceptual Framework of the study.

Statements of Hypotheses

Based on the conceptual framework above, the following hypotheses have been formulated for this research study.

H1 Trust has a significant influence on quality of service delivery in offshore outsourced IT projects.

H2 Efficiency of Communication has a significant influence on quality of service delivery in offshore outsourced IT projects

H3 Cultural Understanding has a significant influence on quality of service delivery in offshore outsourced IT projects.

H4 Relationship Management has a significant influence on quality of service delivery in offshore outsourced IT projects

H5 Efficiency of Knowledge Transfer has a significant influence on quality of service delivery in offshore outsourced IT projects

Sample and Data

This research is explored on the basis of causal explanation design. It searches the effect of Critical Success Factors of offshore IT delivery on the quality of service delivery. The sample size used for the study is 50 respondents. Accordingly, the Survey Questionnaire was distributed to a sample of 50 IT professionals excluding those with less than 6 months of service in the company. A total of 46 sets of completed questionnaires were returned. The researchers used an opinion based method to collect quantitative data on the independent variables from the sample. For the purpose of collecting primary data, a structured questionnaire was designed comprising 5 main statements representing each independent variable. The value of each independent variable was constructed using the arithmetic mean of responses for that variable. The questionnaire consists of two main sections – Section 1 captures the Respondent's details and Section 2 has 5 subsections for the 5 variables conceptualized by the research framework. Each survey question, measuring a dimension of its related independent variable used a five point Likert scale. The Response options range on the degree of agreement from "Strongly Agree" to "Strongly Disagree" on a scale of 5 to 1. An evidence-based approach was used to measure the quality of service delivery (dependent variable) by using the performance rank of IT worker. Performance of IT worker is evaluated by the client and this is a direct indicator of the client's level of satisfaction with the service delivery. Accordingly, the Performance Rank is measured on a 5 point Likert scale: (5) Outstanding services, (4) Exceeds Expectation, (3) Meets Expectation, (2) Needs Improvement and (1) Unacceptable.

Data was analyzed using descriptive and inferential statistical techniques. The responses to each question as well as the overall responses to each main statement are analyzed using descriptive statistics. The relationship between the dependent variable and each independent variable is analyzed using the Pearson's Correlation analysis. All statistical analysis was done using SPSS (Statistical Package for Social Science) Computer Software.

Findings and discussion

Total number of respondents participated in the study were 46 and among them 39 were females and 7 were males. All respondents have a minimum of 3 years of work experience with a majority having 6-10 years of experience. Out of the total sample, 21.7% of the respondents have 3-5 years of experience, 50% have 6-10 years of experience and 13% have over 10 years of experience.

The results show that 76% are qualified with a bachelor's degree or equivalent, while 2% have only a Diploma and 9% are further qualified with a master's degree.

Descriptive Statistics of Independent & Dependent variables

The researcher sees that all variables have 46 observations each, representing the total sample. Using descriptive statistics, the researcher has analyzed the distribution of responses and data points by considering the Mean and Standard Deviation (SD) of each variable. All 5 independent variables (Trust, Communication, Culture, Relationship and Knowledge) have Standard Deviations values less than one ($SD \leq 1$) indicating that all responses are closely distributed around their respective Mean. The dependent variable (Performance Rank) also has a standard deviation of less than one ($SD \leq 1$) indicating that the data points are closely distributed around the mean.

Table 1: Descriptive Statistics – Dependent and Independent Variables

Variable	Mean	Std. Deviation	N
Performance rank	3.4	0.6	46
Trust	4.2	0.5	46
Efficient Communication	3.4	0.6	46
Cross-cultural understanding	3.2	0.7	46
Relationship Management	3.7	0.6	46
Efficient Knowledge transfer	3.8	0.6	46

As shown in Table 1, Trust factor recorded the highest mean (4.2) with the standard deviation of 0.5. This indicates that trust between the client and IT worker is the most important critical success factor of service delivery in offshore outsourced IT projects. This may be the reason that teams that won high degree of trust are more task-oriented and therefore are more result oriented. Without trust of competence of IT professional, work cannot be executed efficiently & timely. Efficient Knowledge Transfer has emerged as the second most important critical success factor for quality service delivery followed by relationship management factor and efficient communication factor. However, the least mean (3.2) is recorded for cross cultural understanding between client and IT worker.

The Pearson's correlation coefficient was run to determine the relationships between the 5 Independent variables and the Performance Rank (Dependent variable) as a 1-tailed test, in order to assess the strength of the effect of each Independent variable on the Dependent variable.

The results show that, except trust factor all other Independent Variables have statistically significant correlation with the Dependent Variable (Performance Rank).

Table 2: Results of Correlation Analysis

Independent Variable	Correlation Coefficient (<i>r</i>)	Sig. (1-tailed) p-value(P)	N
Trust	0.297	0.063	46
Efficient Communication	0.326	0.014	46
Cross-cultural understanding	0.340	0.010	46
Relationship Management	0.312	0.017	46
Efficient Knowledge transfer	0.317	0.016	46

The Correlation Coefficient between Culture and performance rank is 0.340 and it is statistically significant at 1 percent level of significance ($P = 0.010$). Compared to other critical success factors, culture has the highest correlation with performance rank of the IT worker. This indicates that cultural understanding is a significant factor that influences the quality of service delivery in offshore outsourced IT projects in Sri Lanka. Findings of this study are consistent with Winkler et al findings that leadership and management of culture can reduce the impact of 'cultural differences' on success of project through the understanding and adapting to the different cultures.

This result also supports the belief that the cultural differences should be clearly understood by each other to maintain a good relationship. The significance correlation between communication and performance rank ($r=0.326$, $p < 0.05$) indicates that effective technical communication has a direct impact on project success and it is critical to IT outsourcing projects. In contrast to this finding Carmel and Agarwal (2001) found that communication is a mediating factor that affects both coordination and control and they highlighted the critical role of effective communication in the successful orchestration of a global software project. Analysis of information shows that Building relationships ($r=0.312$, $p < .05$) also has a significant positive effect on the IT worker performance rank. Similar observation has been made by Heeks et al (2001). They found that a higher level of agreement between developer and client on work aspects would result in a successful relationship that makes the projects more successful. Shami et al. (2004) also highlighted the importance of building relationships in global software development teams and the use of cross-site social networks to leverage the help of other workers to conclude the task. Further, the study finds that efficient knowledge transfer ($r= 3.17$, $P < 0.05$) is a critical success factor of the quality of service delivery in offshore outsourced IT projects in Sri Lanka. Thus, these results support the belief that by sharing knowledge in IT outsourcing environments, clients and vendors are able to confirm an effective outsourcing relationship over time (Niazi et al. 2013).

Conclusion

The study found that except trust factor, all other factors: Communication factor, Culture factor, Relationship factor and Knowledge factor are proven as Critical Success Factors for Quality Service Delivery by hypothesis test. Accordingly, this study found that cultural understanding is the key critical success factor of the quality of service delivery in offshore outsourced IT projects in Sri Lanka. It is also found that effective technical communication at every stage of the project is essential for higher achievement of delivery outcomes. Relationship management is a quality dimension that reflects the IT worker's willingness to help the client and provide prompt service. This finding also supports the conclusion that sharing organized knowledge is essential for software design and project delivery. The use of different knowledge sharing platforms helps to institutionalize knowledge inside the venter company and with the client The implication of these findings is that if an IT firm needs to increase their quality of service delivery it is vital for the firm to focus on factors like culture, communication, relationship management and knowledge sharing.

References

- Balaji, S. & Ahuja, M. K. (2005). Critical Team-Level Success Factors of Offshore Outsourced Projects: A Knowledge Integration Perspective, In Proceedings of the 38th Hawaii International Conference on System Sciences, IEEE, pp. 1–8.
- Carmel, E. & Agarwal, R. (2001). Tactical Approaches for Alleviating Distance in Global Software Development, *IEEE Software Journal*, 18(April), pp.1–11.
- Carmel, E. & Tjia, P. (2005). Off shoring Information Technology: Sourcing and Outsourcing to a Global Workforce, New York: *Cambridge University Press*, New York. Available at: <http://www.drnino.jp/files/93d0dc5ea4.pdf> [Accessed March 19, 2016].
- Gurung, A., Pratter, E. & Prater, E. (2006). A Research Framework for the Impact of Cultural Differences on IT Outsourcing, *Journal of Global Information Technology Management*, 9(1), pp.24–43.
- Heeks, R. (2001). “Synching or Sinking: Global Software Outsourcing Relationships”, *IEEE Software*, pp.54–60.
- Mao, J.Y., Lee, J.N. & Deng, C.P. (2008). Vendors' perspectives on trust and control in offshore information systems outsourcing, *Information and Management*, 45(7), pp.482–492.
- Niazi, M. (2013). Establishing trust in offshore software outsourcing relationships: an exploratory study using a systematic literature review, *IET Software*, 7(5), pp.283–293.
- Shami, N.S. (2004). An experimental simulation of multi-site software development, In Proceedings of the 2004 ACM conference on Computer supported cooperative work, pp. 1–12

Wende, E. & King, G. (2015). Exploring storytelling for relationship building in offshore outsourced projects: An action research investigation *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2015–March, pp.412–421.

Winkler, J.K., Dibbern, J. & Heinzl, A. (2008). The impact of cultural differences in offshore outsourcing case study results from German Indian application development projects, *Information Systems Frontiers*, 10(2), pp.243–258.

Yang, X. (2004). *Extreme Programming In Global Software Development*, Boston. Available at: [http://www.vlis.zju.edu.cn/papers/Extreme Programming In Global Software Development.pdf](http://www.vlis.zju.edu.cn/papers/Extreme%20Programming%20In%20Global%20Software%20Development.pdf) [Accessed March 19, 2016].

PATIENTS' SATISFACTION TOWARDS THE SERVICE QUALITY OF PHARMACY IN THE GOVERNMENT HOSPITALS IN SRI LANKA

Kumaranayake S.¹, Senevirathne W.A.R² and Silva G.A.J.³

Faculty of Management Studies,
Open University of Sri Lanka
msdsisira@yahoo.com¹, wasen@ou.ac.lk², gasil@ou.ac.lk³

Abstract

The purpose of this study is to assess the patients' satisfaction of the service quality at pharmacy services in the Government hospitals in Sri Lanka. Patient is key customer of the free health services offered by the Government of Sri Lanka. The free health service of Sri Lanka has been commended by the rest of the Asian and Western countries as the patients are charged for providing medical care in most of the countries. However, offering free health services incur cost for the Government of Sri Lanka. Therefore, it is obvious that various shortcomings exist in the health sector, which sometimes could inconvenience the patients. This study attempts to investigate how, patients treated at the Outpatient Department (OPD) of Government clinics express their satisfaction about the pharmacy services available at respective hospitals. The service quality factors presented by Zeithaml et al. (1985) were used to design structured likert scale questionnaire. Cross-sectional research designed was used in this study and data was collected from 108 patients from a Government teaching hospital in Kandy District. Multiple regression analysis was performed to analyse the data. Findings revealed a positive significant relationship between satisfaction and tangibility, responsiveness, assurance, reliability of service qualities. There is no significant relationship between satisfaction and empathy of the services. The study highlighted the importance of dimensions or indicators of concepts, which have direct impact on patients' satisfaction. Conclusively, the study recommends that service quality actions influence patients' satisfaction. These quality actions broadly related to human and technological aspects and these in return help to achieve quality standards. Therefore, technological infrastructure should be available together with skillful pharmacists to make pharmacy services more productive.

Keywords: Customer Satisfaction, Service Quality factors, Hospital Services, Sri Lanka

Introduction

The quality of tangible products has been described and measured by marketers but quality in services is largely undefined and researched (Zeithaml et al., 1985). Quality of services influences the mindset of the service recipient and this in most cases is not exposed. The most significant thing is quality can enhance the satisfaction of the beneficiaries of the given service in different ways than products. Therefore, a service can be customized and personalized. Functional quality of a service has higher impact on customer satisfaction when compared to technical quality, and customer satisfaction has a significant effect on customer loyalty (Kasiri, Guan Cheng, Sambasivan, & Sidin, 2017). The purpose of this study is to assess the patients' satisfaction towards the pharmacy services in the Government hospitals in Sri Lanka. Patient is the key customer of the free health services offered by the Government of Sri Lanka. The country pursues a free health policy and all the Sri Lankans can have free access to health care services provided by the government hospitals. This has helped Sri Lanka to reach a higher Human Development Index than all other countries in the South Asian region (Annual Health Bulletin, 2017). In this study, the researchers focus on patients' satisfaction by using the word "customer" in place of the word "patient". Therefore, "customer of hospital service" in this study implies the patient who receives the hospital services. Customer satisfaction is generally defined as a feeling or judgment towards products or services after use (Ahmad & Jamal, 2003). Customers compare their expectations of goods and

services with actual experiences they gain in using them, and this comparison helps to determine their level of satisfaction. That is, customer satisfaction is based on not only current experience, but also all past, future or anticipated experiences (Anderson & Sullivan, 1993). In the health service sector, especially where hospital delivers medical services, beneficiaries are the customers. In this study hospital customer is the “patient”. Even though they are customers, they are different from the general customers who visit a hotel or a restaurant. Because, patients suffer from many health issues and their need gap is completely different from other type of customers. Patients who seek medical solutions are unable to spend more time outside their homes. Patients’ satisfaction is determined by how the given person is treated and gets cured from illness. However, it may take longer for patients regularly visiting clinics for Non-communicable diseases (NCDs) of public sector hospital to get cured from illnesses. They may have to seek medical treatments for a long time. So regular visit to clinic is compulsory for them and while attending to the clinic such patients have to depend on available service delivery systems within the hospital.

Satisfaction means to delight and satisfy the patients by delivering the service and medications beyond the expectation of the patients. Customer satisfaction is a major concern in the health care system both public and private sector in Sri Lanka. Compared with public sector, private sector health service deliveries are said to be far better. However, this is debatable. Further, private sector charge from patients for their services whereas most of the services are provided free of charge in public sector hospitals. Somehow with the help of modern technology and managerial applications private healthcare institutions have achieved recognition for delivering better services, thus making patients more satisfied than the public sector. Customer satisfaction of health care system consists of two major components; (a) medical (b) non-medical components. The medical components include the health care personals, procedures and services. Satisfaction of the customer is affected by many factors. These are explanation, manner of diagnosis, careful listening, respect and courtesy, response to a patient needs, service waiting time, professional appearance, protection and privacy. Non- medical components include customers, family and customer orientation which are not considered in this study.

In 2015, United Nations member states adopted the 2030 agenda for Sustainable Development and it consists of 17 Sustainable Development Goals (SDGs). The SDG 3 addresses health and aims to “ensure healthy lives and promote wellbeing for all at all ages” (United Nations ,2020, para.3). Ministry of Health and Indigenous Medical Services Sri Lanka, with the collaboration of UN is responsible for ensuring resources for health such as trained human resources, drug supply and major health infrastructure developments. Free health service is an entitlement of every citizen from birth to death in Sri Lanka. Under this social consideration, the Sri Lankan Government is bound to supply free health services to the public free of charge. Hence, the state sector provides 95% of the inpatient care and 50% of the outpatient care (Annual Health Bulletin, 2017). However, with the rapid development of private investment in health care industries and health insurance schemes, private sector also provides health services for a considerable number of patients in the country. Since the costs of providing drugs and medical infrastructures are high, it costs the patients dearly when seeking treatments from private sector hospitals. However, there is a high tendency for patients in Sri Lanka to seek treatments from private sector hospitals and channeling centers. Irrespective of the above facts the Government health expenditure was 1.59% of the total Gross National Products (GNP) in 2017(Annual Health Bulletin, 2017). 628 Government hospitals with the capacity of hospital beds 83,275 operate throughout the country. According to the statistics in ward admission for government hospitals in 2017 was 6,910, 249, the clinic attendance was 27,858,203 and OPD attendance was 55,399,335 (Annual Health Bulletin, 2017). These statistics demonstrates the significance of free health services offered by the Government of Sri Lanka.

Table 1: National Expenditure, Health Expenditure and GNP, 2013 - 2017

Description	2013	2014	2015	2016	2017
National Expenditure (Rs.Million)	2,411,606	2,601,723	3,203,280	3,106,443	3,470,589
Government Health Expenditure (Not Included Private Health Sector) (Rs.Million)	120,346	155,008	181,122	192,535	206,182
Health Expenditure (Not Included Private Health Sector) as a % of National Expenditure	4.99	5.96	5.65	6.20	5.94
Mid Year Population ('000 Persons)	20,585	20,771	20,966	21,203	21,444
Per Capita Health Expenditure (Not Included Private Health Sector) (Rs.)	5,846	7,463	8,639	9,081	9,615
GNP/GNI (Rs.Billion)	9,366	10,125	10,676	11,585	12,933
Health Expenditure as a % of GNP	1.28	1.53	1.70	1.66	1.59

Source: Annual Health Bulletin, Ministry and Indigenous Medical services (2017)

Research Problem

Free access to the health services for the entire population of the country creates large pool of patients for the Government hospitals in Sri Lanka. However, Scarcity of resources is the major factor that inhibits the expansion of the public health sector in the country. This naturally limits the capacity available to treat patients in respective facilities.

Table 2 : Health sector capacity in Sri Lanka

No	Indicator/Resources	Data
1	Government health expenditure as a percentage of total government expenditure	5.94%
2	Per capita health expenditure (Rs.)	9,615
3	Number of hospitals	628
4	Number of hospital beds	83,275
5	Hospital beds per 1,000 population	3.9
6	Nurses per 100,000 population	212.1
7	Supervising Public Health Midwives/Public Health Midwives per 100,000 population	
9	Doctors per 100,000 population	92.3
10	Dental Surgeon per 100,000 population	6.9

Source: Annual Health Bulletin, Ministry and Indigenous Medical services (2017)

Limited budget allocation to the health sector leads to short supply of the services. This creates gaps between demand and supply conditions in the health sector. National Expenditure on health services was Rs. 3,470,589 Million in year 2017. As a percentage this was 5.94% of total government expenditure (Annual Health Bulletin, 2017). Some of the regular shortcomings that exist in the public health services are wasting time by lining in long queues, re-visiting for the same service repeatedly due to re-scheduling of medical service, drug shortages, non-availability of medication and limitation of physical infrastructure. Extensive competitive situation could be observed among the patients to obtain early service with a view to leaving the hospital early. In addition to making re scheduling necessary, this creates long queues leading to hostilities among the patients. According to the systems that prevail in hospitals, consequence flow has to be followed by the patients because of the differences in patients' requirements. These steps consist of registration, diagnosis of illnesses, different type of testing, report generation, medical counselling and finally medication. Collection of the drugs according to the prescription from the pharmacy is the final step. Only after spending few hours at the previous service delivery points the patient reaches the hospital pharmacy to collect drugs. Therefore, patients expect speedy delivery of drugs though the hospital pharmacy. Nevertheless, unfortunately in many hospitals, long queues are seen at the pharmacies commonly referred to as queues at issuing counters.

Pharmacy is the place where dispensing of drugs and instructions are given to the patients regarding their medications. Careful attention, understanding and feed back of patients are essential

in this regard as the requirements vary according the customer. The patient must have quick access to right kind of treatment if that leads to speedy recovery of the patient enabling him/her to lead a normal life. Misunderstanding or ignoring the instructions given necessitates further medical investigations, prolonging the recovery time and returning to normalcy. This results in resources wastage and higher opportunity cost for the government or patient, factors that must not be easily ignored. In public hospitals patients had to spend longer time at various points before reaching the drug issuing counter. Therefore handling of and providing instructions to patients become somewhat difficult, as at one point their intention is to leave the hospital premises as early as possible. It is essential to maintain patient satisfaction in pharmacy practice because mutual understanding between professionals and patients will lead to better knowledge sharing, early recovery, which in turn will empower work force of the country. This naturally makes the utilization of human resource, time, and money investing on the health sector more efficient. As a developing country, efficient usage of limited budget allocated is important when considering the opportunity cost of the country’s economic needs.

After the establishment of grievance handling system with a view to evaluating patients’ satisfaction, a number of complaints was received through various sources. This includes revisiting the pharmacy for further clarification on issues of medications; shortages of drugs. Wasting time by lining in long queues had verbally been informed to the hospital management by patients. This shows patients are not happy about the services provided by the pharmacy.

A preliminary survey was conducted between November 2018 to December 2018. As shown in the figure 1 given below, minimum of 4 and maximum of 9 complains were reported from the 1st week of November 2018 to the 8th week of December 2018. During the time period weekly complains were recorded from different types of clinics conducted by the hospital where drugs were delivered to the patients.

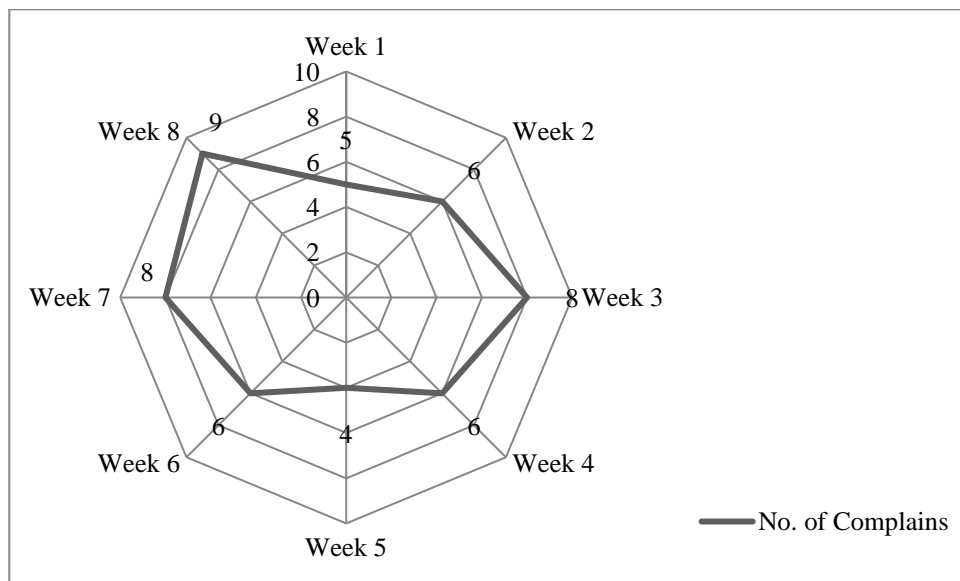


Figure 1: Patient complaints
Source: Author designed

Table 3: Summary of complains received.

1 st Week	2 nd Week	3 rd Week	4 th Week	5 th Week	6 th Week	7 th Week	8 th Week
5 to 11 Nov. 2018	12 to 18 Nov 2018	19 to 25 Nov 2018	26 to 02 Dec.2018	03 to 09 Dec 2018	10 to 16 Dec. 2018	17 to 23 Dec. 2018	24 to 30 Dec 2018
5	6	8	6	4	6	8	9

Source: Author constructed

Objectives of the research

There are two related objectives to be achieved through this research study. First objective is to identify the impact of factors related to perceived service quality at Pharmacies in the Government Hospitals in Sri Lanka on patients’ satisfaction. Second objective is to examine the level of significance between any of the two identified variables.

Literature Review and Hypotheses Development

Patient satisfaction, defined as the patient’s positive or negative response to a specific physician–patient interaction and this has been linked to greater adherence to therapy and fewer lawsuits in relation to malpractice. The patient-centred approaches incorporated into the training of medical personnel are key determinants of patient satisfaction (Grayson-Sneed et al., 2016). The perceptions and expectations of outpatients regarding the quality of medical care, general satisfaction and infrastructure are extremely important. A Hospital be it large or small can demonstrate successful performance only when it satisfies the factors of quality of service a patient expects. Patient dissatisfaction leads to drift in both new and old patients, which hinders the sustainability of any Hospital in the long run (Gopal, Satvinder, & Bedi, 2014). Zeithaml et al. (1985) supported the idea that service quality can be gauged by comparing customer perceptions about the service and the actual performance of service. In a refined study in 1988 the original number of service quality dimensions were reduced from ten to five, contending that these five dimensions fully capture the domain of service quality. These five dimensions are assessed by a total of 22 pair of items. Each item is measured on the basis of responses to two statements that measure (a) Customer expectation and (b) perception of customer on actual levels of services provided (Hossein Dadfar, 2012). The five service quality components were used in this study are as follows.

Table 4: Five Broad Dimensions of Service Quality

Dimension	Definition
Tangibles	Appearance of physical facilities, equipment, personnel and written materials.
Reliability	Degree to which a promised service is performed dependably and accurately.
Responsiveness	Willingness to help customers and provide prompt service.
Assurance	Employees’ knowledge and courtesy and their ability to inspire trust and confidence.
Empathy	Caring, easy access, good communication, customer understanding and individualized attention given to customers.

Source: Zeithaml et al. (1990)

Tangibility and patients’ satisfaction

In the hospital environment, physical facilities, equipment, and communication materials are important when the patient arrives in a distressed condition. Wakefield and Blodgett (1999) have investigated that in case of a tangible physical environment, customer reactions may be more emotional than cognitive. The finding of their work based on consumer surveys was that the tangible physical environment plays an important role in generating excitement in leisure settings, which plays a significant role in determining customer’s intentions. Siddiqi, (2011) proved that, tangibility positively correlated to the customer satisfaction in banking services. Thus, tangibility is presumed to have a positive impact on patients’ satisfaction.

Hypothesis 1(H₁). *Tangibility has a positive impact on customer satisfaction.*

Reliability and patients’ satisfaction

Reliability means the ability of the supplier to execute the service in a safe and efficient manner. It depicts the consistent performance, free of non-compliance, in which the user can trust. The supplier must comply with what has been promised and ensure very first time service delivery.

Reliability is a dimension that measures the reliability of the company in providing services to its customers. There are two aspects of reliability, first, the company's ability to deliver the service as promised and the extent to which a company is able to provide accurate service with no error. Compared to the other four dimensions of SEVQUAL model, reliability dimension is often perceived as the most important dimension for customers in various service industries (Puspa Leni, Sutiye, Suhery, Dessy Trismiyanti, Yoserizal, 2018). Reliability and responsiveness (not empathy, tangibility, and assurance) impact patients' satisfaction (Meesala & Paul, 2018). Thus, reliability is presumed to have a positive impact on patients' satisfaction.

Hypothesis 2(H₂). *Reliability has a positive impact on customer satisfaction.*

Responsiveness and patients' satisfaction

Responsiveness refers to the willingness and ability of the service provider to meet and adapt to customers' needs. Study shows that responsiveness and customer satisfaction is positively correlated (Siddiqi, 2011). In the health care system responsiveness is very important factor because in case of an emergency the expectations of responsiveness are very high (Gopal et al., 2014). Reliability and Responsiveness significantly contribute to patient satisfaction (Meesala & Paul, 2018). Thus, responsiveness is presumed to have a positive impact on patients' satisfaction.

Hypothesis 3(H₃). *Responsiveness has a positively impact on customer satisfaction.*

Assurance and patients' satisfaction

Assurance refers to the courtesy and knowledge of the employees and their ability to build up trust and confidence among patients. This factor is also important to achieve customer satisfaction and retention (Samar, Basu & Ware, 2018). Employees need to change their attitude and should be non-confronting, have knowledge about the hospital, should be able to impart training at all levels in order to improve the service quality (Samar, Basu & Ware, 2018). Not only in the health care sector but also in the education sector Assurance seems to be vital as reflected in the research findings (Akhlaghi, Amini, & Akhlaghi, 2012). Thus, assurance is presumed to have a positive impact on patients' satisfaction.

Hypothesis 4(H₄). *Assurance has a positively impact on customer satisfaction.*

Empathy and patients' satisfaction

Empathy implies the caring, individualized attention the firm provides its customers (Akhlaghi et al., 2012). Assurance, empathy, and tangibility matter little to the patient since he/she depends heavily on the treating physician in developing countries (Meesala & Paul, 2018). Empathy, tangibility, and assurance do not impact patients' satisfaction (Meesala & Paul, 2018). There are contradictory findings of the relationship between empathy and customer satisfaction when it is compared with theoretical and conceptual framework. Thus, empathy is presumed to have a positive impact on patients' satisfaction.

Hypothesis 5(H₅). *Empathy has a positive impact on customer satisfaction.*

Customer Satisfaction

A review of the literature reveals many studies that have shown a positive relationship between service quality perceptions and satisfaction. Researchers have identified several possible variables that may result in out patient's satisfaction with the hospital services (Gopal et al., 2014). Service quality attributes are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty in the retail banking settings (Siddiqi, 2011). Lack of customer satisfaction has an even larger effect on the bottom line. Customers who receive poor service will typically relate their dissatisfaction with fifteen to twenty other associates. In pharmacy service, in addition to confirming or gathering additional information regarding the patient's medical condition and other medications in the clinical encounter, pharmacists also try to discern other aspects of pertinent such as education level or attitudes towards treatment. They rely on this initial dialogue to judge the individual's needs and capabilities to digest safety information (Wilbur, 2018). A direct link is found between lower than expected healthcare service delivery and resultant

decrease in patient satisfaction. Because of this, healthcare providers are now conducting systematic research by using various measures to understand patient satisfaction (Qatari, 1999). Patients' satisfaction is the endogenous variable to be determined in hospital drug issuing counter known as pharmacy. There are eight (08) items in this variable identified for this study.

Research Methodology

Sample Design and Data Collection

In this research, researcher attempted to collect data from well identified and properly defined sample which described the population precisely. A cross sectional study was conducted by administrating structured questionnaire from January to February 2019. Responses were given using a five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). The population of customers in the hospital pharmacy includes 1200 patients visiting the pharmacy, those who attend the regular clinics. The distribution of the population is as follows.

Table 5: Population of the study

Diabetic Clinic patients	200
Hypertension Clinic patients	200
Neurology Clinic patients	300
Respiratory Clinic patients	350
Other Clinic patients	150

The research intends to study the customer satisfaction of the people enjoying normal standard of living, thus people with special needs (Disabled, Blind) will be excluded from this research. The total population of this study is 1200 patients attending the clinics at the hospital.

Table 6: Sample of the study

Clinic Name	No of Patients	Respondents
Diabetic	20	18
Hypertension	12	11
Neurology	25	23
Respiratory	45	41
Other	15	15
Total	117	108

Source: Author constructed

Table 7: Profile of the sample

Frequency			Percentage %		
<u>Age</u>			<u>Education</u>		
18-25	11	10.2	Up to O/L	53	49.1
26-35	16	14.8	A/L	27	25.0
36-45	33	30.6	Diploma	15	13.9
46-55	30	27.8	Degree	13	12.0
<55	18	16.7	<u>Duration of taking medicine</u>		
<u>Gender</u>			Zero- One year	15	13.8
Female	72	66.7	Two to three years	46	42.6
Male	36	33.3	Three to five years	14	13.0
<u>Illness</u>			More than five years	33	30.6
Diabetic	18	16.7			
Hypertension	11	10.2			
Neurology	23	21.3			
Respiratory	41	38.0			
Other	15	13.8			

Source: Author constructed

Age of the patients of the sample is between 18-55 years and they were grouped into five categories. Female representation is 66.% where as male representation is only 1/3 of the sample. Most of the patients suffer from diabetic, hypertension, neurology, and reparatory illness. The patients in the sample have been visiting the hospital from zero years to more than five years.

Measurement of Variables

The relationship between service quality factors and patients satisfaction was measured via linear regression analysis. Linear regression is an analysis subjected to six assumptions that assesses whether one or more predictor variables explain the dependent variable.

SPSS 23 software was used to run regression analysis. Data was normally distributed, calculated skewness values where values were between +1 and -1. Then linearity of the data was confirmed (p=0.000). No multicollinearity problem arisen as VIF values are below 10 and tolerance level is well above 0.2. All scale reliabilities exceeded the threshold of Cronbach’s alpha =0.6 (tangibility: $\alpha=0.85$; reliability: $\alpha=0.71$; responsiveness: $\alpha=0.69$; Assurance: $\alpha= 0.70$; Empathy: $\alpha= 0.68$; Satisfaction: $\alpha= 0.72$) Sekaran & Bougie (2010).

Data Analysis and Presentation

Convergent validity test was performed to identify the correlation of the items with respect to their constructs. All constructs had convergent validity values above 0.50, thus the convergent validity of the variables was confirmed. There after discriminant validity test was performed as it explains the degree of the differences among the constructs in the model. As the AVE values were greater than the squares of inter-construct correlations, it is concluded that the constructs had satisfactory discriminant validity. Composite Reliability (CR) values were used to evaluate the internal consistency of the constructs. All the constructs had CR values above threshold of 0.7. See the table 8

Table 8: output of measurement model

Variable	AVE	(AVE ²)	CR	Correlation
Tangibility	0.518	0.719	0.894	0.790
Reliability	0.517	0.720	0.762	0.756
Responsiveness	0.555	0.745	0.861	0.809
Assurance	0.534	0.677	0.665	0.853
Empathy	0.556	0.675	0.767	0.866
Satisfaction	0.688	0.673	0.756	0.745

Source: Author constructed

After fulfilling validity and reliability thresholds following conceptual model was tested in order to run the regression model.

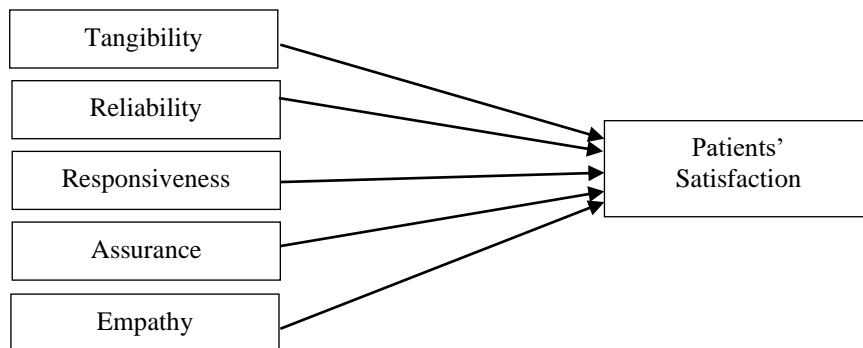


Figure 2: Conceptual Framework

Source: Zeithaml et al. (1990)

Five directional hypotheses were tested during the regression analysis. The results show that, patient’s satisfaction of hospital services is directly related to Tangibility, Reliability, Responsiveness and Assurance, first four hypotheses were proven ($p < 0.0001$). But fifth hypothesis was rejected. That is stated as empathy of the services does not directly relate to the patients satisfaction ($p > 0.0001$). This conclusion is based on 95% confidential level.

Table 9: Model Summaries

R	R Squared	Adjusted R Squared	Std. Error of the Estimate
0.776 ^a	0.652	0.549	0.14944

a. Predictors: (Constant), Tangibility, Reliability, Responsiveness, Assurance, Empathy .
 Source: Survey data

This table provides the R and R^2 values. The R-value represents the simple correlation and it is 0.776 (the "R" Column), which indicates a high degree of correlation. The R^2 value (the "R Squared" column) indicates how much the independent variables explain the total variation in the dependent variable, the independent variables influence the Patients’ Satisfaction by 65.2%, implying that the independent variables considerably influence the dependent variable; i.e. patients’ satisfaction.

Table 10: Results of Coefficients of Multiple Regressions

	Unstandardized Coefficients		Standardized		
	B	Std. Error	Beta	t	Sig
(Constant)	0.261	0.097		2.682	0.009
Tangibility	0.293	0.044	0.291	6.59	0.000
Reliability	0.031	0.045	0.034	0.702	0.048
Responsiveness	0.509	0.04	0.531	12.676	0.000
Assurance	0.28	0.049	0.335	5.716	0.000
Empathy	-0.143	0.055	-0.146	-2.609	0.484

a. Dependent Variable: Customer Satisfaction
 Source: Field Survey

Results of the regression analysis shows that, tangibility, reliability, responsiveness and assurance have direct impact on the patients satisfaction ($p < 0.005$) where as empathy does not show significant relationship ($p > 0.005$). These findings lead to implication on hospital management to re-assess their present service deliveries.

Table 11: Summary of Hypotheses testing

	Hypotheses	P values	Decision
H ₁	Tangibility is positively related to customer satisfaction.	0.000	Accepted
H ₂	Reliability is positively related to customer satisfaction.	0.048	Accepted
H ₃	Responsiveness is positively related to customer satisfaction.	0.000	Accepted
H ₄	Assurance is positively related to customer satisfaction.	0.000	Accepted
H ₅	Empathy is positively related to customer satisfaction.	0.484	Rejected

* $P < 0.05$
 Source: Empirical Findings

Discussion

Discussion of the findings

Customer satisfaction is determined by a large number of factors and some of these are common for any organization while some are unique to specific organization. The purpose of this study is to assess the patients' satisfaction of the pharmacy services in the Government hospitals in Sri Lanka. The study is limited to the patients that attend the clinics and regularly visit the hospital pharmacy in Kandy Teaching Hospital in Sri Lanka.

It is clear now the 5th hypotheses was rejected showing that the empathy does not have an impact on the patients' overall satisfaction. Empathy means caring, easy access, good communication, customer understanding and individualized attention given to customers (Zeithaml et al. 1988). These indicators need to be revisited to find out as to why patients have lower level of concern towards this. It should be emphasized that pharmacist must understand the link between process of care and clinical outcomes. Most of the time, outcomes are not up to the standard although process of care has been followed. Quality of health care is defined as "the degree to which health services for individuals and populations increase the likelihood of achieving desired health outcomes and are consistent with professional knowledge" (Schoenbaum & Sundwall, 1995). If quality of empathy is not met, that indicates lack of caring, inability to have easy access for medication, bad communication with pharmacy officers, lack of understanding and attention to the patients. Steps must be taken to improve the performance in relation to these indicators to enhance the empathy of the pharmacy services.

Fortunately hypotheses number 1, 2, 3, and 4 are proved to have direct positive relationship with the patients satisfaction ($p < 0.000$). It proved that patients have great reliance on pharmacists. Because the education level of most of the respondents is (more than 50%) equal or below O/L. Otherwise, the language proficiency in reading medical description may be lower as they are written in English. Further significant relationships do not mean those are fully embedded with the service deliveries. Here tangibles mean appearance of physical facilities, equipment, personnel and written materials. Reliability means degree to which a promised service is performed dependably and accurately. Responsiveness means willingness to help customers and provide prompt service. Finally, assurance means employees' knowledge and courtesy and their ability to inspire trust and confidence (Zeithaml et al., 1988). Pharmacists cannot identify and manage all of the drug-related problems that patients experience or are at risk of experiencing. Rather, the goal should be to maximize patient benefit with available resources. Pharmacists need to identify those drug-related problems for which management or prevention would result in the greatest benefit for as many patients as possible (US National Library of Medicine, National Institutes of Health, 2020).

Implication for Management

Patients dissatisfaction leads to reluctance on the part of the patients to follow the instructions and adhere to the warnings given. Improper use of medication causes delay in recovery, and this leads to side effects, reducing willingness to continue all the medication for the given time duration, sometime this could be life threatening. In addition to the above, poor adherence to medical advices, medication, worsening of diseases are the other possible negative outcomes. The present management practices that lead to wastage of time and resources create additional opportunity cost to the government, further burdening the economy of Sri Lanka. When compared to private hospitals reputation of public hospitals is still somewhat questionable. Anyway, public health sector is the leader and the driving force of the health system in Sri Lanka. Private health sector follows public health procedures and some services are beyond public practices. This is a typical situation in developing countries. Therefore, it is clear that uplifting of service in public health sector results healthier nation at large.

The management of the hospitals must understand the importance of achieving patients' satisfaction and the pharmacy department plays a critical role towards this. Supplying the physical infrastructure such as ventilation, seating facilities, improved hygienic and sanitary services within hospital premises, proper attention on medication etc are vital areas to be considered towards achieving patients' satisfaction. Health service is beyond the provision of drugs. Medication is of utmost importance in healing and curing illness. Hence, pharmacy plays important role in this

regard, because pharmacy is responsible for not only supplying of drugs, but also providing medications, which includes educating patients of correct methodology of usage of drugs.

Identifying of the needs of patients and assigning priority accordingly create greater comfort to the patients. Correct service delivery brings comfort to both the patients and pharmacy staff. When technology is used to enhance service deliveries less time will be taken per patient. Technology can be used to eliminate unnecessary delays as well as enhance new quality actions. Delivering the best service improves patients' satisfaction and promotes mental satisfaction. Satisfaction of patients' leads to trustworthiness of the hospital management and enhances reputation of the hospital and health sector in Sri Lanka. Fulfilment of needs and wants of patients through patients' information system, proper directions and education will enhance the satisfaction of patients. Pharmacy can play a better medication role by educating the patients on correct methodology of using drugs. This will lower the process of repeating and revisiting. Healthier people means wealthier nation and this enhances economic prosperity in Sri Lanka.

Conclusion

Study proved that increasing waiting time is one of the main reasons for patients' dissatisfaction. Therefore, possibility of appointing a senior level personal as service manager should be inquired into, where he/she can regularly monitor how services are delivered at the pharmacy. Such a service manager can introduce quality actions. This broadly covers human and technological involvement to make sure achievement of quality indicators. Additional staff allocation and extension of time of opening the issuing counters may reduce long queues. Further, investigations can be conducted as to how technology can be used to enhance empathy of the services. At present, many organizations adopt real time management information systems to minimize undue delays. Therefore, if doctor's prescription can be integrated with proper identification mechanism when patient reach the issuing counter or pharmacy, list of drugs can be made readily available. Apart from that, management information system can be maintained for each patient with specific identification number like national identity card number. Such management information system will reduce time taken to service patients, particularly to issue drugs without wasting much time, especially when doctors prescribe similar drugs. Proper database will facilitate quality actions and help the hospital to achieve better quality indicators those that determine the patients' level of satisfaction.

References

- Ahmad Jamal, K. N. (2003). Factors Influencing Customer Satisfaction in the retail Banking Sector in Pakistan. *International Journal of Commerce and Management*, 13(2), 29–53. Retrieved from <https://doi.org/10.1108/eb047465>
- Akhlaghi, E., Amini, S., & Akhlaghi, H. (2012). Evaluating Educational Service Quality in Technical and Vocational Colleges using SERVQUAL Model. *Procedia - Social and Behavioral Sciences*, 46, 5285–5289. <https://doi.org/10.1016/j.sbspro.2012.06.424>
- Anderson, E. W., & Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. *Marketing Science*, 12(2), 125–143. Retrieved from <http://www.jstor.org/stable/184036> Accessed
- Annual Health Bulletin. (2017). *Annual Health Bulletin 2017.pdf*. Co: Ministry of Health and Indigenous Medical Services Sri Lanka.
- Gopal, R., Satvinder, & Bedi, S. (2014). Impact of Hospital Services on Outpatient Satisfaction. *International Journal of Research in Business Management*, 2(4), 2321–2886.
- Grayson-Sneed, K. A., Dwamena, F. C., Smith, S., Laird-Fick, H. S., Freilich, L., & Smith, R. C. (2016). A questionnaire identifying four key components of patient satisfaction with physician communication. *Patient Education and Counseling*, 99(6), 1054–1061. <https://doi.org/10.1016/j.pec.2016.01.002>
- Kasiri, L. A., Guan Cheng, K. T., Sambasivan, M., & Sidin, S. M. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty.

- Journal of Retailing and Consumer Services*, 35(November 2016), 91–97.
<https://doi.org/10.1016/j.jretconser.2016.11.007>
- Meesala, A., & Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, 40(July 2016), 261–269.
<https://doi.org/10.1016/j.jretconser.2016.10.011>
- Qatari, G. A., & Haran, D. (1999). Determinants of users' satisfaction with primary health care settings and services in Saudi Arabia. *International Journal for Quality in health care*, 11(6), 523-531.
- Sadia Samar Ali, Arati Basu, Nilesh Ware. (2018). Quality measurement of Indian commercial hospitals – using a SERVQUAL. *Benchmarking: An International Journal.*, 815-837.
- Sekaran, U. Bougie (2010). *Research methods for business: A skill building approach*.
- Siddiqi, K. O. (2011). Interrelations between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management*, 6(3), 12–36. <https://doi.org/10.5539/ijbm.v6n3p12>
- Schoenbaum, S. C., & Sundwall, D. N. (1995). Using clinical practice guidelines to evaluate quality of care (Vol. 1). US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research.
- US National Library of Medicine, National Institutes of Health (2020). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3053192/>
- Wakefield, K. L., & Blodgett, J. G. (1999). Customer response to intangible and tangible service factors. *Psychology and Marketing*, 16(1), 51–68. [https://doi.org/10.1002/\(SICI\)1520-6793\(199901\)16:1<51::AID-MAR4>3.0.CO;2-0](https://doi.org/10.1002/(SICI)1520-6793(199901)16:1<51::AID-MAR4>3.0.CO;2-0)
- Wilbur, K., Elmubark, A., & Shabana, S. (2018). Systematic review of standardized patient use in continuing medical education. *Journal of Continuing Education in the Health Professions*, 38(1), 3-10.
- Zeithmal Valaries A., Parasuraman A., B. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing Research*, Vol. 49, pp. 41–50.

IMPACT OF WORK LIFE BALANCING DETERMINANTS ON JOB SATISFACTION OF ACCOUNTANTS: SPECIAL REFERENCE TO EMPLOYEE'S PERSONAL, FAMILY AND WORK ENGAGEMENT

Nilanka P.G.K.¹ and Bataduwaarachchi D.L.²

*Faculty of Management Studies,
Open University of Sri Lanka, Nawala, Sri Lanka
¹kumudunilanka@gmail.com and ²dlbat@ou.ac.lk*

Abstract

Balancing work and life is important for both persons and organizations. This study investigates the determinants of work life balance with the main purpose of identifying the impact of work life balance on employee job satisfaction of Accountants of a selected ministry in Sri Lanka. As per the preliminary study, job satisfaction of these officers was less. Existing literature proves that work life balance influences the satisfaction of employees. Personal Engagement, Family Engagement and Work Engagement were identified as the main independent constructs of work life balance as per the literature. The dependent construct is the employee job satisfaction. A sample of 75 Accountants was selected from the ministry for this study. A questionnaire was used to collect the data as the survey instrument. The collected data was analyzed using descriptive, correlation and regression analyses. The findings of the research revealed that determinants of work life balance have a positive impact on employee job satisfaction while work engagement was highlighted as the most prominent predictor of employee job satisfaction.

Keywords: Work Life Balance, Employee Job satisfaction, Personal Engagement, Family Engagement, Work Engagement

Introduction

Work Life Balance (WLB) means “people having enough time to have balance in their job and home life” (Noor and Shamim, 2012). Marks and MacDermid's (1996) described work-life balance as the extent to which an individual is equally engaged in and equally satisfied with his or her work role and family role.

According to Bohlander & Snell (2013), balancing work and family continues to be a major concern for organizations and their employees. Employees engage in their work for longer hours than prescribed since 1973, and now more than ever employees are chained to their companies around the clock by means of communication technology (Bohlander & Snell, 2013). In the current context, many individuals face the common issue of balancing work, family and personal matters. Work-life-balance can affect both the employer and the employee. From an employee's perspective, improper work-life-balance can have a negative impact on work and life satisfaction, physical and mental well-being, and on individual work performance in the organization (Guest, 2002). For employers, improper work-life-balance may result in poor performance, absenteeism, employee turnover, recruitment and training costs, complaints and grievances (Department of Trade and Industry, 2001). According to Mendis & Weerakkody (2014), work-to-family conflict takes place when experiences at work obstruct family life due to inflexible work hours, work overload, interpersonal conflict at work, unsupportive supervisor organization. Family-to-work conflict occurs when experiences in the family interfere with work life, primary responsibility for children, elder care responsibilities, interpersonal conflict within the family unit, unsupportive family members. Work Life Balance requires attainment of equilibrium between professional work and personal work (Anuradha & Pandey, 2016). It is a measure of how satisfied employees are with their job and working environment. Keeping high moral among employees brings tremendous benefit to the organization.

Job satisfaction refers to the attitudes and feelings people have about their work. Positive and favorable attitudes towards the job lead to better engagement and therefore job satisfaction. Negative and unfavorable attitudes towards the job indicate job dissatisfaction (Armstrong, 2009). Nowadays, job satisfaction has been a matter of concern and attention in any field of business. Organizations realize that employee job satisfaction is the essential element to increase customer satisfaction and keep their business running, as competition is getting more intense. Employee dissatisfaction will usually spread to other workmates and word of mouth can do a lot of harm to an organization.

Attainment of high-level performances through productivity and efficiency has always been an organizational goal and this must be given higher priority. Highly satisfied work force is necessary towards achieving higher level of performances, thus advancement of an organization. In the present context increasing job satisfaction of employees is a hot topic in every organization and every industry because it has become one of the most common challenges and has become the most critical factor for the corporate leaders (Pushpakumari, 2008). It is said that satisfied employee is a productive employee, any kind of grievance relating to the organization or personal to a greater extent influence the job. Therefore, every organization is giving higher priority to keep their employees satisfied by providing several facilities, which improves satisfaction and reduces dissatisfaction (Aziri, 2011).

Globalization and resultant dynamic environment made it hard for any organization to retain their competitive advantages in market, so this has become a big challenge for the organization. These changes affect not only the organizational activities, but also the culture and perception of the employee. When changes in the organization take place, the employees have to keep a balance to maintain job satisfaction. Under the current working atmosphere, factors such as work life balance through personal engagement, family engagement and work engagement could improve and maintain high employee job satisfaction.

Problem Statement

According to the Researcher's observation and the information extracted through the informal discussions held with Accountants attached to the selected ministry, it is obvious that the level of job satisfaction of them is considerably lower. Afterwards, Researcher conducted a survey as a preliminary study to understand the level of job satisfaction. The findings of the study revealed that majority of the staff members are not satisfied. Employee satisfaction has a great impact on the productivity and sustainability of any organization. Staff is the integral part of every organization. Therefore, when employees are not satisfied it directly affects the smooth functioning of divisions, thus affecting the overall productivity of the organization. As per the Researcher's observation in the preliminary study, many employees often have difficulties in attempting to balance employment responsibilities with their family life. According to Susi (2010) Work life balance brings satisfaction of employees. Various research studies also show that Work Life Balance significantly influences Job Satisfaction (Frone et al., 1997). Thus, the researcher tested the effect of work life balance of Accountants on their job satisfaction in the selected ministry.

Research Objectives

- To understand the current level of Job Satisfaction of employees.
- To examine how determinants of Work Life Balance influence Job Satisfaction of employees.
- To identify the strength of the impact of each identified determinant of work life balance on job satisfaction.

Literature Review

Work Life Balance & Job Satisfaction

Many studies have identified that there is a strong relationship between WLB and job satisfaction of employees and therefore large volume of research literature is available on this area. Understanding the importance and the strength of the relationship between these two concepts is vital for the management of any organization. When employees gain an equal and flexible balance between work and life, they feel more positive and become attached with the organization that employees them and this in turn increase their job satisfaction (Mas-Machuca, Mirabent, & Alegre, 2016). Mas-Machuca, Mirabent, & Alegre, (2016) explaining further state that when managers and organizations realize and understand the importance and benefit of WLB, it will improve the job satisfaction of the employees of respective organization and this in turn benefits the business. Smith, Blazovich, & Smith, (2014) state that a well-executed WLB program creates a positive and strong impact on job satisfaction of employees attached to any organization. According to (Brandt & Orkibi, 2015) WLB can be positively linked to job satisfaction of employees. They further highlighted that the findings of their study confirmed the hypotheses that there is a positive link between WLB and Job Satisfaction.

Work Engagement

Commitment, involvement, energy, dedication, passion and enthusiasm are concepts that are frequently used when practitioners and scholars talk about work engagement (Bakker, Demerouti, & ten Brummelhuis, 2012); (Schaufeli, W B; Truss, KAlfes, R. Delbridge, A. Shantz, & E. Soane(Eds), 2013). Work engagement is defined as “a positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Rooma, & Bakker, 2002). The first element of work engagement, vigor, can be described as high energy and mental resilience at work. Employees with vigor are willing to invest effort in their work. When the employees with vigor face difficulties, they are able to persevere. The concept of dedication refers to strong work involvement. Dedicated employees experience pride, enthusiasm, inspiration, challenge, and a sense of significance (Schaufeli, Bakker, & Salanova, 2006). The last element, absorption, involves full concentration and concentration that cannot get easily distracted (Schaufeli, W B; Truss, KAlfes, R. Delbridge, A. Shantz, & E. Soane(Eds), 2013).

Management can affect employees’ work engagement since employees’ reactions to organizational structures, policies, and practices influence the extent to which they experience engagement. When employees enjoy their jobs, they convert this enjoyment into more effective action. Engaged employees are able to invest time and energy in solving problems, and they seek connections with people, and try to develop innovative service (Bakker & Leiter, 2010). Due to the reasons mentioned this can be beneficial for both individuals and organizations (Demerouti & Cropanzano, 2010).

Co-workers have the ability to define the social environment at work (Schneider, 1987) and they can have a large influence on whether or not an employee is able to balance his/her time between work and non – work life (Cook & Minnotte, 2008). Co-worker support can also be tied to an employee’s work-life balance, job satisfaction, organizational commitment, and organizational citizenship behaviors. Work life conflict can be reduced when a co-worker helps an employee to cope with the competing demands between one’s work and non-work life (Frone, Yardley, & Markel, 1997); (Thompson & Prottas, 2006). Employee job satisfaction can increase when co-workers are actively supportive of one another (Beehr, 1986); (Pollock, Whitbred, & Contractor, 2000). Similarly, co-worker support, such as mentoring another employee, can be tied to organizational commitment (Raabe & Beehr, 2003); (Reichers, 1985).

Supervisor also shapes employee views of organizational support and its association with work-life conflict (Kossek, Pichler, Bodner, & Hammer, 2011). (Eisenberger, Singlhamber, Vandenberghe, Sucharski, & Rhoades, 2002) are in agreement with (Kossek, Pichler, Bodner, & Hammer, 2011). They argue that workers view supervisors as organizational agents, and they consider supervisor actions and organizational actions to be the same. (Kossek, Pichler, Bodner, & Hammer, 2011) Define perception of supervisor work-life support as an employee’s perception that

their supervisor care about his or her work-life well-being. Behaviors of supportive supervisor include emotional support, instrumental support, role modelling behaviors, and creative work-life management (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009). Supervisors engage in emotional support when they listen to their subordinates and show them that they care about the work-life demands of employees of the organization. Supervisors play an important role in making employees feel that they are comfortable with balancing their work and life responsibilities (Hammer, Neal, Newsom, Brockwood, & Colton, 2005).

Personal Engagement

In the work life balance discourse, there are distinct threads. One focuses on human agency and it is at individual level whereas the other focuses on what measure of workplace flexibility are provided by the organization. Research has looked into work life balance as a personal choice. In addition, values, worker type, role demand and conflict are some of the elements this domain has emphasized. Research has focused on family friendly policies offered by organizations including flexible work arrangements. Employee engagement in fact, can make or break the business bottom line (Tara & Jyotsna, 2010) is of the option that, in order to obtain high performance in individuals, employers need to make their employees engage in intangible work that demands innovation, flexibility, and speed. It is important to make employees engaged especially by giving those opportunities to participate and freedom. Trust-is the most comprehensive response to enhance individual values of self – realization and self – actualization.

An individual will put effort in a domain depending on what is the most central to him/ her – work, family or personal space. (Tara & Jyotsna, 2010) Thus, if work is central, the individual is likely to put more effort in this domain. An individual may experience a work life balance even if he/she spends long hours at work and not able to devote enough time or energy to his/her family and has no time for him/herself. However, work holds a central place in his/her life, over and above the need to be with family, friends or indulge in recreational activities. Because of the rewards he/she obtains by putting effort in his/her work, he/she still experiences a work life balance. (Tara & Jyotsna, 2010)

Other members of the system would experience the improvement in a domain, not just perceived by the focal individual. The empirical literature on cross over supports the notion that the work family experience of one member of the system influences the attitudes, behaviors and work family experiences of other members (Hammer, Allen, & Grigsby, 1997). In relation to conditions at work place (high time pressure, high job insecurity, and poor organizational climate), optimistic employees were found to report lower levels of mental distress than their less optimistic colleagues (Makikangas & Kinnunen, 2003). Greenhaus, Collins, and Show(2003:513) modified Marks and MacDermid (1996) and defined WLB as, the extent to which an individual is equally engaged in and equally satisfied with his or her work role and family role.

Family Engagement

This considers the effect of high performance work practices and family friendly practices on work family balance (Bloom, Kretschmer, & Van Reenen, 2009); (Frye & Breugh, 2004); (Poelmans, Chinchilla, & Cardona, 2003). One major reason for lack of research in this area could be that studies carried out that based on surveys focused only on the companies instead of the workers (Bloom, Kretschmer, & Van Reenen, 2009); (Poelmans, Chinchilla, & Cardona, 2003), making it difficult to analyze the effect of practices on work family balance. (Osterman, 1995) Talks about how companies that adopt high performance work practices are expected to offer their employees family friendly practices to avoid the problems that the high performance practices have on work family balance of employees.

From theoretical point of view, family-friendly practices affect life satisfaction by reducing work family conflicts or increasing work family balance. Family-friendly practices can be classified into three broad subsets; Family support practices, Flexible arrangement practices and Parental leave practices (Ferrer & Gagne, 2006); (Glass & Finley, 2002). However, most of the existing

researches have examined the effect of family-friendly practices without taking into account the different subsets of practices (Hill, 2005).

Family support practices include a set of services that employers make available to workers, someone working full time, who is committed to his or her work and has no outside responsibilities (Fursman & Callister, 2009). These policies aim at increasing work-family balance by offering employee supported solutions to help parents take care of their family responsibilities while retaining a high productivity at work. Flexible arrangement practices include all policies that provide workers greater flexibility in terms of working time and place. Finally, parental leave is a kind of practice that reduce working hours to provide time for family and care giving. These subset of practices endeavor to facilitate work family integration (Clark, 2000), enabling people to cope with the fluctuating demands in life at home. The expected result of this policy is a better well-being of the parents and reduced turnover rates enhancing the work-family balance of employees at the same time (Batt & Valcour, 2003). Furthermore, as the employer permits employees to take time off, this will have a positive impact on work-family balance (Frye & Breagh, 2004).

Research Methodology

Conceptual Framework

Based on the literature, Conceptual Framework was developed where Work Life Balance (Working Engagement, Personal Engagement and Family Engagement) as Independent Variable and Job Satisfaction as the Dependent Variable.

Hypotheses

Based on the above conceptualization, following hypotheses were developed,

H0₁ – *There is no significant relationship between work-life-balance and employee job satisfaction*

H1₁ – *There is a significant relationship between work-life-balance and employee job satisfaction*

H0₂ – *There is no significant relationship between work engagement and employee job satisfaction*

H1₂ – *There is a significant relationship between work engagement and employee job satisfaction*

H0₃ – *There is no significant relationship between family engagement and employee job satisfaction*

H1₃ – *There is a significant relationship between family engagement and employee job satisfaction*

H0₄ – *There is no significant relationship between personal engagement and employee job satisfaction*

H1₄ – *There is a significant relationship between personal engagement and employee job satisfaction*

Sampling

The population of the study is 89 Accountants attached to the selected ministry in Sri Lanka. Researcher selected 75 Accountants as the sample using Simple Random Sampling Method.

Data Collection Method

In order to gather primary data for the study, a structured questionnaire was compiled and distributed among the sample.

Data Analysis

Correlation Analysis

The Correlation analysis was conducted in order to find the correlations that exist between the variables. The Pearson’s coefficient of correlation was used to measure the association between independent variables and the dependent variable. The results of the correlation analysis are presented in following matrix.

Table 1: Correlation Matrix

Work	1			
Personal	.527**			
Family	.622**	.377**		
Job Satisfaction	.771**	.513**	.709**	1
	Work	Personal	Family	Job Satisfaction

** Correlation is significant at 0.01 level (2-tailed)
N= 75

The results of the correlation analysis reveal that work life balance tends to be strongly associated with the job satisfaction. All correlation coefficients positively and significantly correlate with job satisfaction.

Regression Analysis

A Multiple linear regression analysis was carried out to investigate the impact between dependent variable and independent variables.

Table 2: Model summary

R	R Square (R ²)	Adjusted R Square	F	Sig (P)	Std. Error of the Estimate
0.831	0.691	0.678	52.946	0.000	0.64853

The model summary gives useful information about the regression analysis. In the present study, R is 0.831 and this indicates that the model is successful in predicting elements. The coefficient of multiple determinations, R² is the proportion of variance in the dependent variable which can be explained by the independent variables. In the present study, R² is 0.691. Thus, 69% of the variation in job satisfaction can be explained by work life balance. F-value is 52.946 which is more than 2.00 and P-value is 0.000 which is significant at 0.01 level. This indicates that the variance in job satisfaction is significantly explained by the set of independent variables that related to work life balance.

Table 3: Regression Results

Variables	Regression Coefficient (Beta)	t-value	Sig. (p-value)
(Constant)	0.979	2.634	0.010
Work	0.878	5.218	0.000
Personal	0.130	1.573	0.120
Family	0.347	4.311	0.000

According to the above table, the regression coefficients of work engagement and family engagement are statistically significant. The regression coefficient of personal engagement is statistically insignificant. According to the multiple regression model, the work engagement has the highest impact with the value 0.878. This indicates that there is a positive relationship between work engagement and job satisfaction. In this case the regression coefficient is 0.878 at 0.01

significant level. Family engagement with the value of 0.347 is the second important variable, and, it is significant at 0.01 level. This indicates that there is a positive relationship between family engagement and job satisfaction. Personal engagement is statistically insignificant and the findings do not show that Personal engagement has a significant impact to job satisfaction.

Conclusion

The findings of the study recognized that the job satisfaction is mostly influenced by work engagement while family engagement too is an important factor in creating job satisfaction of employees. Nevertheless, Personal engagement does not show a significant relationship with employee job satisfaction. Based on the findings it is important for family members and friends to be very helpful and understandable, this goes a long way in balancing work-life of employees. Work life benefits have proven to bring about increased effectiveness in employees both personally and professionally. The possibility of work-life benefits such as flexible working arrangements for employees could be considered and implemented as part of the work life balance strategies of respective organization. Workload management is another aspect which management could look at. Currently, many employees face the burden of work overload. Getting work done on time and with precision is therefore a huge challenge for employees. It is important for the management to allocate work for every employee in an appropriate manner with clear instructions on task prioritization and execution. The redesigning of work tasks could be considered in this context, if an employee is faced with overstress due to excessive work. Work-life balance policies are an essential component that needs to be embedded in to the organization's structure. Each division should take up the role of being accountable for measuring work life balance progress and ensuring that work-life balance goals are achieved. The study found that increase in work-life balance factors would lead to an increase in job satisfaction. Job satisfaction affects the employee's morale, turnover, absenteeism, and pro-social behavior and these can be crucial for the organization.

Based on the findings, the conclusion can be drawn that the job satisfaction can be stimulated by creating an environment where employees can balance their work life better. Findings of the research clearly indicate the importance for the organization to create a healthy environment for employees to achieve work life balance. In order to increase the job satisfaction of employees it is not only important to focus on the employees, but also on his or her family, because family engagement, personal engagement and work engagement are related with the work life balance and job satisfaction of the employee.

Recommendations

WLB is a significant factor, which affects employee satisfaction as per the findings of the study. Therefore, it is important and necessary to consider WLB as an important factor when management takes decisions on employees. Organization should also give priority to maintain a flexible working condition and environment, because work engagement is the most important WFB factor, which affects Job Satisfaction.

Organization should create a working condition so that employee can manage family matters/responsibilities well. All respondents agreed with work life balance policies but disagreed with overall level of WLB. Therefore, employees should be provided with the facilities with a view to making them feel that the organization is helping them in coordinating the family and professional life. The employee feels that the management does not allocate workloads in an equal manner among colleagues. Therefore, it is important to allocate workload in an equal manner among workers to improve their satisfaction.

Organization should have formal counsellor to understand the workers work life balance problems of employees and help them find solutions. Work life imbalance is another reason for job dissatisfaction. Therefore, a supportive management is required to minimize the conflict between work and family. Top management of organization should realize the importance of work life balance and its adverse effect on job satisfaction. Employees' social gathering programs and public contact programs could be a better option to reduce the mental pressure in the work place.

References

- Anuradha and Pandey, M., (2016). Impact of work-life balance on job satisfaction of women doctors. *Problems and Perspectives in Management*, 14(2), pp.319-324.
- Armstrong, M., (2009). *Armstrong's Handbook of Human Resource Management Practice*. 11th ed. London: Kogan page.
- Aziri, B., (2011). *Job Satisfaction: a literature review*. South East European University.
- Bakker, A. B., & Leiter, M. P., 2010. *Work engagement: Handbook of essential theory and research*. UK: Psychology Press.
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L., (2012). Work Engagement, Performance, and active learning, The role of conscientiousness. *Vocational Behavior* , pp.555-564.
- Batt, R., & Valcour, P. M., (2003). Human resources practices as predictors of work-family outcomes and employee turnover. *Industrial Relations* , pp.189-220.
- Beehr, T. A., (1986). Social support, autonomy, and hierarchical level as moderators of the role characteristic-outcome relationship. *Occupational Behaviour* ,pp. 207-214.
- Bloom, N., Kretschmer, T., & Van Reenen, J., (2009). *Determinants and consequences of family-friendly workplace practices: An international study*. LSE/ Stanford Memo.
- Bohlander, G. W., & Snell, S. A., (2013). *Principles of Human Resource Management*. 16th ed. Delhi, IN: South Western, a part of Cengage Learning.
- Brandt, Y. I., & Orkibi, H., (2015). How Positively links with job satisfaction: Preliminary findings on the mediating role of work life balance,. *Psychology* , pp.82-84.
- Clark, S. C., (2000). Work/family border theory: a new theory of work/family balance. *Human Relations* , pp.747-770.
- Cook, A., & Minnotte, K., (2008). Occupational and industry sex segregation and work-family interface. *Sex Roles* , pp.800-813.
- Demerouti, E., & Cropanzano, R., (2010). *Employee work engagement and job performance*.
- Eisenberger, R., Singlhamber, F., Vandenberghe, C., Sucharski, I., & Rhoades, L., (2002). Perceived supervisor support: Contributions to perceived support and employee retention. *Applied Psychology* , pp.565-573.
- Ferrer, A., & Gagne, L., (2006). *The use of family friendly workplace practices in Canada*. Canada: Institute of Research on Public Policy.
- Frone, M. R., Yardley, J. K., & Markel, K. S., (1997). Developing and testing an integrative models of the work family interface. *Vocational Behaviour* , pp.145-167.
- Frye, K., & Breaugh, J., (2004). Family-friendly policies, supervisor support, work family conflict, family-work conflict, and job satisfaction: A test of conceptual model. *Business and psychology* , pp.197-220.
- Fursman, L., & Callister, P., (2009). *Men's participation in unpaid care, A review of the literature*. Department of Labour and Ministry of Woman's Affairs.
- Glass, J. L., & Finley, A., (2002). Coverage and effectiveness of family-responsive workplace policies. *Human resource management review* ,pp.313-337.
- Hammer, L. B., Allen, E., & Grigsby, T. D., (1997). Work family conflict in dual earner couples: within individual and crossover effects of work and family . *Vocational Behaviour* , pp.185-203.
- Hammer, L. B., Kossek, E., Yragui, N. L., Bodner, T. E., & Hanson, G. C., (2009). Development and validation of a multidimensional measure of family supportive supervisor behaviours. *Management* , pp.837-856.
- Hammer, L. B., Neal, M. B., Newsom, J. T., Brockwood, K. J., & Colton, C. L., (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Applied Psychology* , pp.799-810.

- Hill, E. J., (2005). Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support. *Family Issues* , pp.793-819.
- Kossek, E., Pichler, S., Bodner, T., & Hammer, L. B., (2011). Workplace social support and work-family conflict: A meta analysis clarifying the influence of general and work-family- specific supervisor and organizational support. *Personnel Psychology* , pp.289-313.
- Makikangas, A., & Kinnunen, U., (2003). Psychosocial work stressors and well-being: self esteem and optimism as moderators in a one year longitudinal sample. *Personal and Individual differences* , pp.537-557.
- Marks S. R. and MacDermid M., (1996), Multiple roles and the self: A theory of role balance, *Journal of Marriage and the Family*, pp.417-432
- Mas-Machuca, M., Mirabent, J. B., & Alegre, I., (2016). Work life balance and its relationship with organizational pride and job satisfaction. *Managerial Psychology* , pp.589-602.
- Mendis, M.D.V.S., & Weerakkody, W.A.S., (2014). The Relationship between Work Life Balance and Employee Performance: With Reference to Telecommunication Industry of Sri Lanka. *Kelaniya Journal of Human Resource Management*, 9, pp.98-100.
- Noor and Shamim, (2012). An empirical analysis of factors affecting work life balance among university teachers: the case of Pakistan, *Journal of International Academic Research*, Vol. 12
- Poelmans, S., Chinchilla, N., & Cardona, P., (2003). The adoption of family-friendly HRM policies competing for scarce resources in the labour market. *International Journal of Manpower* , pp.128-147.
- Pollock, T. G., Whitbred, R. C., & Contractor, N., (2000). Social Information processing and job characteristics: A simultaneous test of two theories with implications for job satisfaction. *Human Communication Research* , pp.292-330.
- Pushpakumari, M. D., (2008). *The Impact of Job Satisfaction on Job Performance : An Empirical Analysis*.
- Raabe, B., & Beehr, T. A., (2003). Formal mentoring versus supervisor and coworker relationship: Differences in perception and impact. *Organizational Behaviour* , pp.271-293.
- Reichers, A. E., (1985). A review and reconceptualization of organizational commitment. *Academy of management review* , pp.465-476.
- Schaufeli, W B; Truss, KAlfes, R. Delbridge, A. Shantz, & E. Soane(Eds.), (2013). *Employee Engagement and theory practice*. London, UK: Routledge.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M., (2006). The measurement of work engagement with a short questionnaire: A cross - national study. *Educational and Psychological measurement* , pp.701-716.
- Schaufeli, W. B., Salanova, M., Gonzalez-Rooma, V., & Bakker, A. B., (2002). The measurement of engagement and burnout and:A confirmative analytic approach. *Happiness Studies* , pp.71-92.
- Schneider, B., (1987). The people make the place. *Personnel Psychology* , pp.437-453.
- Sekaran, U., & Bougie, R., (2010). *Research Methods for Business: A Skill Building Approach*. 5th ed. India:Wiley.
- Smith, K., Blazovich, J., & Smith, L., (2014). Employee friendly companies and work life balance: Is there an impact of financial performance and risk level? *Organizational Culture, communication and conflict* , pp.1-13.
- Susi, S, J., (2010). Work-Life Balance: The key driver of employee engagement. *Asian journal of management research*, pp.1-10. Yutak
- Tara, S., & Jyotsna, B., (2010). A model of work life balance, employee engagement, emotional consonance/ dissonance & turnover intention. *Human Behaviour & Organizational Development* .
- Thompson, C. A., & Prottas, D. J., (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well- being. *Occupational Health Psychology* , pp.100-118.

INNOVATION PRACTICES OF LARGE-SCALE MANUFACTURING ORGANIZATIONS LOCATED IN INDUSTRIAL ESTATES IN THE WESTERN PROVINCE OF SRI LANKA.

Ranaweera S.¹ and Sivalogathan, V.²

*Department of Management Studies
Open University of Sri Lanka*

¹tharindu28@hotmail.co.uk and ²vsiva@ou.ac.lk

Abstract

Innovation management is an area that has become prominent in academic research. Though it is accepted that innovation leads to growth and success of individual industries and also the entire economy, Sri Lanka is ranked 85th out of 142 countries in the Global Innovation Index 2015. This is despite Sri Lanka being a country with a high level of literacy as well as secondary education when compared with many other developing countries. Although a few studies on innovation management has been carried out in Sri Lanka, there has been a dearth in studies carried out to capture an overall view of innovation management in large scale industries. This study aims at analysing the current innovation practices in large-scale manufacturing organizations located in the Industrial Estates in the Western Province of Sri Lanka, identifying current gaps in innovation management in these organizations and identifying internal and external barriers to innovations of these organizations. This is a qualitative, cross-sectional analytical study with purposive sampling, based on the case-study approach. The study uses a study framework developed through an extensive literature review. Eleven organizations with 100 or more employees, established in the Industrial Estates of the Western Province from sectors that contribute most to the Gross Domestic Product of Sri Lanka were considered for the study. Only innovation practices introduced during the last three years were taken into consideration. The firms considered for the study have implemented organizational, product and process innovations during the last three years that has enabled them to maintain growth, maintain and expand markets sometimes in adverse economic and business environments. External factors have had an impact on innovation practices within the organizations much more than factors internal to the organizations. Several internal and external barriers to innovation were identified and these should be addressed to improve innovations in the manufacturing sector in Sri Lanka.

Keywords: Innovation Management, Large scale Industries, Type of Innovation

Introduction

Substantial evidences available and it has been accepted that innovation is positively linked to productivity and leads to growth and success of individual industries, thus the entire economy. According to the Global Innovation Index (GII) 2015, the role and significance of innovation goes beyond the objective of achieving economic success. Innovation is seen as the key to addressing pressing societal problems such as pollution, health issues, poverty, and unemployment in emerging countries. The report further states that innovation should be seen through the lens of inclusive development because it can address poverty and health issues. Further, it could contribute to achieve environmentally sustainable development because it addresses the problems of pollution and energy provision. (Cornell University, INSEAD, WIPO, 2015). Though all these aspects are relevant to Sri Lanka, it is ranked 85th out of 142 countries in the Global Innovation Index 2015 (Cornell University, INSEAD, WIPO, 2015).

In spite of being a country with a high level of literacy as well as secondary education compared to many other developing countries, Sri Lanka has been unsuccessful in achieving a high ranking in GII. The transport, telecommunication, and power supply infrastructure in Sri Lanka is also considered to be relatively advanced compared to other developing countries.

In Sri Lanka, The industrial sector consists of four major subsectors – Mining and Quarrying, Manufacturing, Construction and Electricity, Gas and Water. This sector plays a very important role in the Sri Lankan Economy. This sector contributed 34% of the GDP in 2015, employed 26% of the workforce, which was 2.03 million. More importantly, industrial exports contributed to approximately 76% of the country's total exports (Central Bank of Sri Lanka, 2016). According to the same report, the contribution of manufacturing to the industrial sector is 52%.

The Manufacturing Sector consists of three major components- processing (tea, rubber, coconut), the factory industry and the cottage industry. Of these, the factory industry consisted of around 90% of the manufacturing sector. As Sri Lanka is currently utilizing almost full labour, 95.3% (Central Bank of Sri Lanka, 2016), and with industries reporting a shortage of labour, value addition (an outcome of innovation) is the key to economic success of individual workers, companies and the country as a whole. It is widely accepted that industries were the foundation of the economies that made a leap to the developed status within a short period of time. Though Sri Lanka has attained middle income status, the jump to the next level requires substantial growth in industries and value addition, which should lead to a change in structure of the industrial economy. As Sri Lanka has reached almost full employment as stated above, the overall GDP and the per-capita income cannot be significantly increased with the current structure of manufacturing, services and export portfolio. At the current state of almost full employment, doing more of the same will just reinforce the status-quo of low wages, relatively low value addition, low export income and significant income disparity.

Objectives of the study

1. To analyse the current innovation practices in large-scale manufacturing organizations located in the industrial estates in the Western Province of Sri Lanka.
2. To identify the current gaps in innovation management in these organizations as per the framework developed.
3. To identify internal and external barriers to innovations of these organizations.

Literature review

This literature review was carried out through searches on “innovation”, “innovation management”, “innovation practice”. Following the review of the publications, it was seen that factors related to innovation can be studied at two levels. The first or the macro level where national level policies and action promote innovation. This encompassed factors such as education, investments, regulatory environment etc. that build an ecosystem for innovation (Cornell University, INSEAD, WIPO, 2015). Secondly, it is at the organization or firm level, these are different factors such as management practices, culture of innovation within the organization (Organization for Economic Cooperation and Development, Statistical Office of the European Communities, 2005).

Macro Level Factors Related to Innovation

The conceptual framework for the Global Innovation Index, which has been developed and fine-tuned since 2004, provides a comprehensive view of macro-level factors that contribute to innovation. In this framework, innovation outputs are measured using knowledge outputs (creation, impact and diffusion) and creative outputs. These can be classified as intermediate outcomes which ultimately contribute to value addition, productivity and growth. These macro level inputs include regulation, tertiary education, infrastructure, investments and innovation linkages. These factors are important in determining the current macro-level gaps in innovation practices at country level (Cornell University, INSEAD, WIPO, 2015).

Organizational Level Factors Relating to Innovation.

Nelson, (1959) contended that the more widespread the reputation and name of a firm, the higher the chances of full exploitation of its research efforts. Based on later empirical analyses, it is being argued that the size of the firm is an important determinant of innovation, although a specific

linear relationship has not been clearly elucidated (Symeonidis, 1996). Some studies have identified different paths to innovation. Dosi and Nelson distinguish between two types of innovations - the cumulative innovation motivated by the need for improvements that has been identified through routinized activities, and the discrete, independent development that often indicates the beginning of a new technological paradigm (Dosi & Nelson, 1994).

According to Goffin and Mitchell, the importance of understanding innovation was first recognized by the Austrian economist Joseph Schumpeter in 1930s. His work on innovation strongly influenced the field of economics. In addition, Michael Porter, (Porter, 1990) and Rogers (Rogers, 2003) defined practices that are “new” and perceived to be new as innovation. Hamel defines management innovation as a marked departure from traditional management principles, processes, and practices or a departure from customary organizational forms (Hamel, 2006). A.T. Kearney, a respected global strategic management consulting firm, following extensive analyses conclude that while concept development should not be neglected, the true key to innovation excellence lies in the first three areas: innovation strategy, idea generation and idea screening. This analysis also concludes that a strong executive champion that develops and propels the innovation strategy is a hall-mark of leading innovation firms.

Theories and Models of Dimensions of Innovation at Organizational Level

Goffin and Mitchell identify five key dimensions of innovations in the manufacturing sector. These are product, service, manufacturing process and business process, business mode innovation (Goffin & Mitchell, 2010). Hanson and Birkinshaw postulates an “Innovation Value Chain” within an organization which describes innovation as a sequential, three-phase process that involves idea generation, idea development and the diffusion of developed concepts (Hanson & Birkinshaw, 2007). Kline and Rosenberg’s Chain-Linked Innovation Model represents the organizational level technical activities occurring in the innovation process, the external forces of the market place, and the complex interactions between the various stages of the process Kline & Rosenberg (1996).

Goffin and Mitchell also postulates a framework for the process of innovation within the firm. It is the Innovation Pentathlon Framework, which attempts to link the external and the internal factors and processes than have to be managed to drive the process of innovation successfully (Goffin & Mitchell, 2010). The Organization for Economic Cooperation and Development (OECD), having 34 member countries including many European countries, Japan and the United States, in collaboration with the Statistical Office of the European Communities has developed a manual for measuring innovation in individual organizations, which is now in its third edition (Organization for Economic Cooperation and Development, Statistical Office of the European Communities, 2005). It is based on a framework that has been incrementally developed.

Recent studies on innovation focus primarily on Small and Medium Scale (SME) industries, mostly located in Europe (Mangiarotti & Riillo, 2014). (Baković, Lazibat, & Sutić, 2013), (Prajogo, Laosirihongthong, Sohal, & Sakun Boon-itt, 2007). Wu and Sivalogathan have developed a model and conducted a study on organizational performance in the apparel sector in Sri Lanka, based on intellectual capability and innovation (Wu & Sivalogathan, 2013). The most recent and important publication on innovation in large manufacturing organizations in Sri Lanka is the study by Sivalogathan and Wu on intellectual capital and innovation in Sri Lanka, carried out in the textile and apparel sector in Sri Lanka. (Sivalogathan & Wu, 2015).

Study framework and methodology

The Oslo Manual on Guidelines for collecting and interpreting Innovation Data published by the Organization for Economic Cooperation and Development (OECD) and the Statistical Office of the European Communities (Eurostat) states that Innovation activities are all scientific, technological, organisational, financial and commercial steps. These actually, or are intended to, lead to the implementation of innovations (Organization for Economic Cooperation and Development, Statistical Office of the European Communities, 2005). This study uses the above definition for innovation.

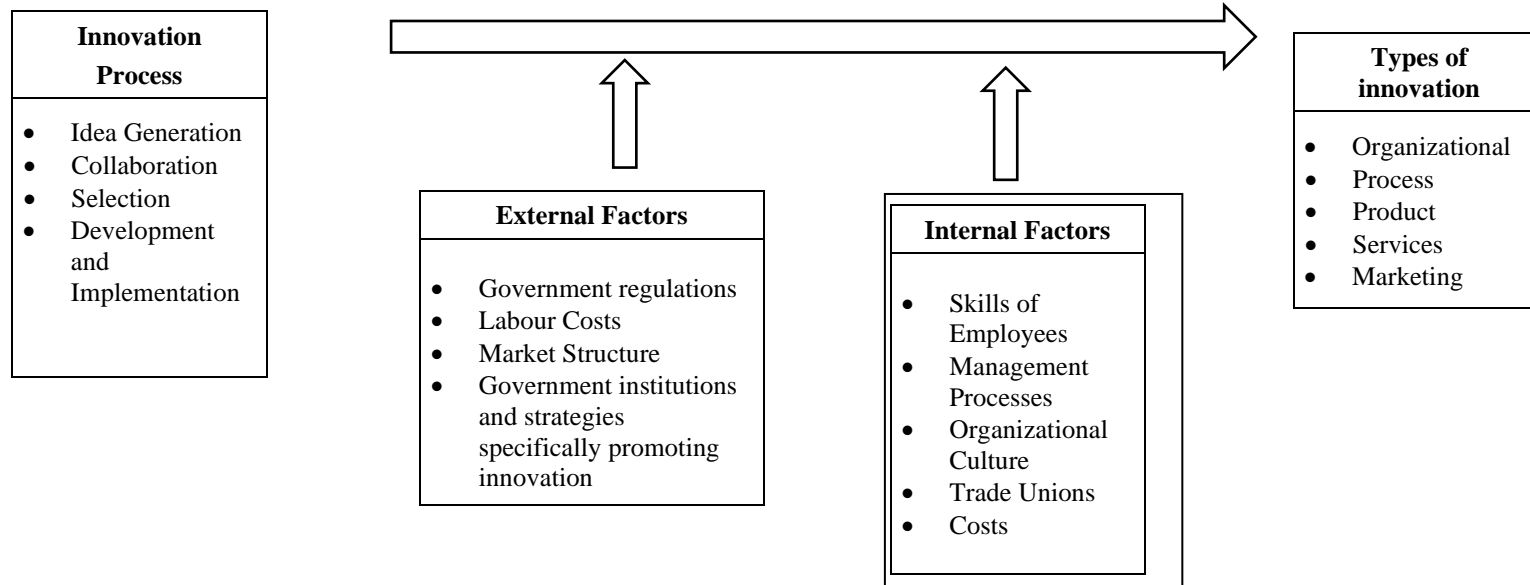


Figure 1: Study Framework for Innovation practices of large-scale industries located in Industrial Estates in the Western Province of Sri

Methodology

This study is a quantitative and qualitative, cross-sectional, analytical study using the case-study approach, with purposive sampling. The investigator visited the identified firms to collect the relevant data. The management at the highest level was interviewed, namely the Chairman / Managing Director. The recording was carried out manually, and the discussion was entered in Microsoft Word, in line with the framework of the Interview Guide. Information and directions of the discussion that were not originally within the Interview Guide was recorded at the end. The entry of data was done on the same day of the interview. The data was analysed through coding, based on the interview guide developed.

Validation / Presentation and discussion of findings

The initial findings were presented to the officials of the Ministry of Industries on 29th November 2016, as there was consensus of relating the findings at this forum. This meeting was chaired by the Secretary of the Ministry of Industrial Development and was attended by the Director of Industrial Development and other officials.

Sampling

The sampling frame was obtained from the Ministry of Industries, which operates these Industrial Estates. There are a total of 29 Industrial estates functions under the Ministry of Industries and Commerce. In these there are 312 Factories operate. Out of these around 150 are located in the 8 industrial estates of the Western Province. In this study, the size of the firm (Large - over 100 Employees, discussed below) and the sector “Manufacturing”, as defined by International Standard Industrial Classification - ISIC Classification (United Nations Department of Economic and Social Affairs, 2008) Level 1 Code “C” was selected. The geographical location, Western Province was predetermined, as the largest number of industries was located in this province.

Within the ISIC Level 2, six sectors were chosen from the manufacturing sectors established in the Industrial Estates located in the Western Province, based on their contribution to industrial output of Sri Lanka as specified in the Factory Industry Production Index (FIPI), in Table 2.9 of the Annual Report of the Central Bank 2015 (Central Bank of Sri Lanka, 2016). Therefore the sample was stratified according to the geographical location (Industrial Estates of the Western Province), sector (Manufacturing), size (Over 100 employees), and the type of the organization (ISIC Code Level 2 – described below). Eleven firms from the selected sectors, employing 100 or more were selected.

Limitations

1. Due to time and resource constraints, only companies operating in the Western Province were taken into consideration. This limitation is mitigated by the fact that more than half of the large-scales manufacturing organizations operate in industrial estates that are located within the Western Province, as discussed earlier.
2. Though there are many different categories of large manufacturing firms, only those with a significant contribution to the economy have been selected. This may make the findings somewhat biased, as large contributors may have implemented better innovation practices compared to other companies. A comparative study of significant contributors and other companies should be an important area that should be focused in future research.
3. The exaggeration or downplaying of innovation practices by the respondent companies may have occurred.

Data Analysis

The firms fulfilling the selection criteria were from food products, beverages (ISIC 10), wearing Apparel (ISIC 13), rubber and plastics products (22), chemicals and chemical products (20) fabricated metal products (25), electrical equipment (27) and printing (18). These were located in the Zones at Homagama, Minuwangoda, Horana, Ratmalana and Mathugama, The number employed generally was around 100-150. One employed 300, another 600 and the largest had 2000 employees.

Table 1: Comparison of idea generation, types of innovation and innovation outcomes of firms studied

	Idea Generation			Type of Innovation			Outcomes (new to:)		
	Employees	Owner/s	Own Research	Product	Process	Organizational	Firm	Market	Asia/World
Ajax (Aluminium Fabrication)	✓				✓	✓	✓	✓	
Bitumix (Bitumen Products)	✓	✓	✓		✓	✓	✓	✓	
Dil Foods (Food Products)		✓	✓		✓	✓	✓		
Elcardo (Metal Products)		✓	✓		✓	✓	✓	✓	✓
EMP (Electric Circuit Equip.)	✓	✓	✓		✓		✓	✓	✓
Fine Tex (Knitware)	✓		✓		✓		✓		
Multichemi (Chemicals)	✓		✓	✓	✓		✓	✓	
Polychrome (Electrical Equip.)		✓	✓	✓	✓		✓	✓	✓
Sachita (Plastic Products)		✓	✓	✓	✓	✓	✓	✓	
Samson (Rubber Products)	✓		✓	✓	✓		✓	✓	
SC Printing (Printing)		✓	✓	✓	✓		✓	✓	

The founder / owner was the innovation “champion” in the most firms. All the firms relied on their own research. Product and process innovation were seen in all the firms, the focus has been lacking on service and market innovation. All firms have had product, process or organizational innovations during the last three years, these have been new to the firm.

Table 2: Detrimental factors identified by different firms

	Govt. policies /attitudes	Uncertain Taxation	Quality and quantity Labour	Educational/ training	Cost of Electricity	Land issues	Under-invoicing/ Dumping	External Research	Intellect. Property System
Ajax (Aluminium)	✓		✓		✓	✓			
Bitumix (Bitumen)	✓	✓	✓	✓	✓		✓	✓	✓
Dil Foods (Foods)	✓	✓	✓		✓		✓		
Elcardo (Metal)	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMP (Electrical)	✓	✓	✓	✓	✓			✓	✓
Fine Tex (Knitware)	✓		✓	✓	✓	✓			
Multichemi (Chemicals)	✓	✓	✓	✓	✓				✓
Polychrome (Electrical)	✓	✓	✓	✓	✓		✓	✓	✓
Sachita (Plastic)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Samson (Rubber)	✓	✓	✓	✓	✓			✓	
SC Printing (Printing)	✓	✓	✓	✓	✓	✓		✓	✓

All firms stated that external factors have had a strong impact on innovative practices. The uncertain policy and taxation environment and attitude of govt. structures and labour issues have been identified as the most damaging issues at present. All firms stated that cost of electricity is a major impediment to production costs and inhibits value addition.

Table 3: Priority given to types of innovation compared to the necessary investment.

	High investment	Low investment
High priority	<ul style="list-style-type: none"> • Acquisition of new plants • Acquisition of new machinery • Introduction of new products 	<ul style="list-style-type: none"> • Own research • Organizational changes • Changes in manufacturing processes
Low Priority	<ul style="list-style-type: none"> • Investing in new businesses 	<ul style="list-style-type: none"> • Internal Training • Incentives

It is a significant finding that process innovation, especially acquisition of plant and machinery, although has been cost intensive and given high priority by the firms and was seen in all the firms studied

The overall effect on innovation of the internal and external factors identified in the study

External Factors:

Table 4: External factors identified and their overall effect on innovation

Effect on Innovation	Strong Effect	Weak Effect
Supportive	<ul style="list-style-type: none"> •Market Structure: Competition, acceptances of innovative products by the market 	<ul style="list-style-type: none"> •ICT, Communication •Availability of credit and finance
Detrimental	<ul style="list-style-type: none"> •Priority given to manufacturing sector •Attitude of government structures and officials •Complexity of government procedures •Taxation •Land issues •Under-invoicing •Education •Cost of electricity 	<ul style="list-style-type: none"> •Lack of government research •Intellectual property •Quantity of labour •Availability of technical training

Management of all the firms consider that external factors to have a stronger impact on innovation than internal factors. The external factors which were under the control of the government were considered as the most detrimental to the innovation in the manufacturing sector.

Internal Factors/:

Table 8: Internal factors identified and their overall effect on innovation

Effect on Innovation	Strong Effect	Weak Effect
Supportive	<ul style="list-style-type: none"> • Organizational Culture • Research and development • Advanced machinery • Allowing staff to freely discuss ideas with management • Labour collectives 	<ul style="list-style-type: none"> • Availability of finance • Availability of skilled and qualified staff • Incentives for innovation
Detrimental	<ul style="list-style-type: none"> • Negative or neutral attitudes of workers and lack of ability to think critically by workers 	<ul style="list-style-type: none"> • Lack of technical and innovation related training

Most internal factors identified were supportive, although overall the management strongly felt that these factors have had a lesser effect on innovation than the external factors.

Sector differences

Eleven firms from seven sectors were studied and in four of these sectors, two firms each were considered for the study. In the other three sectors, only one firm was considered, as there were no other organizations meeting the selection criteria in the Industrial Estates of the Western Province.

There were more commonalities than differences in innovation practices and the factors affecting innovation among sectors. This is a significant finding of this study.

All sectors identified the following factors:

- a. Priority given in policy making to the manufacturing sector
- b. Inconsistent taxation policies
- c. Hostility of government agencies towards manufacturers
- d. Issues related to labour, land and education
- e. High cost of electricity

The specific issue of under-invoicing and dumping was raised by the Fabricated Metal Products, Electrical Equipment and Plastics sectors. This they considered as one of the most important issues affecting innovation.

The firms involved in Food Products and Household Chemical Products expressed concern on the dangers of price squeezing by the supermarkets, which they believe have a negative impact on quality and product differentiation.

Discussion of Findings

Key Findings

- a) All organizations studied had succeeded in implementing more than one type of innovation (organizational, process, product or service) during the last three years.
- b) Innovation was considered to be indispensable to maintain growth, expand market share, add value and to survive in hostile policy environments by all the firms
- c) All the firms strongly felt that it was innovation that enabled them to become leading players in their respective sectors.
- d) Firms recognized that innovative practices was one of their main safeguards against the adverse policies in general and tax policies in particular, something which has existed in the recent past. This factor is supported in innovation literature where authors such as Cooper and Edgett, through case examples postulated that an innovation strategy is an essential tool for organizations to grow continually even in difficult times (Cooper & Edgett, 2000).
- e) The perception that local manufacturing was not given the priority and the support despite its significant contribution to the economy was prevalent in all firms. This view was detrimental to investments on innovation and research. Some expressed the opinion that local manufacturing will die out within the near future if effective actions were not urgently taken.
- f) One of the significant findings coming out of this study is the recognition by the companies of the extent to which the external environment has had an impact on innovation at firm level. The findings strongly suggest that the external macro factors have a significant impact on the organization level factors related to innovation.
- g) All organizations had a process of developing, testing out and implementing innovative ideas, although the process was not a formal one. Regular, formal gatherings where innovative ideas were specifically discussed were only seen in two organizations. Suggestions boxes are available in all organizations and the staff was given the freedom to discuss their ideas with the immediate supervisor or higher management in all organizations.
- h) Specific training for multiskilling was practiced in three organizations, although the main objective of this exercise was not idea generation.
- i) Although most organizations were constantly engaged in innovating processes and developing innovative products, formal research units were available only in three of the eleven organizations. The others relied upon ad-hoc research.

- j) The most frequently cited method of acquisition of knowledge was reverse-engineering of products obtained from abroad or ideas obtained by perusing technical manuals or catalogues.
- k) Another significant aspect that has been brought into focus in this study, which had not been covered in literature and the models discussed, is the attitude of the government structures and officials towards innovation as well as the attitude towards the manufacturing business. This attitude is reflected at the policy level (E.g. the low priority afforded to manufacturing compared to services) and the attitudes of the officials of agencies such as Inland Revenue, Department of Labour etc., towards manufacturing firms. The firms felt that there was an overwhelmingly negative attitude towards manufacturing organizations at both policy making level and policy implementation levels, this has had a strong impact on innovative practices as well as on investments on innovation.
- l) The complexity and the length of the government processes for crucial aspects such as obtaining land were a major hurdle for expansion of companies. Those interviewed recognized that government officials, even the ones who wanted to help were tied down by the complex web of procedures.
- m) There was no significant difference among sectors on the aspects of external and internal factors and the practices relating to innovation. This is a significant finding as it can logically be expected that different sectors have different innovation management practices as well as different enabling and detrimental factors. This finding is consistent with the models discussed in the literature survey, as none of the models differentiated among different sectors of manufacturing.
- n) The factors that have a negative impact directly or indirectly on innovation were; some of course explained before.
 - i. The complexity of government administrative processes
 - ii. Hostility of government structures and agencies towards manufacturing firms
 - iii. Unavailability of or inaccessibility to suitable land
 - iv. Aspects related to general and technical education
 - v. Lack of opportunities for industry specific trainings
 - vi. Paucity of labour
 - vii. Under-invoicing of imported products
 - viii. Lack of relevant research by government agencies
 - ix. The inefficient and unhelpful Intellectual Property Rights system
- o) None of the companies reported significant marketing innovations they had undertaken during the last three years.
- p) All companies reported that the sudden change in the policy on infrastructure development in 2015, the subsequent changes in tax policies and the uncertainty relating to taxation have had a significant negative impact on company operations and contributed to lowering priority for innovation and investments on innovation.
- q) Information Technology (IT) and communication services, infrastructure and IT literacy were not mentioned as barriers to innovation. The possible reason may be that the IT infrastructure and the literacy are adequate for current the level of development of the manufacturing sector. The IT related industries are still a small part of the industrial sector in Sri Lanka, and mostly consist of service organizations. In addition, no IT related company fulfilled the selection criteria for this study.
- r) The labour unions (or collectives) were supportive of innovation in all the firms.
- s) Financing constraints for innovation was not mentioned by the firms. This was a significant and unexpected finding. Usually in a resource poor country such as Sri Lanka, both external and internal financing could logically be expected as a factor impeding innovation. Almost all the firms stated that internal as well as external funding was not an issue.
- t) No company purchased or obtained research or licenses from external sources, domestically or internationally.

Comparison of findings with published frameworks and theoretical models

Global Innovation Index 2015: It was stated before that Sri Lanka is ranked 85th in the Global Innovation Index 2015. This index is calculated using innovation inputs and outputs. The main categories of inputs are institutional (political, regulatory, and business factors), human capital and research, infrastructure, market sophistication and business sophistication. The categories of outputs are knowledge and technology outputs and creative outputs. All these categories are sub-categorized and each subcategory is operationalized using sets of indicators that are comparable across countries (Cornell University, INSEAD, WIPO, 2015).

As was discussed in the Literature Survey, in the rankings, out of 143 countries, Sri Lanka is ranked 112th in institutions, and 128th human capital and research. Though these rankings had been obtained using macro level indicators, they were identified as the most important detriments to innovation at organization level in the firms that were considered for the study. Further, Sri Lanka is ranked higher in Infrastructure at no. 57th, and the firms also stated that ICT and other infrastructure needs were no major impediments to innovation.

OECD Innovation Measurement Framework, for individual firms: This is the only standardized and validated framework for mapping organizational level innovation, with widespread acceptability. (Organization for Economic Cooperation and Development, Statistical Office of the European Communities, 2005). This framework too is described in the Literature Survey. Several aspects of this framework have been incorporated into the study framework developed for this study. The institutional factors included in the framework, such as education and research were identified as important factors by most of the firms studied. This framework only considers product, process, organizational and marketing frameworks, and does not contain service innovation. This matched the Sri Lankan situation as service innovations have been rare among the firms studied.

Innovation concepts of A.T. Kearny: The international strategic management group A.T. Kearny, following an extensive analysis concludes that a strong executive champion that develops and propels the innovation strategy (“Innovation Champion”) is a hall-mark of leading innovation firms, (Kearny, A.T, 2008). This was widely seen in the organizations studied. In at least eight of the eleven organizations such a champion could be identified, that is the owner / founder. In at least six of them, that is more than half the firms studied, most of the innovative ideas have been generated by these champions. This seems to be a dominant characteristic of manufacturing firms in Sri Lanka.

Management Innovation concept of Hamel: Hamel postulated that the most important aspect of innovation in an organization is management innovation (Hamel, 2006). He describes this as a marked departure from traditional management principles, processes, and practices, or a departure from customary organizational forms that significantly alters the way the work of management is performed. He argues that establishment of such practices has enabled firms to be successful for long periods of time. A good example was in one organization all the activities and processes have been planned in meeting the exact date, time and the location (may be very far from the factory) that the client needs the product. This has been a major factor, which enabled the company to become the largest private sector firm in this sector, and to maintain this position.

Goffin and Mitchell’s Model of Dimensions of Innovation in the manufacturing sector identifies five dimensions of innovation. These are new products, new services, manufacturing processes, business processes and business models. They have shown that these dimensions ultimately result in commercial innovations (Goffin & Mitchell, 2010). All the components of this model were clearly seen when the firms considered for the study are taken together. The only missing aspect was the “new services” which was seen only at one organization. There were numerous examples of new products, new manufacturing processes and new business processes among the firms studied. Two companies based their business model on continuous innovation and introduction of new products. Therefore, all the dimensions identified in this model are available in the large scale manufacturing sector in Sri Lanka. In most of the firms at least three of these dimension are at work together, the commonest being new products, manufacturing processes and business processes.

Hanson and Birkinshaw postulates an “Innovation Value Chain” within an organization. It describes innovation as a sequential, three-phase process that involves idea generation, idea development and the diffusion of developed concepts (Hanson & Birkinshaw, 2007). The idea generation stage is easy to describe and this feature has been visible in the companies studied. Idea

generation was mainly by the owners and higher management, but was seen in lower level employees too. However, this model identifies different sources of idea generation – by teams, cross functional units and by external elements such as the customers and partners. In most organizations studied, the idea generation occurred via a single person or a small research team. Cross-functional idea generation was only seen in one firm where a matrix organizational structure had been established. The three firms whose main manufacturing objective was fulfilling specific customer orders depended to some extent on ideas of customers and external partners for product improvement and development. There were no sectoral differences.

The next two stages of this “Innovation Value Chain” are idea conversion (to products or services) and idea diffusion (“buy-in” from both within and outside the organization). These two stages have not been distinct in the organizations studied. Most commonly, once an idea was generated, the management and the relevant technical experts try it out with the person or group that generated the idea and then either adopt it, modify it or reject it. This is more precise, if not more decisive than the “buying in” process that described in the model. In the organizational context in Sri Lanka, in most of the firms studied, it is the Chairman / Managing Director that has to “buy-in” the idea to ensure its development and implementation. Although it may seem an autocratic form of innovation management, this can lead to practical ideas that previously seemed impractical. In addition, it cuts the time period between idea development and implementation.

Kline and Rosenberg’s Chain-Linked Innovation Model identifies technical activities occurring at organizational level in the innovation process, the external forces of the market place, as well as the complex interactions between the various stages of the process (Kline.S & Rosenberg, 1986). This is represented schematically in the literature review. In this model, the central chain of innovation starts with the invention or production of a design, based on market signals. It is then developed, produced and marketed. External factors that have an impact on this process have been identified as research and knowledge inputs. This model mainly seems to represent the market oriented product innovation. Components of this model such as the process of implementation of an innovation was seen in the firms considered for the study. However, there were many process and management innovations that cannot be fitted within this model. For example, the practices such as lean management, “reverse planning” and outsourcing which greatly contributed to value addition do not fall within the purview of this model. Therefore, the innovation practices and factors identified in this study are wider in scope than the Chain-Linked model

Goffin and Mitchell’s Innovation Pentathlon Framework is a detailed framework of the innovation process within the organization. Several aspects of this framework were incorporated into the Study Framework. In general, the innovation process (idea generation to implementation) and the outcomes (different types of innovation) observed in the firms were consistent with this framework. However, external factors played a greater role in innovation practices in the organizations studied, compared to the internal factors such as organizational culture and incentives. In addition, no organization had an official or written-down innovation strategy, which is included in this framework.

Key Conclusions and Recommendations

Grouping of findings in relation to objectives of the study

<p>CURRENT INNOVATION PRACTICES</p>	<p>Types of innovation seen</p> <ul style="list-style-type: none"> • Product • Process • Organizational 	<p>Innovation Processes seen</p> <ul style="list-style-type: none"> • Idea generation • Innovation implementation process • Own research 	<p>Outcomes – products and processes seen that are:</p> <ul style="list-style-type: none"> • New to firm • New to market • New to world • Disruptive
<p>CURRENT GAPS IN INNOVATION MANAGEMENT</p>	<p>Types of innovation lacking</p> <ul style="list-style-type: none"> • Marketing • Service 	<p>Gaps in Internal processes</p> <ul style="list-style-type: none"> • HR practices - Training • Obtaining external research • Incentives 	
<p>BARRIERS TO INNOVATION</p>	<p>Internal</p> <ul style="list-style-type: none"> • Quality of Labour • Attitudes and values of employees 	<p>External</p> <ul style="list-style-type: none"> • Government policies, processes (E.g. Priority for manufacturing, attitude of officers, taxation and land issues) • Education and external training • Labour and skills available • Intellectual property system, lack of research • Enforcement: Under invoicing/ dumping 	

Figure 2: Grouping of findings in relation to objectives of the study

New Framework developed from findings of study

Based on the findings and the analysis, and new Framework for innovation practices in large-scale manufacturing organizations located in the industrial estates in the Western Province of Sri Lanka was developed. It is shown in the next page.

Compared to the original Study Framework,

- 1) This looks at a wider range of external and internal factors that have an impact on innovation
- 2) Specific supportive and detrimental elements, both internal and external that have an impact on innovation have been identified.
- 3) Additional factors that impact on the innovation pathway, which are the innovation objectives of the organization, has been incorporated.
- 4) The outcomes of innovation is added.

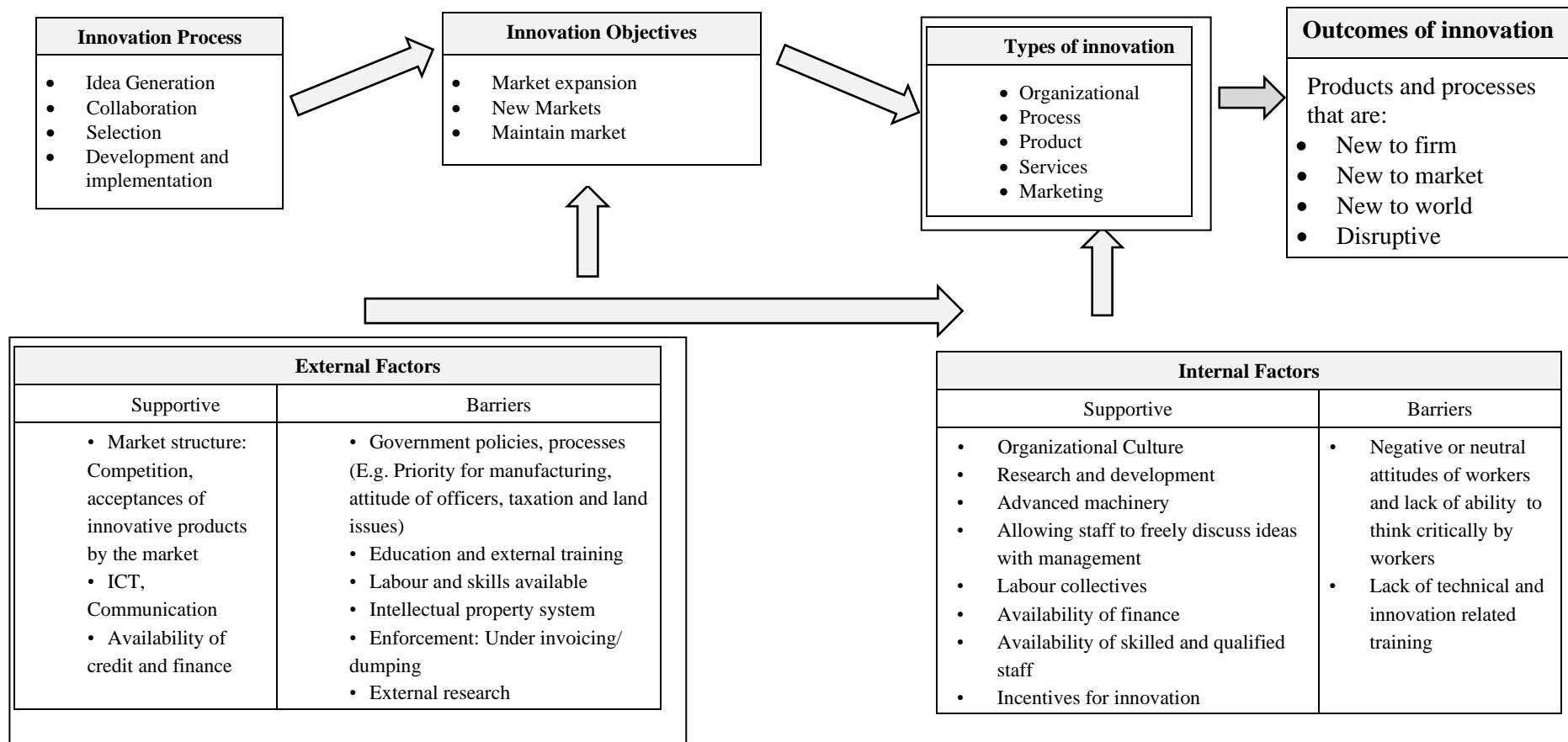


Figure 3: New Framework for Innovation practices of large-scale industries located in Industrial Estates in the Western Province of Sri Lanka

References

- Anuradha, & Pandey, M. (2016). Impact of Work - Life Balance on job satisfaction of Women doctors. *Problems and Perspectives in Management* .
- Aziri, B. (2011). *Job Satisfaction: a literature review*. South East European University.
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L. (2012). Work Engagement, Performance, and active learning, The role of conscientiousness. *Vocational Behavior* , 555-564.
- Baković, T., Lazibat, T., & Sutić, I. (2013). Radical innovation culture in Croatian manufacturing industry. *Journal of Enterprising Communities: People and Places in the Global Economy* , 7 (1), 74-80.
- Batt, R., & Valcour, P. M. (2003). Human resources practices as predictors of work-family outcomes and employee turnover. *Industrial Relations* , 189-220.
- Beehr, T. A. (1986). Social support, autonomy, and hierarchical level as moderators of the role characteristic-outcome relationship. *Occupational Behaviour* , 207-214.
- Bloom, N., Kretschmer, T., & Van Reenen, J. (2009). *Determinants and consequences of family-friendly workplace practices: An international study*. LSE/ Stanford Memo.
- Brandt, Y. I., & Orkibi, H. (2015). How Positively links with job satisfaction: Preliminary findings on the mediating role of work life balance,. *Psychology* , 82-84.
- Central Bank of Sri Lanka. (2016). *Annual Report 2015*. Central Bank of Sri Lanka.
- Central Bank of Sri Lanka. (2016). *Economic and Social Statistics of Sri Lanka 2016*. Central Bank of Sri Lanka.
- Clark, S. C. (2000). Work/family border theory: a new theory of work/family balance. *Human Relations* , 747-770.
- Cook, A., & Minnotte, K. (2008). Occupational and industry sex segregation and work-family interface. *Sex Roles* , 800-813.
- Cooper, R., & Edgett, S. (2000). Developing a product innovation and technology strategy for your business. *Research and Technology Management* , 53 (3), 33-40.
- Cornell University, INSEAD, WIPO. (2015). *Global Innovation Index 2015 - Effective Innovation Policies for Development*. Geneva.
- Demerouti, E., & Cropanzano, R. (2010). Employee work engagement and job performance. In A. B. Bakker, & M. P. Leiter(Eds), *Work engagement: A handbook of essential theory and research* (pp. 147-163). New York: NY: Psychology Press.
- Dosi, G., & Nelson, R. (1994). An Introduction to Evolutionary Theory of Economics. *Journal of Evolutionary Economics* , 4 (1), 153-172.
- Eisenberger, R., Singhamber, F., Vandenberghe, C., Sucharski, I., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived support and employee retention. *Applied Psychology* , 565-573.
- Ferrer, A., & Gagne, L. (2006). *The use of family friendly workplace practices in Canada*. Canada: Institute of Research on Public Policy.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative models of the work family interface. *Vocational Behaviour* , 145-167.
- Frye, K., & Breaugh, J. (2004). Family-friendly policies, supervisor support, work family conflict, family-work conflict, and job satisfaction: A test of conceptual model. *Business and psychology* , 197-220.

- Fursman, L., & Callister, P. (2009). *Men's participation in unpaid care, A review of the literature*. Department of Labour and Ministry of Woman's Affairs.
- Glass, J. L., & Finley, A. (2002). Coverage and effectiveness of family-responsive workplace policies. *Human resource management review* , 313-337.
- Goffin, K., & Mitchell, R. (2010). *Innovation Management. Strategy and Implementation of Pentathlon Framework* (2 ed.). Basingstoke: Palgrave MacMillian.
- Hamel, G. (2006). The why, what, and how of management innovation. *Harvard Business Review* , 84 (2), 72-84.
- Hammer, L. B., Kossek, E., Yragui, N. L., Bodner, T. E., & Hanson, G. C. (2009). Development and validation of a multidimensional measure of family supportive supervisor behaviours. *Management* , 837-856.
- Hammer, L. B., Neal, M. B., Newsom, J. T., Brockwood, K. J., & Colton, C. L. (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Applied Psychology* , 799-810.
- Hanson, T., & Birkinshaw, J. (2007). Innovation Value Chain. *Harvard Business Review* , 85 (6), 121-130.
- Hill, E. J. (2005). Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support. *Family Issues* , 793-819.
- Hossein Dadfar, S. B. (2012). Differentiation by improving quality of services at the last touch. *International Journal of Quality and Service Sciences* , 345-363.
- Kearney, A.T. (2008). *Innovation Management. Strategies for Successful Leadership*. Chicago: A.T. Kearney.
- Kline, S. J., & Rosenburg, N. (1986). An Overview of Innovation. In R. R. Lanu (Ed.), *Positive Sum Strategy: Harnessing Technology for Economic Growth* (pp. 275-305). Washington D.C.: National Academy Press.
- Kossek, E., Pichler, S., Bodner, T., & Hammer, L. B. (2011). Workplace social support and work-family conflict: A meta analysis clarifying the influence of general and work-family- specific supervisor and organizational support. *Personnel Psychology* , 289-313.
- Makikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: self esteem and optimism as moderators in a one year longitudinal sample. *Personal and Individual differences* , 537-557.
- Mangiarotti, G., & Riillo, C. (2014). Standards and innovation in manufacturing and services: the case of ISO 9000. *International Journal of Quality & Reliability Management* , 31 (4), 435-454.
- Mas-Machuca, M., Mirabent, J. B., & Alegre, I. (2016). Work life balance and its relationship with organizational pride and job satisfaction. *Managerial Psychology* , 589-602.
- Nelson, R. (1959). Simple Economics of Basic Scientific Research. *Journal of Political Economy* , 67, 297-306.
- Organization for Economic Cooperation and Development, Statistical Office of the European Communities. (2005). *Oslo Manual - Guideline for Collecting and Interpreting Innovation Data* (3 ed.). Paris: OECD Publications and European Commission.
- Osterman, P. (1995). Work/family programs and the employment relationship. *Administrative science quarterly* , 681-700.
- Poelmans, S., Chinchilla, N., & Cardona, P. (2003). The adoption of family-friendly HRM policies competing for scarce resources in the labour market. *International Journal of Manpower* , 128-147.

- Pollock, T. G., Whitbred, R. C., & Contractor, N. (2000). Social Information processing and job characteristics: A simultaneous test of two theories with implications for job satisfaction. *Human Communication Research* , 292-330.
- Porter, M. (1990). The Competitive Advantage of Nations. *Harvard Business Review* , 3, 73-91.
- Prajogo, D., Laosirihongthong, T., Sohal, A., & Sakun Boon-itt, S. (2007). Manufacturing strategies and innovation performance in newly industrialised countries. *Industrial Management and Data Systems* , 7 (1), 52-68.
- Pushpakumari, M. D. (2008). *The Impact of Job Satisfaction on Job Performance : An Empirical Analysis*.
- Puspa Leni, Sutiye, Suher, Dessy Trismiyanti, Yoserizal. (2018). Analysis of Service Quality Dimensions on Customer Satisfaction. *Advances in Economics, Business and Management Research* , 208-215.
- Qatari, G. a. (1999). Determinants of users' satisfaction with primary health care settings in Saudi Arabia. *International Journal for Quality in Healthcare : International Society for Quality in Healthcare* . , 523-531.
- Raabe, B., & Beehr, T. A. (2003). Formal mentoring versus supervisor and coworker relationship: Differences in perception and impact. *Organizational Behaviour* , 271-293.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of management review* , 465-476.
- Rogers, E. (2003). *Diffusion of Innovations* (5 ed.). New York: Free Press.
- Schaufeli, W B; Truss, K, Alfes, R. Delbridge, A. Shantz, & E. Soane(Eds). (2013). *Employee Engagement and theory practice*. London, UK: Routledge.
- Schaufeli, W. B., Salanova, M., Gonzalez-Rooma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout and: A confirmative analytic approach. *Happiness Studies* , 71-92.
- Schneider, B. (1987). The people make the place. *Personnel Psychology* , 437-453.
- Sivalogathan, V., & Wu, X. (2015). Impact of Organization Motivation on Intellectual Capital and Innovation Capability Intellectual Capital and Innovation Capability of the Textile and Apparel Industry in Sri Lanka. *International Journal of Innovation Science* , 7 (2), 153-168.
- Syrneonidis. (1996). *Innovation. Firm Size and Market Structure: Schumpeterlan Hypotheses and some New Themes*. Washington: Organization for Economic Development and Cooperation.
- Tara, S., & Jyotsna, B. (2010). A model of work life balance, employee engagement, emotional consonance/ dissonance & turnover intention. *Human Behaviour & Organizational Development* .
- Thompson, C. A., & Prottas, D. J. (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well- being. *Occupational Health Psychology* , 100-118.
- United Nations Department of Economic and Social Affairs. (2008). *International Standard Industrial Classification of All Economic Activities Revision 4*. New York: United Nations.
- Wu, X., & Sivalogathan, V. (2013). Innovation Capability for better Performance: Intellectual Capital and Organization Performance of the Apparel Industry in Sri Lanka. *Journal of Advanced Management Science* , 1 (3), 273-277.



ISSN 2513-2377

www.ou.ac.lk