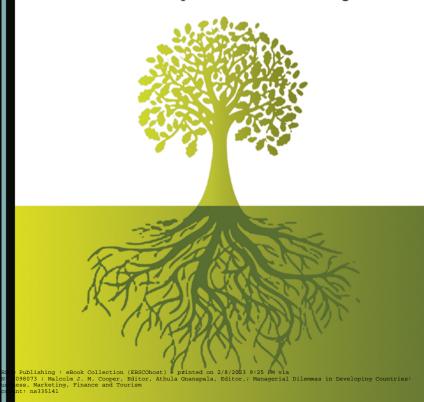
Managerial Dilemmas in Developing Countries

Business, Marketing, Finance and Tourism

Edited by Mohamed Aslam, Malcolm J.M. Cooper, Athula Gnanapala and Thilini Gamage



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PREFACE

This book is published using selected research papers from the 1st Intradisciplinary Conference of Management Researchers 2017 (1st ICMR 2017). Recognizing the significance and inevitability of lobbying the critical managerial issues and challenges in developing countries related to organizations, human resource, consumers, finance and tourism and hospitality, the editors decided to compile the contributions of researchers from different geographical settings into this book. It includes articles containing empirical evidence gathered through surveys, in-depth interviews, covert and open observation and contextual analysis. Considering their coherence and similarity the chapters in the book are clustered into five parts: organizational changes and development, human resources management, marketing and consumer behaviour, financial management, and tourism and hospitality management. •verall, the book has twenty-three chapters dealing with various managerial dilemmas related information technology, business reengineering, the manpower utilization process, consumer behavioural aspects and marketing performances, mitigating financial challenges, and anticipating desires and expectations in the emerging tourism and hospitality industry. As contributors for the books are from different disciplines and backgrounds. we believe that this approach enriches the book for the readers.

The first part of the book consists of studies of organizational changes and development that include in the first chapter by A.A.K. Gayania and K.L.B.G Dharmarathne, a study on the factors affecting the use of elearning systems by the banking assistants of the Hatton National Bank with special reference to the South-Western region in Sri Lanka. In chapter two K.A.P. Mekhala, H.C. Munasinghe, A.N. Abeygunawardena, V. Puvana, R.K.D. Darshana and K.U.S. Somarathna examine management information systems for effective decision making in relation to the total cost of quality. Chapter three is contributed by Lasitha Devendra and Upul Sonnadara and covers reengineering academic institutional standards. N. A. P. Pubudika, Manori P. Kovilage in chapter four analyse the factors affecting failure to achieve the expected sewing efficiency level in the Sri

Lankan garment industry; with special reference to Brandix Apparel Solutions in Wathupitiwala, Sri Lanka.

The second part of the book is focused on human resource management. In chapter five, the changing role of human resources and its business relevance are analysed by Asadullah Khan and Sanath Karunagoda, K.A.K. Nanayakkara and M.S.M. Aslam in chapter six investigate the impact of organizational downsizing on manpower retention: a case study of the Eden Resort & Spa, Beruwala. Chapter seven deals with the impact of work-life balance on employee work performance in the hotel industry of Sri Lanka and is contributed by D.S. De Seram and W.K. Athula C. Gnanapala. A study on the impact of fair treatment and working environments on organizational commitment is contributed by I.A. Ekanayake and K.R.M.C. Thilakarathne in chapter eight. In chapter nine R. S. Hewage and A. A. M. D Amarasinghe analyse the effect of job satisfaction and job stress on perceived job performance of insurance agents in Sri Lanka. The impact of the big five personality traits on employee job involvement in Brandix Apparel Solutions Limited-Intimate Apparel, Walisara, is discussed by W. B. S. M. Wijesingha and A. C. Jayatilake in chapter ten. Chapter eleven is a study of the relationship between psychological contract and employment by S. H. A. K. Nandasiri, D. C. Wijayasekara and P. Sivashankar.

Part three of the book incorporates empirical studies relating to marketing and aspects of consumer behaviour. Chapter twelve is a study of bank interest rate reduction and its impact on the channelling of funds in Sri Lanka by A. M. M. P. K. Alweera. In chapter thirteen V. Muthusamy and K.D.U.D. Fernando analyse the factors that affect cross selling of dwelling houses and personal accident insurance for private motor car policyholders in Sri Lanka. In chapter fourteen W.P.S. Wijesinghe P. Sivashankar and S.H.P. Malkanthi contribute a study of consumer willingness to pay for organic food in Colombo Municipal Council, using evidence from a conjoint analysis study. A study of the cinnamon value chain in the Galle district of Sri Lanka is contributed by S. H. P. Malkanthi and A. A. C. Krishani in chapter fifteen.

The fourth part of the book incorporates studies related to dilemmas in the financial management of organizations in developing countries. In chapter sixteen R. S. Hewage and T. U. I. Peiris analyse the effect of financial development on economic growth, giving evidence from South Asian countries. T.U.I. Peiris contributes a study on foreign direct investment and endogenous growth, again with evidence from South Asian countries, in chapter seventeen. Chapter eighteen also includes an investigation by T. U.

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I. Peiris on the effect of institutional excellence on stock market development. D. G. Dharmarathna then investigates the stock price reaction to right issue announcements and information efficiency in the Colombo Stock Exchange (CSE) in chapter nineteen.

The fifth part of the book presents research articles related to empirical investigations in tourism and hospitality management at destinations, sites and resorts throughout Sri Lanka. Hiran Dinusha and W. K. Athula C. Gnanapala provide an analysis of the interpretation ability of tourist guides and the impact of this on tourists' satisfaction in round tours in chapter twenty. In chapter twenty-one M.P.D.R.S Senevirathnea and W. K. Athula C. Gnanapala investigate the behavioural characteristics of solo female travellers in Sri Lanka. Then Namal Wijesundara contributes an empirical essay on community participation in tourism decision making process through a case study of Arugam Bay, Sri Lanka in chapter twenty-two. Finally, in chapter twenty-three the impact of unplanned development on tourist satisfaction is investigated, with special reference to Negombo, Sri Lanka, by Ruvini Charika and W. K. Athula C. Gnanapala.

Given that the 1st ICMR 2017 at the Faculty of Management Studies of Sabaragamuwa University of Sri Lanka was the entryway to compile this book with fascinating and informative research papers from diverse geographical settings and different academic backgrounds, It is a pleasure to acknowledge the Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, the main organizer of the conference and conference sponsor, the Lanka Electricity Company as a platinum sponsor, and the Insurance Association of Sri Lanka and CEG Education Holdings as gold sponsors. Also, the editors express our sincere thanks to all the contributors of the book

M.S.M. Aslam Malcolm Cooper Athula Gnanapala Thilini Gamage

PART I: ORGANISATIONAL DEVELOPMENT

CHAPTER ONE

FACTORS AFFECTING THE USE OF E-LEARNING SYSTEMS BY THE BANKING ASSISTANTS OF HATTON NATIONAL BANK IN THE SOUTHWESTERN REGION

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Abstract

E-learning is an emerging new paradigm of learning and training in workplaces which creates a platform for learners to learn wherever they are, and without time constraints. This study is aimed at understanding the elearning system of Hatton National Bank PLC (HNB PLC), one of the wellestablished, island-wide, commercial banks in Sri Lanka. The objective of the study was to find out the factors that affect the use of e-learning systems by banking associates, and the study was carried out at the Hatton Nation Bank offices in the Southwestern Region. The model was developed using the factors of social influence, perceived support, perceived self-efficacy and computer anxiety that affect the behavioural intention to use e-learning systems. The population of \$4 banking associates gave their responses to a survey questionnaire. The survey data were analysed using inferential statistics such as Pearson's Product Moment Correlation, and Multiple Regression analysis. The major finding of the study revealed that perceived selfefficacy has a greater impact on the usage of e-learning systems, and is a factor relating to the individual rather than the group. In contrast, one of the strong predictors of social influence was rejected, since the p-value was insignificant. Perceived support, however, showed a positive relationship, and computer anxiety indicated a high negative relationship with behavioural

intention. The observed model proposes significant predictors which influence the e-learning system of Hatton National Bank PLC.

Keywords: Usage of e-learning, social influence, perceived support, perceived self-efficacy, computer anxiety, behavioural intention

Introduction

As a vertical market, where adoption of innovative technology is central to its growth, up-skilling of employees in the banking sector is of utmost importance. The fast-changing technological and social environments have overburdened the shoulders of employees in organisations (Zafar, Zahra, and Zia 2014). Workplace learning is an important means of employees' continuous learning, and e-learning is being recognized as a supportive practice for learning at work. In this case, e-learning is increasingly being used by organisations as an emergent approach for enhancing the skills of knowledge workers (Cheng et al. 2011). The effective usage of e-learning is required to cater to, and to satisfy, the requirements of organisations, and offers the benefits of cost-effectiveness, delivery-efficiency, self-management of learning, on-demand training, and time/place-free availability to employees (Welsh, Wanberg, Brown, and Simmering 2003). Hence, e-learning has been introduced by HNB Bank PLC as an approach to self-learning.

Research Problem

There is a lack of empirical studies of the acceptance and use of technology conducted on the implementation of e-learning in the workplace. Venkatesh and Davis (2000) explained that despite impressive advances in hardware and software capabilities, the troubling problem of underutilized systems continues. Misalignment has been found to exist between the organisational environment and technology-supported learning activities such as knowledge capture and sharing in the workplace (Cheng et al. 2011). In fact, employee behaviour in e-learning is not as expected, hence the weak focus on self-learning, technological and physiological factors which has been identified by researchers. DeRouin, Fritzsche and Salas (2005) recommended that researchers begin measuring the behavioural and organisational outcomes of e-learning.

This chapter analyses the data from a study of the HNB PLC using descriptive statistics concerning the dimensions of perceived ease of use, and perceived usefulness and behavioural intentions. Here the exploration fo-

cussed on the fact that most banking assistants have a low tendency to interact with e-learning, compared to junior executives, executives, and senior executives. With respect to this, a preliminary study of their usage details and descriptive statistics found that the e-learning engagement of banking assistants is low. The researchers identify the factors that impact on the lower usage of e-learning systems among the banking assistants of HNB Bank PLC in the South-Western region of Sri Lanka.

Objectives of the Study

The objectives of the research were as follows:

- 1. To identify the impact of social influence on behavioural intention;
- 2. To identify the impact of perceived support on behavioural intention;
- 3. To identify the impact between perceived self-efficacy and behavioural intention; and
- 4. To identify the impact between computer anxiety and behavioural intention.

Literature Review

The information-rich era of today creates the value of learning as a quest, it enhances learner's skills, knowledge and attitude. As cited in Falconer (2006), organisational learning was first introduced by March and Simon in their early work on organisations. Employees engage with learning in all the hierarchical levels of an organisation for their survival in a competitive working environment today. In the banking industry, organisational learning polishes the quality of customer service, while adding value to the employees. The learning organisation theorists viewed e-learning as a form of organisational learning, and the potential of e-learning as a tool for workplace learning can only be exploited within an appropriate work and learning culture and environment (Tynjala and Hakkinen 2005).

The importance of workplace learning as an effective way for employees to acquire knowledge and skills for individual competence development, as well as for organisational effectiveness, has been widely recognized (Doornbos, Simons, and Denessen 2008). Falconer (2006) stresses that transformation of tacit knowledge to explicit knowledge, and its diffusion amongst, and across, groups, can be effectively facilitated by IT in general, and e-learning techniques specifically. While various definitions metaphor e-learning, Kelly and Bauer (2004) view e-learning as a web-based learning tool that utilises web-based communication, collaboration, knowledge

transfer, and training, to benefit individuals and organisations. Accordingly, this study views e-learning as a technological way of uplifting employees' skills, knowledge and attitudes, irrespective of where they are available.

When increasing e-learning in organisations, it is fundamental to evaluate its effectiveness. Previous theories and models of the adoption and diffusion of IT/IS and UTAUT facilitate the examination of user intentions to use an information system, and their consequent usage behaviour (Dwivedi et al. 2011). For Davis (1989) a user's behavioural intention is defined as "a measure of the strength of one's intention to perform a specified behaviour." In fact, intention to use is an attitude, whereas use is a behaviour (Ong and La 2006). Behavioural intention is therefore considered as the most influential predictor of behaviour (Sheppard, Hartwick, and Warshaw 1988), and is found to be the dependent variable in evaluating the use of e-learning. Thus, this study concludes that behavioural intention is the response variable that explains the gaps found in the use of this technique.

The variables weighted highly in the workplace, several being seen to influence individual's behaviour. The literature defines social influence as follows: SI as one of the extrinsic motivators could influence employees' attitudes towards e-learning as an intrinsic motivation (Roca and Gagné 2008), thus the SI model of technology proposed by Fulk, Schmitz, and Steinfield (1990) states that group members' or supervisors' attitudes toward technology affect individuals' perceptions of its usefulness. In this case, employee education levels may also influence e-learning usage.

Perceived support can urge potential users to use e-learning, enhancing users' intention to use, regardless of their gender, age, previous usage experience, or working experience (Cheng et al. 2011). Hence, the impact on behavioural intention is considerable, according to Cheng et al. (2012). This construct is measured with three dimensions; managerial support, job support and organisational support (Tang et al. 2014).

In the e-learning context, an individual's behavioural characteristics are significant, hence the success of behavioural intention is also based on individual commitment. The existing body of knowledge reveals that personal factors play important roles in either adopting or rejecting e-learning (Yu, Chen, Yang, Wang, and Yen 2006). According to research in Taiwan, the most critical factor which positively affects learners' satisfaction toward e-learning is perceived self-efficacy. This result indicates that learners' self-efficacy is an important factor that influences e-learning usage (Liaw 2008). Employees with high autonomy should be able to arrange time for e-learning more easily (Brown 2005). Recent years have witnessed in the literature a series of studies on the learner characteristics of perceived self-efficacy, which show that these have a strong influence on behavioural intention. In

this study, the relationship of behavioural intention and perceived self-efficacy is described in accordance with the theory of planned behaviour which is a strong player within UTAUT.

Although computers are widespread, the human interaction with them for learning purposes is doubtful. Colquitt, Lepine, and Noe (2000) explain that computer anxiety is a determiner of individual computer engagement. Moreover, the higher the anxiety aroused, the more task performance decreases (Kanfer and Heggestad, as cited in Sun et al. 2007). Therefore, a negative impact of computer anxiety on behavioural intention is observed.

Methodology

The researchers tested these theories by specifying narrow hypotheses, and the survey used a cross-sectional study. The study uses the positivist approach to justify the hypothesis designed to prove the relationship between behavioural intention and e-learning. The HNB bank was the setting for the study. The South-Western Region consists of 21 branches. Primary data was used for the study and collected through structured questionnaires distributed among 108 respondents. Moreover, the researchers used secondary data from 'employee details, May 2015' when determining the sample size and propositions. The sampling method used in the research was stratified Random Sampling, a probability sampling method.

Conceptual Framework

The conceptual framework for this study connects the causal relationships within the independent variables to the dependent variable (Figure 1.1). Data analysis was performed by testing regression analysis to measure the acceptance of the proposed model, the research hypotheses and the research objectives. The hypotheses were tested at the confidence level of 95%. Cronbach's Alpha values of constructs that indicate sufficient level of reliability were 0.786 for all the constructs. Thus, the validity coefficient of 0.781 exceeds 0.5, and this indicates a high level of sampling adequacy in the instrument used.

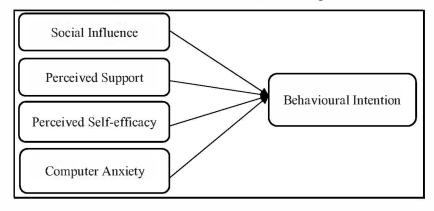


Figure 1.1 Conceptual Framework of the Study Source: (Developed by reviewing the existing literature by the researcher)

Data Analysis

Correlation Analysis

The relationship between the independent and dependent variables is estimated by applying correlation bivariate analysis. The conceptual model indicates positive relationships (Pearson r) for constructs apart from computer anxiety. We found a weak positive correlation between social influence and behavioural intention (r = 0.346, p = 0.000). Perceived support and perceived self-efficacy indicate strong positive correlations with behavioural intention. This is statistically significant (p = 0.000), and thus there is not enough evidence to reject H₀. The computer anxiety construct signifies a high degree of negative correlation (r = -0.702, p = 0.000) towards behavioural intention. In fact, when computer anxiety increases, it negatively impacts on behavioural intention.

Regression Coefficients

The regression analysis was performed by the researchers using the stepwise method, to determine the best fit model that reflects the impact of the independent construct on behavioural intention (Table 1.1).

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
.922a	.851	.845	.30617	2.215

Table 1.1 Model Summary

There is a strong positive relationship between the independent variables and the dependent variable (r = 0.922) with respect to model no. 3. Therefore, behavioural intention is explained by its high degree of positive relationships with perceived support, perceived self-efficacy, and its high degree of negative impact with computer anxiety. The dependent variable is explained \$5.1% by the independent variables. There is only 14.9% of the impact resulting from any variables not included in this analysis.

The adjusted R^2 shows a better fit compared to the R^2 coefficient of 84.5% which is adjusted based on the residuals. The Standard Error is relatively small value (.30617), close to zero, and indicates the high validity of the model. The significance of the overall model was checked using ANOVA and the P-value was 0.000 which is less than 0.05, and F = 151.735. H_1 is accepted since there is enough evidence to reject H_0 . Therefore, the analysis of variance is significant. When considering Collinearity statistics, the tolerance level of the independent variables exceeded 0.2, denoting a lesser relationship within the independent variable as per Table 1.2. This is also indicated by the VIF indicators, as the findings are lower than 10.

Table 1.2 Regression Analysis Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.	Collinearity Statistics	
	В	Std. Er- ror	Beta			Toler- ance	VIF
Constant	.795	.423		1.88●	.064		
PS	.389	.098	.273	3.984	.000	.397	2.522
PSE	.651	.087	.555	7.500	.000	.341	2.934
CA	149	.044	192	-3.384	.001	.578	1.729

The independent variable of social influence had a statistical significance of p = 0.216. However, social influence is insignificant, as it exceeds the criteria of p < 0.050, hence H_0 is accepted. As per the model indicated in Table 2, perceived support and perceived self-efficacy are positive coef-

ficients, with values respectively of 0.389 and 0.651. When perceived support increases by one unit, behavioural intention is enhanced by 0.389. The regression equation is a statistical platform to infer the sample findings to the total population, and was identified by justifying assumptions and model adequacy:

BI =
$$0.795 + 0.389_{(PS)} + 0.651_{(PSE)} - 0.149_{(CA)}$$

Results and Discussion

UTAUT is derived by summarising eight models which impact on behavioural intention in a variety of ways, as per existing literature. It indicates that the respondents to this study need a change in the e-learning system, in accordance with their attitude. It indirectly says that banking assistants in the South-Western region are not satisfied with the current e-learning system. Though the literature indicates a higher tendency to be accepted, there is a significant percentage of assistants who do not use any such material. This indicates that there is less involvement in e-learning in HNB Bank PLC.

According to the existing body of knowledge, social influence is accepted with a strong correlation in South Korea (Yoo et al. 2012), Mexico (Terzis, Moridis, Economides, and Mendez 2013), Belgium (Pynoo et al. 2011), and Taiwan (Wang et al. 2007), but, it is rejected by the South-Western region of HNB Bank PLC in Sri Lanka. Nevertheless, Wang, Wu and Wang (2009) found that social influence impacts positively on behavioural intention and is a significant determinant of this.

Simultaneously, the predictor variable of perceived support indicates a strong positive relationship with the behavioural intention to use e-learning. The predictor variable of perceived support showed a strong correlation with lower impact, and was designated as a significant variable in our conceptual model with respect to the South-Western Region of HNB Bank PLC. This indicates that if management support, job support, and organisational support increase in HNB Bank PLC, the greater the positive outcome that can be gained from e-learning.

The current study found a 0.889 strong degree of correlation between perceived self-efficacy and behavioural intention. The findings of Armitage and Conner (2001) suggested that perceived self-efficacy is a useful predictor of intention and behaviour. In the current context it was found to be a strong determinant. The coefficient of regression (β) denotes 0.651, a high level of impact at the 95% confidence level, and is statistically significant (p-value = 0.000). Therefore, the researchers conclude that perceived self-

efficacy is indicated significantly in the research context of HNB Bank PLC in the South-Western region. Finally, a high degree of negative correlation with computer anxiety (-0.702) was found in this study. A high level of computer anxiety has been negatively related to learning computer skills (Barbeite and Weiss 2004). Therefore, the researchers found that reducing the level of computer anxiety is crucial.

As per the findings of the study, there is an \$4.5% agreement coefficient of determination for the developed conceptual model. It therefore demonstrates a high level of significance. The predictor variables explain \$4.5% of the dependent variable. Thus, the study has identified the factors that impact on the behavioural intention to use e-learning in the HNB Bank PLC in the South-Western region of Sri Lanka.

Conclusions

E-learning in the workplace context is an emerging trend in Sri Lanka in the context of modelling, retaining, enhancing, and training for employee skills. The study discussed in this chapter was conducted to identify why HNB Bank PLC, South-Western region, shows less engagement with elearning. According to the study, HNB Bank PLC employees require more pervasive impact from the organisation to enhance the usage of e-learning systems. In the perspective of HNB Bank PLC, organisational support, managers' consideration, and job support, can be identified as influencing indicators. In fact, using e-learning is deemed as supplementary, and designed to enhance employee knowledge in general. Therefore, if there is a lack of employee and managers' consideration directly related to the e-learning system, this will be important. Thus, to gain the commitment of banking assistants, the motivation to use e-learning must be enhanced by focusing on job requirements.

Moreover, perceived self-efficacy is deemed to have a positive impact relevance to the learners' viewpoint. Employee attitude is the key determinant factor in enhancing behavioural intention. In this case, the employee has the responsibility of enhancing the quality of service, and their motivation must be uplifted to maintain quality. Moreover, to reduce computer anxiety, the organisation must focus on its e-learning system. However, the materials used for disseminating knowledge as articles may bore readers. Thus, user-friendly materials need to be more focused, since banking assistants use computers daily. Therefore, the researchers conclude that e-learning is an imperative for HNB Bank PLC, to enable it to cater for the updating of its information needs. Thus, more consideration is required from the organisation and employees to enhance their behavioural intention to use e-

learning systems in HNB Bank PLC, South-Western Region.

References

- Armitage, C. J., and M. Conner. 2001. "Efficacy of the Theory of Planned Behaviour: A meta-analytic review." Social Psychology 40: 471-499.
- Barbeite, F. G., and E. M. Weiss. 2004. "Computer Self-efficacy and Anxiety Scales for an Internet Sample: Testing Measurement Equivalence of Existing Measures and Development of New Scales." Computers in Human Behaviour 20: 1-15.
- Brown, K. G. 2005. "A Field Study of Employee E-learning Activity and Outcomes." Human Resource Development Ouarterly 16(4): 465-480. doi: 10.1002/brdq.1151
- Cheng, B., M. Wang, S. J. H. Yang, and J. Peng. 2011. "Acceptance of competency-based workplace e-learning systems: Effects of individual and peer learning support." Computers and Education 57(1): 1317-1333.
- Colquitt, J. A., J. A. Lepine, and R. A. Noe. 2000. "Toward an Integrative Theory of Training Motivation: A Meta-Analytic Path Analysis of 20 Years of Research." Journal of Applied Psychology \$5(5): 678-707.
- Davis, F. D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." MIS Quarterly 13(3): 319-340.
- DeRouin, R. E., B. A. Fritzsche, and E. Salas. 2005. "E-Learning in organisations." Journal of Management 31(6): 920–940.
- Doornbos, A. J., R. Simons, and E. Denessen. 2008. "Relations between Characteristics of Workplace Practices and Types of Informal Work-Related Learning: A Survey Study among Dutch Police." Human Resource Development Quarterly 19(2): 155-170.
- Dwivedi, Y. K., N. P. Ranal, H. Chen, and M. D. Williams. 2011. "A Metaanalysis of the Unified Theory of Acceptance and Use of Technology (UTAUT)." Governance and Sustainability in IS 366: 155-170.
- Fulk, J., J. Schmitz, and C. W. Steinfield. 1990. A Social Influence Model of Technology Use, Organisations and Communication Technology. Newbury Park, CA: Sage.
- Harun, M. H. 2002. "Integrating E-learning into the workplace." Internet and Higher Education 4: 301-310.
- Kanfer, R., and E. D. Heggestad. 1997. "Motivational Traits and Skills: A Person-centered Approach to work motivation." Or ganisational Behaviour 19: 1-56.
- Kelly, T., and D. Bauer. 2004. "Managing intellectual capital via e-learning

- at Cisco." In Handbook on Knowledge Management: Knowledge directions, edited by C. Holsapple, 511–532. Berlin, Germany: Springer.
- Liaw, S. 2008. "Investigating students' perceived satisfaction, behavioural intention, and effectiveness of e-learning: A case study of the Blackboard system." Computers in Human Behaviour 51: 864–873.
- •ng, C., and J. Lai. 2006. "Gender differences in perceptions and relationships among dominants of e-learning acceptance." Computers in Human Behaviour 22: 816–829.
- Pynoo, B., P. Devolder, J. Tondeur, J. Braak, J. Van, W. Duyck, and P. Duyck. 2011. "Predicting secondary school teachers' acceptance and use of a digital learning environment: A cross-sectional study." *Computers in Human Behaviour* 27: 568–575.
- Roca, J. C., and M. Gagne. 2008. "Understanding e-learning continuance intention in the workplace: A self-determination theory perspective." *Computers in Human Behaviour* 24: 1585–1604.
- Sheppard, B. H., J. Hartwick, and P. R. Warshaw. 1988. "The theory of reasoned action: a meta-analysis of past research with recommendations for modifications and future research." *Journal of Consumer Research* 15(3): 325-343.
- Sun, P., R. J. Tsai, G. Finger, Y. Chen, and D. Yeh. 2007. "What drives successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction." *Computers and Education*. http://doi.org/10.1016/j.compedu.2006.11.007
- Tang, L.L., C. H. Hsu, and ●. C. Kiet. 2014. "Acceptance of web-based elearning systems: Behavioural intention and impacts." *International Journal of Innovation in Management* 2(1): 37–52.
- Terzis, V., C. N. Moridis, A. A. Economides, and G. R. Mendez. 2013. "Computer Based Assessment Acceptance: A Cross-cultural Study in Greece and Mexico." *Educational Technology and Society* 16(3): 411–424.
- Tynjala, P., and P. Hakkinen. 2005. "E-learning at work: theoretical underpinnings and pedagogical challenges." *The Journal of Workplace Learning* 17(5/6): 318–336.
- Venkatesh, V., and F. D. Davis. 2000. "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies." *Management Science* 46(2): 186–204.
- Wang, Y., M. Wu, and H. Wang. 2009. "Investigating the determinants and age and gender differences in the acceptance of mobile learning." *British Journal of Educational Technology* 40(1): 92–119.
- Welsh, E., C. Wanberg, K. Brown, and M. Simmering. 2003. "E-learning: emerging uses, empirical results and future directions." *International*

- Journal of Training and Development 7(4): 245-58.
- Yoo, S. J., S. Han, and W. Huang. 2012. "The roles of intrinsic motivators and extrinsic motivators in promoting e-learning in the workplace: A case from South Korea." Computers in Human Behaviour 28(3): 942–950.
- Yu, S., I. Chen, K. Yang, T. Wang, and L-L Yen. 2006. "A feasibility study on the adoption of e-learning for public health nurse continuing education in Taiwan." *Nurse Education Today*.
- Zafar, A., N. Zahra, and Y. A. Zia. 2014. "Antecedents of Job Burnout among Bank Employees." *Humanities and Social Sciences* 21(2): 13–24.

CHAPTER TWO

MANAGEMENT INFORMATION SYSTEMS FOR EFFECTIVE DECISION MAKING ON THE TOTAL COST OF QUALITY

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Abstract

Manufacturing organisations are continuously affected by chronic waste and hidden quality costs, resulting in the increased total cost of quality and reduced profitability. However, the existing remedial systems only focus on sporadic waste and visible quality costs, and fail to capture a real picture of the total cost of quality. Therefore, the severity of issues is often unidentified by organisations, and no preventive actions are triggered for continuous improvement. This chapter focuses on developing a reliable quality costing system for lanited fabric manufacturing organisations, in which all dimen-

sions of prevention, appraisal, internal and external failure costs are encompassed, and the achievement of an organisation's quality objectives and long-term success through proper identification, monitoring, analysis, and reporting of quality costs is captured, thereby facilitating management decision making to understand the 'total cost of quality'. The comprehensive literature survey provided here depicts the nature of chronic and sporadic waste, distinguishes between visible and hidden costs, categorizes cost elements, analyses quality costs, reveals the real impact of quality costs on organisational performance, and identifies the strategy for managing the total cost of quality. Initially, a detailed process study was conducted to identify all the cost elements, categorize their impact, and to define the method of quantifying such cost elements. Collected quality cost data was analysed, and the impact of cost of quality (Co) on organisational performance was identified. Finally, a Microsoft Excel-based system was developed to produce useful management information, which includes cost distributions, trend analysis of cost categories, and key cost elements, highest cost elements, and a monthly cost of quality report.

Keywords: Chronic waste, hidden costs, quality costing, total cost of quality.

Introduction

In a globally competitive market, manufacturers are forced to design and manufacture highly reliable and quality products with competitive pricing to fulfil customer expectations. To achieve this objective, robust and reliable quality management systems should be in place (Gryna 2001, 11). Money is the common language of the top management of a company. If financial figures on quality costs could be generated, information on major quality failures, the financial significance of quality failures, areas of poor performance and possible opportunities for quality improvement would be communicated to top management efficiently and effectively (Juran 1999, 8.2). Therefore, when assigning monetary values to quality issues, it is important to emphasize the severity of the issues. Inefficient quality management systems will have a negative impact on organisational objectives and lead to additional cost of quality, while strategically-designed quality management systems, focusing on customer satisfaction, reduced cost and increased profit, will overcome global competition, attract business opportunities, and ensure long-term business success.

Sri Lankan knitted fabric manufacturing organisations are affected by chronic waste and hidden quality costs in their manufacturing processes,

leading to higher total cost of quality and reduced profitability. Companies are worried about the high number of customer complaints, internal process inefficiencies, and failures, caused by the lapses of existing quality management systems (QMS), which deprive them from achieving their organisation's quality objectives. To improve quality, an organisation must understand the costs associated with this criterion, since the objective of continuous improvement programs is not only to meet customer requirements, but also to do so at the lowest possible cost. This can only be achieved by systematically managing the costs needed to achieve quality, and as well as identifying and eliminating non-conformance. The reduction of these costs is only possible if they are identified and measured (Vaxevanidis 2009).

However, insignificant emphasis is given to 'chronic waste' and 'hidden quality costs' within the textile industry. Existing •MSs have failed to quantify such chronic waste, as most of the organisations have no proper mechanisms to capture such quality costs (Plunkett 1999). Therefore, the severity of the situation is unidentified, and not known by companies. Hence, the initiation of preventive action to improve the current situation will never be triggered, and companies will continue to experience the repercussions of poor customer satisfaction and internal process inefficiencies, which are reflected in the form of increased 'total cost of quality', and reduced profitability. The identification, monitoring, analysis, reporting, and facilitating management knowledge of the cost of quality, chronic waste, and hidden costs, will be an opportunity for significant quality improvement in knitted fabric manufacturing organisations. Therefore, the need for a proper quality costing system, enabling effective decision making, is strongly felt when seeking to ensure continuous quality improvement. Hence, the research project reported on in this chapter was aimed at developing a reliable quality costing system, to facilitate the management decision-making process of a knitted fabric manufacturing organisation, to ensure quality improvement through proper identification, monitoring, analysis, reporting, and thereby facilitate management of Co, leading to a reduction in the total cost of quality.

Literature Review

The cost of poor quality can be defined as the financial loss caused by non-conforming products, services, and processes whose quality objectives are unattained. The total cost of quality is the cost incurred to ensure customer satisfaction by means of providing products and services with required level of quality (Gryna 2001, 19). Total Coo is the sum of the total of the cost of non-conformance (CONC) and the cost of conformance

(C●C). C●NC are the costs incurred from not achieving the required quality first time, and C●C are the costs incurred in ensuring that the required quality is achieved first time (Crosby 1979).

Many organisations categorize the costs associated with quality into four categories: prevention, appraisal, internal failures, and external failures. Collectively, the four categories amount to the 'total cost of quality'. The cost of poor quality includes the internal (prior to delivery) and external (after the delivery) failure categories, which incur costs to fix the products that do not conform to customer requirements, whereas appraisal costs are known as the costs incurred in determining whether the products conform to customer requirements. Prevention costs are the costs of activities undertaken to prevent the occurrence of non-conforming products.

Chronic Waste

Chronic waste is the plarmed waste in a process where it has been identified as an opportunity for improvement in Juran's trilogy, as shown in Figure 2.1. When a process is plarmed ineffectively, it is unable to achieve a 100% level of quality as operations proceed. These inefficiencies will be continued as they are built into the process. Since the inefficiencies of the process design are not identified as a result, effort will not be made to eliminate such wastes from the process. Instead quality control procedures will be employed to control sudden sporadic spikes resulting from some unplarmed events, such as power failures, raw material issues, process breakdowns, or human error. This corrective approach could be regarded as a mere troubleshooting attempt. The result will be the restoration of the increased error level, back to the planned original chronic level of quality control. As shown in Figure 2.1, chronic waste should be reduced to a level far below the original level, through quality improvement designed to achieve real results (Juran 1999, 5.8).

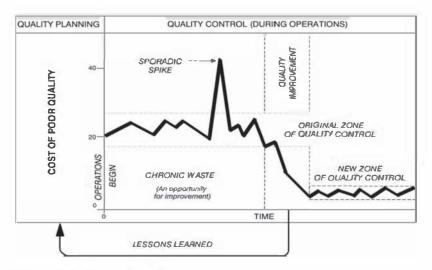


Figure 2.1 The Juran trilogy diagram Source: Adapted from Juran, (1989).

Hidden Costs

The total cost of quality should be viewed inclusive of hidden costs which are difficult to estimate. However, in the present context, most of the hidden costs are not considered in CoQ calculations, and hence the significance of CoQ is often underestimated. According to Gryna (2001) these hidden costs can be large; sometimes three or four times the reported failure cost. Defeo (2001) suggests that more visible and easily measurable quality costs consume 4-5% of sales, yet the true cost of poor quality includes costs which are intangible and difficult to measure, and is much higher. Thus, though obvious costs of poor quality are at the tip of the iceberg, many costs are hidden underneath. Therefore, it is difficult to manage the total cost by merely focusing on the surface.

Cost of Quality Improvement Strategy

The Coo improvement strategy is based on the idea that the elimination of root causes of failures is more effective and cheaper, as it prevents future occurrence of failures. Hence, eventually, the total cost of quality will be minimized (Dale 2003, 188) if the company:

- 1. Reduces failure cost by problem solving;
- 2. Invests in the 'right' prevention activities;
- Reduces appraisal costs in a statistically sound manner where appropriate; and
- Continuously evaluates and redirects the prevention effort to gain further improvements.

An efficient quality management system could balance the quality costs, as shown in Figure 2.2, to achieve minimum total cost of quality by eliminating failures, and systematically reducing appraisals while investing in preventive activities to achieve organisational goals.

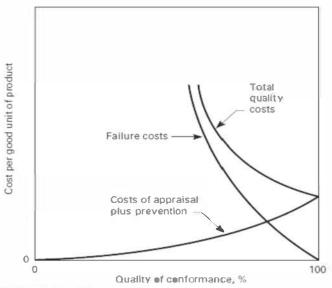


Figure 2.2 Model for optimum quality cost Source: Juran 1999, 8.22.

Quality Cost Reporting

Quality cost reports will provide detailed analysis and necessary information for decision making. The financial significance of quality costs can be assessed more easily by expressing these costs as a percentage of actual sales. Additional insight concerning the relative distribution of quality costs can be realized by construction of a pie chart. Figure 2.3 provides such an analysis, in which failure costs account for about 45% of the total quality

costs. Managers, of course, have the responsibility of assessing the optimal level of quality and determining the relative amount that should be spent in each category. The reduction in costs should come through improvement of quality. Reduction of quality costs without any effort to improve quality could prove to be a disastrous strategy (Juran 1999).

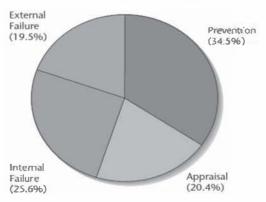


Figure 2.3 Relative Distribution of Quality Costs

Trend Analysis

Quality cost reports reveal the magnitude of quality costs and their distribution among the four categories, thus revealing opportunities for improvement. Once quality improvement measures are undertaken, it is important to determine whether quality costs are being reduced as planned. Quality cost reports will not reveal whether improvement has taken place. Therefore, a graphical representation of the progress of the quality improvement programs over time is required. A graph, called a multiple-period quality trend graph, could be generated to identify whether the overall change in quality costs is moving in the right direction and to see whether significant quality gains are made during each period. By plotting quality costs as a percentage of sales against time, the overall trend in the quality program can be assessed. Additional insight can be provided by plotting the trend of each individual quality category. An example of multiple-period trend graph is shown in Figure 2.4.

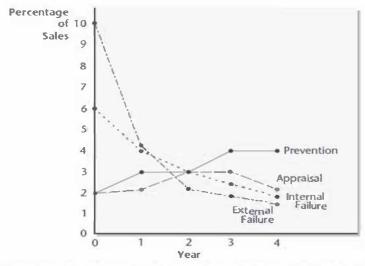


Figure 2.4 Example Multiple-Period Trend Graph: Individual Quality Cost Categories

Methodology

Identification of Cost Elements and Collection of Cost of Quality Data

Plant everall process was roughly mapped through process mapping, and the overall flow of the process has been studied while identifying the KPI's for each section. After understanding the overall process of the plant, required areas for further study were identified. Then a detailed study was conducted for each selected section, and the existing elements of CoQ, the existing measures of CoQ, hidden costs, and chronic waste elements, were identified. Key departments including warehouses (yarn, greige, chemical, mechanical), yarn dyeing, RM inspection, knitting, picking-rework section, greige inspection, final inspection, physical testing laboratory, colour lab, baby dye recipe work, sample dyeing, customer care sections, bulk dyeing (dye house), and finishing, were covered in this study.

Classification of Quality Costs

After collecting all the necessary quality cost data, the cost elements were classified into four basic quality cost categories: prevention, appraisal,

internal failure, and external failure. To classify the above quality cost elements, a decision chart proposed by Campanella (1990) is used, as shown in Figure 2.5. Proper classification of these quality costs is important for the preparation of an effective quality cost matrix.

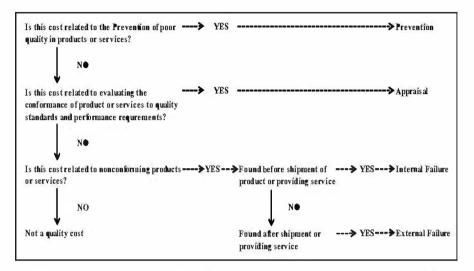


Figure 2.5 Decision chart for identifying COQ activities and assigning to appropriate cost categories
Source: Campanella 1990, 51.

Development of the Departmental and Overall Quality Cost Matrices

As a guideline for the identification of the quality cost elements, the BS 6143: Part 2 (British Standards Institute 1990) checklist was used. Quality costs apart from the above checklist were also identified in the knitting plant, as these checklists are not tailor-made for every industry. After identifying and classifying all the cost elements, quality cost matrices were prepared which represent them in all the manufacturing-related processes of the plant.

Development of the Quality Costing System with Graphical User Interface (GUI)

GUI is an interface which allows the decision maker to access required information for management decision making. The system maintainers are

only required to input necessary data into the system as defined. Then the system will automatically generate useful information in the form of summarized data tables, graphs, and trends. The developed GUI for this project contains features such as data input, request for information, departmental CoQ matrix, overall CoQ matrix, distribution of CoQ, identification of high CoQ elements, target vs. actual results, CoQ trend analysis, changes in major external failure costs, overall CoQ performance, sales, profit, and monthly CoQ report, and will guide the user in making effective quality cost decisions

Data Analysis and Findings

From the data, many chronic wastes and hidden cost elements were identified that could be eliminated or minimized to improve quality and reduce the total Co. However, most of the cost elements identified during the analysis were considered as operational costs, and not as quality costs, by the company. Some of the identified cost elements from the analysis were hidden costs that were not identified and recorded by the company earlier. The hidden costs and chronic wastes captured during the study include; pigment dyeing reprocess costs, offline finishing costs, the cost of reinvoicing, quality training costs, the costs of analysis and reporting of test results, cost of reporting of quality data, preproduction verification costs, quality improvement and administration costs, re-inspection costs, measuring equipment and machine calibration costs, vendor control costs, costs of colour matching, and so on. These cost elements were included in the newly developed quality costing system as currently the company has no records on the above cost elements. Therefore, identification, recording and analysis of these hidden costs in future will be an opportunity for significant quality improvement in an organisation.

Discussion

Quality costs are incurred by any organisation, even if they are not collected, measured, and reported on a formal basis. ●ne of the key objectives of a quality cost collection should be to distinguish these 'hidden costs', 'indirect costs', or unbudgeted costs', arising from various departmental budgets and overheads. However, certain cost elements are not easily collected and measured. Therefore, it should be realized from the outset that quality costing can never be precise, and hence the Co● system should be continuously upgraded to capture as many cost elements as possible.

It was identified that there were only a limited number of elements on the British Standard (BS) checklist which could be directly extracted from the present reporting system of the company. The existing systems did not record cost data in the form outlined in BS 6143: Part 2 (British Standards Institute 1990) and it was difficult to relate the cost elements outlined in the checklist to those reported in the company. Further, there was little information about the expenditure on such CoQ elements in the existing reporting system. Quality cost elements were allocated under various cost centres by the plant, some were charged to overheads, and the management accountant found it to be a complicated and time-consuming process to allocate costs to the elements in the checklist. Therefore, the traditional management accounting practices were applied by the company to CoQ elements without any emphasis on the management of CoQ.

However, the implementation of GUI-based cost collection would mean a change in the accounting practices in the organisation, which clearly would require support from management. Therefore, management commitment and employee attitudes towards change are very important in successful implementation of the new quality costing system. It was also found that the Coe elements were subjected to the perception of the cost collector. Therefore, the developed system provides the necessary precautions to overcome such difficulties by introducing well defined quality cost matrices for each department, with defined cost elements having relevant measurement units.

In addition, the cost elements were not sufficiently broad to fully address the non-manufacturing functions, such as sales, accounts, and colour lab. Some of the elements had to be modified to suit the way in which manufacturing was carried out. For example, the definition of rework was not sufficiently specific to pinpoint which type of rework was to be undertaken, such as picking rework, re-dying, and re-finishing. Therefore, the new system must be developed in such a way that it covers all possible and important aspects of the processes, such that detailed information can be generated.

The detailed and useful information generated by the system can facilitate the management decision making process effectively, with minimum effort, and will lead to continuous improvement of the plant's quality performance. It will be useful in identifying the size of the quality problems, leading to major opportunities for reductions in the cost of poor quality, opportunities for reducing customer dissatisfaction, providing a means of measuring the result of quality improvement activities, assessing the status of quality, revealing hidden problem areas, and assisting decision makers to align quality goals with wider organisational goals and effectively allocate resources for quality improvement.

A well-designed Co system not only reduces costs, but also ensures product quality. Co measurement should be part of a firm's quality management program. In the ISO/TS16949:2002 Clause 5.6, on management review, it is stated that part of the management review shall be the monitoring of quality objectives, and the regular reporting and evaluation of the cost of poor quality. In fact, a cost of quality system provides a good method for the identification and measurement of such costs, and allows the management to set targeted action for reducing these costs. Analysis of quality costs can reveal potential for savings while improving quality. It can reveal which quality-related problems are proving expensive and difficult to deal with. Attention can then be directed to those which can yield the greatest return on investment. Therefore, the developed, user-friendly, GUI-based quality costing system for analysis and reporting of chronic waste and hidden costs will be an opportunity for significant quality improvement in knitting textile manufacturing organisations. To achieve the goal of this Co system, all responsible parties should work on an agreed standard operating procedure for the designed quality costing system.

Conclusions

Identification and analysis of chronic waste and hidden costs will be an opportunity for significant quality improvement in lanitting textile manufacturing organisations. To improve quality, an organisation must realise the costs associated with quality, since the objective of continuous improvement programs is not only to meet customer requirements, but also to do it at the lowest cost. Co reporting is therefore beneficial at both the corporate and operational levels. At the corporate level, it attracts management attention and provides a benchmark against which financial improvement can be measured over time. At the operational level, it helps to identify, prioritize, and select improvement projects, and monitor the progress of improvements.

Quality costs need to be controlled. To do so, these costs need to be identified and estimated. In fact, a cost of quality system enables the achievement of organisation's quality objectives and long-term success, through proper identification, monitoring, analysis, and reporting of quality costs, and thereby allows management decision making to manage the 'total cost of quality'.

References

- Bottorf, D. 1997. "COO systems: the right stuff." Quality Process: 33-35.
- British Standards Institute. 1990. BS 6143: Part 2, Guide to the Economics of Quality Prevention, Appraisal and Failure Model. London: British Standards Institute.
- Campanella, J. 1990. Principles of Quality Costs: Principles, Implementation and Use. 2nd ed. Milwaukee, WI: ASOC.
- Cengage Learning. (n.d.). Quality Costs and Productivity Measurement Reporting and Control.
 - http://www.cengage.com/resource_uploads/down-
 - loads/0324660138 230868.pdf. Accessed 20 January 2016.
- Crosby, P. 1979. Quality is Free. New York: McGraw-Hill
- Dale, B. 2003. "Setting up a Quality Costing System, An evaluation of the key issues." Business Process Management Journal 104-116.
- Defeo, J. A. 2001. *The-Tip-of-the-Iceberg: Hidden-Cost-of-Poor-Quality*. http://www.juran.com/elifeline/elifefiles/2009/09/The-Tip-of-the-Iceberg_Hidden-Cost-of-Poor-Quality.pdf. Accessed 20 January 2016.
- Donovan, S. 2006. Making the Case for Quality-Using Cost of Quality to Improve Business Results. New York: American Society for Quality.
- Gryna, F. M. 2001. Quality Planning and Analysis From product development through use. 4th ed. New York: McGraw-Hill.
- Johnson, M. 1995. "The development of measures of the cost of quality for an engineering unit." *International Journal of Quality and Reliability Management*:86-100.
- Juran, J. M., and F. M. Gryna. 1999. Juran's Quality Handbook. 5th ed. New York: McGraw-Hill.
- Kumar, J. B. 1995. "Cost of quality: evaluating the health of British manufacturing Industry." *The Tom Magazine*: 50-57.
- •akland, N. A. 1988. "Quality assurance in the textile industry: Part I". International Journal of Quality and Reliability Management v: 5-25.
- Plunkett, B. D. 1999. Quality Costing. 3rd ed. Aldershot: Gower.
- Plunkett, J. J and B. Dale. B. 1988. "Quality costs: A critique of some economic cost of quality models." *International Journal of Production Research*:1713-172.
- Plunkett, J. J and B. Dale. 1987. "A review of the literature on quality-related costs." *International Journal of Quality and Reliability Management*: 40.
- Shaw, A. M. 1994. "Quality Costing The Money in Mistakes." The TQM Magazine: 20-22.

- Vaxevanidis, N. 2009. "Cost of Quality Models and their Implementation." International Journal for Quality research III: 27-36.
- Willey, K. B. 1989. "Questions about Quality Costs." International Journal of Quality and Reliability Management: 9-15.

CHAPTER THREE

RE-ENGINEERING ACADEMIC INSTITUTION STANDARDS

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Abstract

This chapter attempts to show that the process of re-engineering academic institutions should follow a sequence of pre-determined activities. It is noted that, in contrast, the re-engineering of most academic institutions does not follow a systematic process, and results in the process not achieving the desired outcomes. The re-engineering process is also popularly known as business process re-engineering (BPR). BPR means not only a change, but often a radical or dramatic change involving systematic elimination of unnecessary processes and the introduction of new processes to an organisation. Generally, teaching and learning must be re-engineered before administrative and management processes. The core function of any academic institution is in teaching and learning. The process of teaching in an academic institution begins with the identification of industrial demands, designing a module structure, improving modules to suit desired needs, course content and delivery methods, integration to the academic program, the recommendation of teaching and reading material, technology infusion, selecting suitable academic staff for course delivery, curriculum updates, and student evaluation and assessment. The authors are of the understanding that unless the current practices and skills of learners meet international standards, they may not be able to take advantages of current global opportunities. The authors are researching how BPR can be used in the Sri Lankan education system. There are many stages to completion, from the enrolment of students to academic programs, that need consideration during this research. Importantly, it is observed that many current academic and management practices may need drastic change to meet this requirement.

Keywords: processes, process maps, re-engineering, information technology, pragmatic transformation.

Introduction

All educational institutions, from small colleges to large multi-campus institutions, carry out a complex range of activities or processes to deliver their learning and teaching activities. Most recognise that some of those internal processes could be improved to suit current market needs, but it is often difficult to know how to manage this change, or what to do first.

An activity or process consists of a set of logically interconnected activities, through which actors convert inputs into outputs to achieve a certain purpose. These processes usually cut across functional or organisational boundaries. The outputs are passed on to customers, who can be internal or external. The re-engineering process is also known as 'business process reengineering' (BPR). BPR not only means a change, but can mean radical or dramatic change, involving systematic elimination of unnecessary processes, and the introduction of new processes to an organisation. BPR is a world-wide-applicable technique for business restructuring, focusing on business processes, and with the potential to provide vast improvements in a short period of time. The technique implements organisational change, based on the close coordination of a methodology for rapid change, employee empowerment and training, and support from information technology. BPR is the analysis and design of workflows and processes, within and between departments or entities (Davenport and Short 1990). Hammer and Champy (1993) think it is radical change and the rethinking of overall processes to achieve better performance in terms of cost, quality, service and speed, while Davenport and Short (1990) call it a process of analysis and workflow redesign in an organisation.

Re-engineering these processes is a viable option to consider. However, it must be noted that the re-engineering of most academic institutions does not follow a systematic process, and hence results in the organisation not achieving its desired objectives. Despite the, often sceptical, stance against BPR and other management concepts from academics (Birnbaum 1988), which may seem foreign to the organisational culture of higher education (HE), many universities have successfully re-engineered their processes. According to a recent study conducted by Educause (Kvavik, Goldstein, and

Voloudakis 2005), higher education institutions have invested heavily in BPR, leveraging information technology to improve services and reduce costs. The globalization of the economy and the liberalization of their trade markets have formulated new conditions in the market place which are characterized by instability and intensive competition. Competition is continuously increasing with respect to price, quality and selection, service, and promptness of delivery. Removal of barriers, international cooperation, and technological innovations have thus caused competition to intensify.

This dramatic change in processes may require a scientific and pragmatic transformation of organisational structures and management systems, the reallocation of employee responsibilities, the setting of new performance measurements, the development of productivity-based incentive systems, employee skill development, and the efficient and effective use of information technology in managing organisational functions.

The Research Problem

This chapter attempts to show that re-engineering academic institutions should follow a sequence of logical and pre-determined activities. The authors have researched the processes of many Sri Lankan higher educational academic institutions, including state-owned universities, and found that many of the stages, from the enrolment of students, through designing academic programs to completion, may need consideration in this attempt. All these stages are accomplished by a set of interrelated processes. However, this research is limited to identifying the need to change, and the identification of the processes that may need re-engineering.

Literature Review

The literature reviewed for this paper concentrates on identifying the need for change, and the tools and approaches used for bringing change in an academic institution. The focus is on discussing BPR as a tool for change, the introduction of BPR and other development approaches, methodologies, success and failure factors, and the comparison of BPR with other tools used for change. BPR is the tool for change, and it is important to construct a base regarding the need for change, and why academic institutions should bring in change. The discussion in the chapter starts with the importance of change, and then gives the background of BPR, canvasses the literature on BPR, approaches, and documents the applications of BPR, in public as well as private sector academic institutions.

Every re-engineering practitioner and BPR expert has their own way of explaining and using this tool. Thus, there are differences in the approaches towards BPR, and various authors have discussed their differences over the concepts, as well as the definition of this approach. In the literature review of BPR, much has been written about the ideas and case applications. However, an overall methodology has not yet emerged. Also, most past work has been on these changes in for-profit competitive organisations, and not in not-for profit organisations. This research focused on reviewing the available literature on BPR, and subsequently collected data by administering a customized questionnaire to respondents from state and privately-owned institutions.

Methodology

To analyse BPR in academic institutions, the authors focused on the identified phases involved in the re-engineering of educational processes. It was identified that six phases are needed for the re-engineering of processes in academic institutions, as indicated in Figure 3.1:

Phase 1: Identifying the need to change;

Phase 2: Identification of existing processes;

Phase 3: Selection of the processes requiring change;

Phase 4: Understanding of the selected processes;

Phase 5: Redesign of the selected processes; and

Phase 6: Implementation of the redesigned processes.

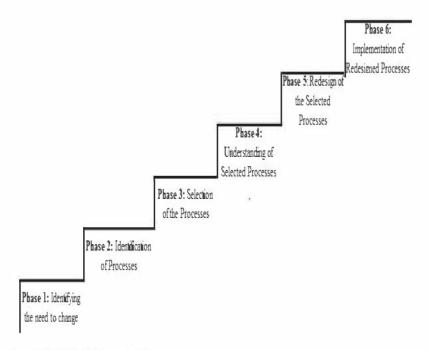


Figure 3.1 The Phases of BPS Source: Authors

Phase 1: Identifying the Need for Change

Many academic institutions may require their processes to be changed to sustain growth. Today academic institutions are compelled to be industry-focused and student-centric. The first step in re-engineering is to communicate the need for change to meet the objectives of the institution. The intended change will be based on the institute's daily operational and future needs, which may be due to internal or/and external factors. Thus, justification for the need to change within an institution needs to arise. The institute's current and immediate needs will drive how it is going to operate, and outlines the kind of results it will achieve. This requirement for change will be used during a BPR effort, as a reminder of re-engineering objectives, as a metric for measuring the progress of the project, and as a prod to keep reengineering action going. This phase will need the whole-hearted support of the senior, middle, and lower management staff members of the institution.

Phase 2: Identification of the Processes

During this phase, the most important business processes are identified and are described from a holistic perspective using a set of process maps. Process maps will give a picture of workflows throughout their duration. Business processes in higher education are in all functional areas, such as administrative, academic, and students' affairs. This shows the high-level nature of the processes, which can be decomposed into sub-processes on separate sub-process maps. Process maps are also used as a means of communication to help people discuss re-engineering. The output of this phase is process maps, reflecting how these high-level processes interact within the institution and in relation to the outside world.

Phase 3: Selection of the processes

It is unrealistic to re-engineer all the high-level processes of an institution at the same time. Therefore, there is a need to decide which processes are to be redesigned. This is a very important part of a BPR effort. Ideal candidates for re-engineering are the most problematic processes, those with great impact to customers, or those with a greater chance of being successfully re-engineered, processes that contribute to the institute's objectives, and so on. According to an institute's strategic objectives, more criteria could be defined in selecting processes for redesign, such as whether a process contributes to the institute's strategic direction, has an impact on stakeholder satisfaction, and so on.

Phase 4: Understanding of selected processes

Before proceeding to redesign, the re-engineering team needs to gain a better understanding of the existing processes concerning what they do, how well or how poorly they perform, and the critical issues that govern their performance. Detailed analysis and documentation of current processes is not within the scope of this phase. The objective is the provision of a high-level view of the process under consideration, so that the team members have the intuition and insight required to create a totally new and superior design.

Phase 5: Redesign of the selected processes

This is the most creative phase of the methodology, because new rules

and new ways of work should be invented. Imagination and inductive thinking should characterise this phase. Redesigning a process is not algorithmic or routine, and therefore Hammer and Champy (1993) suggest three kinds of techniques that can help re-engineering teams to generate new ideas; as redesign proceeds, teams can consider these techniques again to stimulate additional thought. Information technology may be heavily used during this phase.

Phase 6: Implementation of redesigned processes

The last phase covers the implementation phase of the BPR project. Hammer and Champy (1993) do not talk about implementation as much as about project planning. They believe that the success of the implementation depends on whether the five preliminary phases have been properly performed.

Re-engineering Sri Lankan Academic Institutional Standards

The government of Sri Lanka has established the Ministry of Higher Education and Highways to regularise, expand, and develop the institutions offering courses for higher education. The Ministry, along with the University Grants Commission, continuously works with academia, trade unions, and other key stakeholders to uplift the higher education system in Sri Lanka to the desired level. There are currently 15 state universities in Sri Lanka, including the University of Colombo, the University of Peradeniya, the University of Ruhuna, the University of Kelaniya, the University of Sri Jayewardenepura, and the University of Moratuwa. In recent years, with changes to the University Act, a few other institutions have been given permission to grant their own degrees, the most prominent being the Sri Lanka Institute of Information Technology and the Sir John Kotelawela Defence University. There are also privately-owned institutes offering foreign degrees to Sri Lankan students.

The Ministry of Higher Education is taking measures to strengthen its institutional framework, and has established the Quality Assurance and Accreditation Council (QAAC) under the UGC. The QAAC's key objective is to ensure excellence in higher education through quality assurance.

Data Analysis

The present research study was conducted to determine the current educational status of state and privately-owned universities and institutions. Questionnaires with predefined series of questions were used to collect information from the universities. For phase 1, Identifying the Need to Change, we tabulated the responses to the following questions: Duration (years), total credits (SLQF 2015), full time/part time, country of the university/institute, typical age of students (years), enrolment route (mostly), enrolment to pass out ratio % (typical). The data shows that most of the state-owned universities schedule three years for general degrees, and four years for Honours degrees, and these require 90 and 120 credits respectively.

All degree programs are conducted on a full-time basis, and all enrol UGC recommended students, except for the open University of Sri Lanka, the Sri John Kotelawela Defence University, the National School of Business Management, and other semi-state-owned institutions. The undergraduate degree programs of the privately-owned institutions with foreign university affiliations mostly offer three-year general and Honours degrees with 90+ credits, are conducted on full-time or part time basis, and a UGC recommendation is not mandatory for enrolment. Postgraduate degrees offered by the state-owned universities, are of one to two years in duration, and conducted mostly on part-time basis in fee levy mode. UGC recommendation is, again, not a mandatory criterion for registration, however most request a Bachelor's degree or equivalent as a prerequisite. Most of the non-state universities deliver postgraduate degrees, like state universities.

For phase 2, Identification of Existing Management Processes, the following issues were examined to identify the processes that may need reengineering: the extent of out-of-class interaction with faculty, courses regarded as demanding, employability, employers being familiar with courses, courses with a broad focus, courses which are vocationally/professionally orientated, courses which are academically prestigious, where enterpreneurial and management skills are included, courses which develop research skills, where problem-based learning is used, where the capability of problem solving (individual) is enhanced, collective team work, courses which meet international academic standards, English language skills (spoken) at completion, English language skills (written) at completion, and eligibility for international jobs.

Most state-owned universities agreed that, in their undergraduate degrees, out-of-class interaction with faculty was low, technical degrees were regarded as highly demanding but better for employability, the criteria that employers are familiar with the course was not important, and that general degrees were more broad-based, compared to Honours degrees. Most degrees were vocationally/professionally orientated except some arts degrees. Most Honours degrees were academically prestigious, and enterpreneurial and management skills were included in only a few degree programs, most four-year Honours degrees had a research component, while three-year general degrees had very limited research components. Almost no degrees were developed on the platform of problem-based learning.

Further, the capability for problem solving (individual) is marked low in general degrees, while in Honours degrees it is marked high. Collective team work is high in technical degrees and low in non-technical degrees. Most Honours degrees were marked high in meeting international academic standards. English language skills (spoken) at completion and English language skills (written) at completion were marked low in most general degrees. Few degrees were selected to be useful for immediate international job hunting.

Results and Discussion

We considered some of the factors affecting the successes and failures of re-engineering processes. We also discussed the relationship between the six phases of this process, and linked it to academic institutions in Sri Lanka. There is still a need for an exclusive and universally acceptable model for BPR, as well as a commonly applicable methodology. Higher education institutes also need to transform their organisations to successfully face challenges in a competing environment. When analysing the data from our sample of the state and non-state universities and institutions, it was identified that there were many processes that may need to be re-engineered. This requires careful plaining and implementation of appropriate change management initiatives. The study emphasized the importance of the systematic selection of processes to be re-engineered, even before the process is begun. While information technology is recognised as an important factor in the success of this project, prior planning and understanding of the appropriate management processes most often led to a successful integration with the project goals.

Conclusions

Generally, teaching and learning must be re-engineered before the administrative and management processes. This is because the core function of any academic institution is teaching and learning. The process of teaching

in an academic institution begins with identification of industrial demands, designing a module structure, improving modules to suit desired needs, updating course contents and delivery methods, the level of integration to the wider academic program, the recommendation of teaching and reading material, technology infusion in the modules, selecting suitable academic staff for course delivery, and student evaluations and assessment. Academic activities are, however, notably more difficult to quantify and evaluate. Hence, we argue that these processes will require restructuring, or else they will profoundly affect the final outcomes of most administration and management processes, such as student recruitment, policies on attendance and discipline, infrastructure facilities, marketing, staff recruitment and employment policies, and so on.

The authors are of the understanding that unless the current practices and skills of learners are up to international standards, students may not be able to take advantage of current global opportunities. It is also noted that Sri Lankan academic institutions are faced with immense challenges to keep up with global educational requirements. In this regard, it was identified that management issues are faced by the academic institutions in Sri Lanka during such re-engineering processes. However, many academic institutions are not certain of the process of re-engineering. As indicated above, our desire is to recommend the best way to manage the re-engineering process by identifying and streamlining all the required elements of this process.

Access to higher education is still less than the minimum international threshold levels, the distribution of institutions is skewed, and enrolment in public universities is largely concentrated in the conventional disciplines, whereas in the private, self-financed institutions, student enrolment is overwhelmingly in the market-driven disciplines.

Acknowledgments

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References

- Ahmad, H., A. Francis, and M. Zairi. 2007. "Business process reengineering: critical success factors in higher education." *Business Process Management Journal* 13(3): 451-469.
- Belarmino, A., and A. Canteli. 2001. "Business process reengineering and university organisation: A normative approach from the Spanish case." *Journal of Higher Education Policy and Management* 23(1): 63-73.
- Birnbaum, R. 1988. How colleges work: The cybernetics of academic organisations and leadership. San Francisco: Jossey-Bass.
- Davenport, H., and E. Short. 1990. "The new industrial engineering: Information technology and business process redesign." *Sloan Management Review* 31(4): 11-27.
- Den Hengst, M., and G. de Vreede. 2004. "Collaborative business engineering: A decade of lessons from the field." *Journal of Management Information Systems* 20(4): 85-114.
- Greenwood, R., and R. Hinings. 1996. "Understanding radical organisational change: Bringing together the old and the new institutionalism." Academy of Management Review 21(4): 1022-1054.
- Hammer, M., and J. Champy. 1993. Re-engineering the corporation, a manifesto for business revolution. New York: Harper Collins.
- Penrod, J., and M. Dolence. 1992. Reengineering: A process for transforming higher education. In *Proceedings of the 21st Annual Conference on Distance Teaching and Learning 2005*. Professional Paper Series, #9, CAUSE. Boulder: CAUSE.
- Robinson, R. 1995. Radical systems development: An introduction to rapid application development. Chapel Hill: Professional Press.
- Schein, E. 2004. organisational culture and leadership (3rd ed.). New York: Wiley.
- Student handbooks of Universities and Institutes of Sri Lanka (various).

CHAPTER FOUR

FACTORS AFFECTING THE FAILURE TO ACHIEVE EXPECTED SEWING EFFICIENCY LEVELS IN THE GARMENT INDUSTRY: BRANDIX APPAREL SOLUTIONS, WATHUPITIWALA, SRI LANKA

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Abstract

Sewing efficiency has become the key determinant of successes in the apparel industry in Sri Lanka. This chapter reports on research that was undertaken where the case study company was continuously running below its targeted sewing efficiency level. The main objective of the study was to explore the factors affecting the poor sewing efficiency of machine operators working for Brandix Apparel Solutions in Wathupitiwala, Sri Lanka. The study followed the quantitative research approach. Here, the researchers selected six factors that affect sewing efficiency, such as working environment, supervision, machine operators' job satisfaction, skill level, education level, and sewing related experience, by looking at previous studies, to test their relationship and effects on the sewing efficiency of machine operators in this company. A standardized and validated questionnaire was distributed among 104 machine operators in the company as part of primary data collection. These 104 operators, out of a total population of 230 machine operators, were randomly selected. The validity and reliability of the questionnaire was tested using Cronbach's alpha and KMO values. Descriptive statistics and correlation and multiple regression analysis were employed as the data analysis techniques. Finally, the study concluded that the working environment, supervision, job satisfaction, and skill level, positively affected the sewing efficiency of machine operators in Brandix Apparel Solutions, and suggests that machine operators' education level and experience have a positive relationship with their sewing efficiency.

Keywords: education, job satisfaction, supervision, skill, sewing efficiency, work environment.

Introduction

The apparel industry in Sri Lanka is one of the largest contributors to the export revenue of the country (Dheerasinghe 2009). According to the Sri Lankan Export Development Board, apparel exports bring the largest export income to the country, and recorded an increase of 9.3%, year on year, by earning US \$4.9 billion in 2014 (Embuldeniya 2015). To achieve its organisational goals, and to fulfil customer expectations that will lead to sustainable competitive advantage, every organisation needs high performing employees. Many experts believe that human resources are the most important element, and effective component, of trade and economic activity for improving efficiency and achieving organisational aims (Pouryazdan, Soltani, and Lari 2015). They emphasise that the poor efficiency of employees directly affects organisational productivity. In Sri Lanka, garment factories contribute to the development of the economy by exporting readymade garments for Europeans. The Brandix Group of companies is one of the largest export apparel manufacturers in Sri Lanka. Brandix Apparel Solutions (Lingerie) in Wathupitiwala's export processing zone is part of the Brandix group which has approximately 1,900 employees.

The Research Problem

Brandix Apparel Solutions wishes to achieve a 95% efficiency level from their sewing machine operators, but their machine operators could not achieve that expected efficiency level. As a result, the machine operators could not cover the daily production targets, and this led to it being impossible to complete customer orders on time. Then machine operators had to do overtime. Further, the organisation had to hire machine operators from outsourcers to complete daily targets. This situation is worst when shipments are delayed and organisational reputation is affected. Figure 1 shows the expected efficiency level in the last six months of production in 2015.

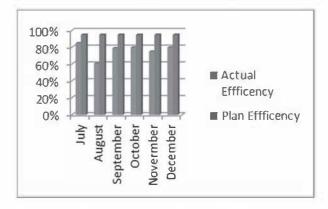


Figure 4. 1 Expected Efficiency Level and Achieved Efficiency Level Source: Efficiency Report 2015.

The data show that there was a huge gap between the actual sewing efficiency and the expected efficiency level in this period. The authors conducted this study to find out the causes of the low efficiency of sewing machine operators in this company. Hence, the main objective of the study was to explore the causes affecting poor sewing efficiency levels at Brandix Essential Solutions (Lingerie).

Literature Review

Efficiency, Effectiveness, Productivity

"Efficiency is doing things right" (Drucker 2007). In other words, "Efficiency is the achievement of the ends with the least amount of resources" (Koontz 1990). "Effectiveness is doing the right things" (Drucker 2007). "Productivity is a measure of the efficiency and effectiveness to which organisational resources (inputs) are utilized for the creation of products and/or services (outputs)." In a garment manufacturing factory, 'output' can be taken as the number of products manufactured, and 'input' is the people, machinery, and factory resources, required to create those products within a given time frame (Figure 4.2).

Physical Working Environment

This factor focuses on how offices are designed and laid out, and furniture and equipment are set up in the workplace. We investigated the environmental factors within the garment industry and their effects, and conclude that congested work areas, improper ventilation, dust, excessive noise, high temperature, and humidity in the apparel plant are the major sources of some efficiency related problems:

H1: The work environment has an impact on low sewing efficiency.

Job Satisfaction

Job satisfaction refers to how content an individual is in their current position (Indermun and Saheed 2013). Job satisfaction and employee performance have a significant positive relationship (Khan, Nawaz and Aleem 2012). If a person's work is interesting, the pay is fair, promotional opportunities are excellent, his or her supervisor is helpful, and co-workers are friendly, the worker is likely to be satisfied in their job. Furthermore, job satisfaction gains which benefit the organisation include reduction in complaints and grievances, absenteeism, and staff tumover, as well as improved punctuality, worker morale, and efficiency (Christen, Iyer, and Soberman 2005). In the literature, there is evidence that there is a relationship between job satisfaction and the performance of employees (Pushpakumari 2008):

H2: The job satisfaction of machine operators has an impact on low sewing efficiency.

Operator Working Skills

Dheerasinghe (2009) said that lack of skilled labour is the major challenge facing the Sri Lankan apparel Industry. Lack of skilled labour normally impacts on the efficiency level of the factories (Dheerasinghe 2009). The lack of skills of the operator may create a handling problem with the fabric parts of garment manufacturing. Excessive, or improper, handling and positioning of the fabric parts during the sewing leads to seam puckering. Furthermore, if the operator is unable to handle the sewing machine properly, there is a chance of seam damage due to frequent needle breakage (Salleh, Yaakub, and Dzulkifi 2011):

H3: ●perator skills have an impact on low sewing efficiency.

Supervision

Supervisors have a positive effect on the overall business, as well as on their staff's performance and behaviour. Supervision affects the employee's job performance, productivity and efficiency (\bigcirc misore 2014). Supervision is the ability to influence the behaviour of subordinates to take a course of action, and the art of influencing subordinates towards achieving organisational goals. \bigcirc misore (2014) further explains that the quality of supervision influences the efficiency and effectiveness of the subordinates (Anderson 2010):

H4: Supervision has an impact on low sewing efficiency.

Working Experience

This study found that (mostly female) garment workers are young, unmarried, with little education, of rural origin, and from poor families. So, women who work in the garment industry have had no previous work experience, and this affects the efficiency level of the factory. The organisations are always hiring employees with experience, because this gives better performance in the organisation:

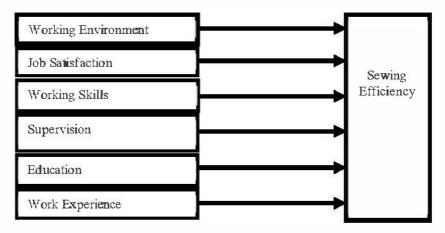
H5: The education level of machine operators has an influence on low sewing efficiency.

Education Level

The results of the study of the impact of education on efficiency in apparel manufacturing reveals that the main problem which magnifies the sewing inefficiency level is the involvement of uneducated employees in the garment manufacturing industry (Ahamd, Khali and Rashed 2012). Thomas and Daniel (2009) also stated that if highly educated workers are in the organisation they contribute more to the individual and organisational effectiveness than less educated workers (Thomas and Feldman 2009). Thus, there is a positive relationship between the education level of the employees and their performance:

H6: The work experience of machine operators has an influence on low sewing efficiency.

Conceptual Framework



Methodology

This study followed the deductive research approach, therefore, the researcher needed to develop a theory and hypothesis, and design a research strategy to test those hypotheses (Saunders et al. 2009). A survey strategy is usually associated with the deductive approach (Saunders et al. 2009). However, it would have been impractical for the researcher to collect data from the entire population, therefore a representative sample was selected. In this study, the population is all the direct employees currently working at the Brandix-Wathupitiwala site (1,500 employees). Saunders et al. (2009) give a rough guide to the minimum sample sizes required from different sizes of population, at the 95% confidence level for 5% margins of error. Accordingly, the researcher determined the sample size as 140 machine operators. The sampling method used in the research was Stratified Random Sampling.

The study used both primary and secondary data, and the secondary data was collected through company documents, such as Performance Recode and Factory Efficiency review reports. As suggested by Saunders et al. (2009), the questionnaire is a widely-used data collection technique in survey strategies. Therefore, the study employed two self-administered questionnaires for primary data collection. One questionnaire was delivered among machine operators, and included questions covering the demographic factors and independent variables: working experience, working shills, job satisfaction, working

environment, supervision, working experience and education level of machine operators. The second questionnaire was delivered to line supervisors, to collect data on machine operators' efficiency levels. The researchers used a five-point Likert Scale to measure the responses (Strongly Agree=5, Agree=4, Neither Agree nor Disagree=3, Disagree=4, and Strongly Disagree=1).

Correlation analysis, regression analysis, and chi square analysis were employed as the data analysis techniques, with the support of SPSS version 21.0 and Minitab 16.0 Software. A Normality Test was used to determine whether the data set of dependent variables (employees' productivity) was normally distributed or not. Correlation analysis was conducted to identify the relationship between the dependent variable and independent variables. Regression analysis was used to measure the impact of operators' skills, job satisfaction, working environment, and supervision, on their sewing efficiency. Chi square analysis was used to determine the relationship of operators' experience and education level to their efficiency.

Composition of the Sample

Table 4.1 explains the demographic factors of the machine operators in Brandix Wathupitiwala.

Table 4. 1 Composition of the Sample

Variable Percentage Variable		Variable	Percentage	
Gender		Working Experience		
Male	17%	Less than 6 months	23%	
Female	83%	7 months to 1 year	28%	
Marital Sta-		Above 1 year to 3	13%	
tus	250/	years	220/	
Married	25%	Above 3 years to 5 years	20%	
Single	75%	More than 5 years	16%	
Age		Education Level		
18-30	64%	Up to Grade 5	2%	
31-40	18%	Above Grade 5-Up to Grade 8	11%	
41-50	12%	Above Grade 8-Up to ●/L	67%	
Above 50	6%	Up to A/L and above	20%	

Data Analysis

According to Blumberg et al. (2008) if the dependent variable is not normally distributed the researcher cannot use parametric tests. Then, if the p value of the dependent variable is > 0.05, the dependent variable is normally distributed. This study employed the Anderson Darling Test to check the normality of the dependent variable, the sewing efficiency level of machine operators. As Figure 4.2 illustrates, the p value of sewing efficiency was > 0.05. Hence, it can be stated that the dependent variable (sewing efficiency level of machine operators) is sufficiently normally distributed. Also, the Cronbach's Alpha value of the dependent variable, and all the dimensions in independent variables was greater than the acceptable coefficient (≥ 0.70). Therefore, the reliability of the research instrument is guaranteed.

Correlation analysis was conducted to evaluate the correlation between the sewing efficiency of machine operators (dependent variable) and the independent variables (working environment, job satisfaction, operators' skill and nature of supervision). Since the p value of each variable was < 0.05 at 95% confidential level, there is a strong positive relationship between the each of the above variables. Also, a chi-square analysis was conducted to evaluate the relationship between the sewing efficiency and work experience and education level of machine operators. The result of this analysis revealed that p < 0.05. Hence, there is a very strong relationship between sewing machine operators' efficiency and their working experience and educational levels, respectively.

Regression Analysis

Through the data analysis, the researchers constructed the following regression model:

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(Efficiency) = -0.0013 + 0.324 (Work Environment) + 0.0584 (Job Satisfaction) + 0.199 (Skill) + 0.477 (Supervision)
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Analysis of variance

Table 4.2 represents the analysis of variance of the fitted regression model.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	117.87●	4	29.467	1026.56	0.000
Residual Er- ror	2.871	100	●.●29		

Table 4. 2 ANOVA Test

Total

Here, H₀: The fitted model is not significant, H₁: The fitted model is significant. As Table 4.2 explains, since the p value of the model is < 0.05, there is adequate evidence to reject H₀ at the 95% significant level. Further, the Coefficient of Determination(R-Sq.) of this model was 97.5%. Therefore, 97.5% of the variation of the machine operators' efficiency can be explained through this fitted model.

Significance of the parameters

240.741

The p value of all the variables in the model is < 0.05. Therefore, all of them can be accepted as significant variables at the 95% confidential level. Thus:

- There is an impact from the work environment on sewing efficiency;
- There is an impact from job satisfaction on sewing efficiency;
- There is an impact from skill on employee sewing efficiency; and
- There is an impact from supervision on sewing efficiency.

Results and Discussion

The study found that the working environment had a significant impact on the sewing efficiency of machine operators in the Brandix Apparel Solution factory in Wathupitiwala ($\beta = 0.313$ and P = 0.000). This supports earlier work on the relationship between the work, workplace, and work tools is the most important aspect in work itself. Employees' performance is affected by the workplace environment, and they will always complain about discomfort and dissatisfaction in the workplace. Also, an adverse physical environment can decrease worker concentration on tasks. In addition, this study found that job satisfaction has significant impact on the sewing efficiency of machine operators in this company, ($\beta = 0.071$ and P = 0.000).

Satisfaction will affect a worker's effort: increased satisfaction from performance helps to increase expectations of performance leading to rewards. The regression analysis in this study revealed that operator skill has a significant impact on the sewing efficiency of machine operators in Brandix-Wathupitiwala ($\beta = 0.190$ and P = 0.000). Furthermore, lack of skilled labour is the major challenge facing the Sri Lankan apparel industry and it affects the efficiency level of the factories. We note that the lack of skills of an operator may create a handling problem with the fabric parts in garment manufacturing. Excessive or improper handling and positioning of the fabric parts during sewing leads to seam puckering. Furthermore, if the operator is unable to handle the sewing machine properly, there is a chance of seam damage due to frequent needle breakage.

This study revealed that the nature of the supervision also has an impact on operators' efficiency ($\beta = 0.972$ and P = 0.000). Supervision is an extremely vital part of a workplace that intends to maximize its success. It naturally follows then, that poor supervision in a workplace is one of the primary obstacles to achieving the potential success of an organisation. After all, employees, no matter what their task, must have proper instruction and training to ensure that they are doing their jobs correctly, and with minimal risk of error or injury.

Conclusions

The main objective of this study was to find out the influence of work environment, supervision, operators' job satisfaction, skill level, education level and working experience on sewing efficiency level. Incorporating regression and chi-square analysis, the researchers found that work environment, job satisfaction, supervision, skill, education, and working experience, highly influence the sewing efficiency of the machine operators in the Brandix Wathupitiwala factory setting.

References

- Ahamd, S., A. Khali, and C. Rashed. 2012. "Impact of Efficiency in the Apparel Supply Chain." Asian Journal of Natural and Applied Sciences: 361.
- Anderson, A. 2010. Factors Affecting Employee Performance. London: Macmillan.
- Christen, M., G. Iyer, and D. Soberman. 2005. "Job Satisfaction, Job Performance, and Effort." *Journal of Marketing* 70(1): 137-150.
- Dheerasinghe, R. 2009. "Garment Industry in Sri Lanka Challenges,

- Prospects and Strategies." Staff Studies 33(1): 33-72.
- Drucker, P. F. 2007. The Practice of Management (Revised edition). California: Josseybass.
- Embuldeniya, A. 2015. "Impact of Apparel Industry on the Economy of Sri Lanka." *Journal of Social Statistics* 7.
- Indermun, V., and M. B. Saheed. 2013. The Job Satisfaction- Emloyee performance Relaionship. *International Journal nad Innovative Research in Management*: 1-9.
- Khan, A. H., M. M. Nawaz, and M. Aleem. 2012. "Impact of Job Satisfaction on Employee Performance." African Journal of Business Management 2697-2705.
- Koontz, H. 1990. Essentials of Management. 5th edition. Cape Town: Oxford.
- Pushpakumari, M. D. 2008. "The Impact of Job Satisfaction on Job Performance." City Forum 2008 9(1): 89-105.
- •misore, B. ●. 2014. "Supervision Essential to productivity." Global Journal of Commerce and Management Perspective: 104-108.
- Pouryazdan, M., H. Soltani, and M. A. Lari. 2015." Explaining the effects of factors affecting efficiency and effectiveness of human resources in Gachsaran Oil Company." Journal of Scientific Research and Development 1-8.
- Salleh, F., N. Yaakub, and Z. Dzulkifi. 2011. "The Influence of Skill Level on Job Performance." *Business and Management Review* 1: 31-40.
- Saunders, M., P. Lewis, and A. Thomhill. 2009. Research Methods for Business Students. 5th edition. London: Pearson Education limited.
- Thomas, W. H., C. D. Feldman. 2009. "How Broadly does Education to job Performance." *Personal Psychology*: 89–134.

PART II:

HUMAN RESOURCE MANAGEMENT

CHAPTER FIVE

THE CHANGING ROLE OF HR AND ITS BUSINESS RELEVANCE

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GOVERNMENT OF ABU DHABI

Abstract

The intent of this chapter is to report on the role of the human resources (HR) department in connecting organisations to their business environment. Traditionally, the finance department in organisations has been related to money matters, whereas HR departments have not been related to money matters, even in the case of giving training to employees, and its influence on subsequent organisational growth. This research attempts to establish the link between HR and finance (money matters). Finally, it is observed that the role of HR has been limited to that of administration, rather than the development of employees. The study is based on a qualitative research approach, adopting direct/participant observation methods where the researchers were part of their respective organisations. This was limited to the organisations and their HR interaction. Semi-structured interviews were also conducted, to gain an in-depth understanding of HR processes, the role played by HR, and its impact on the performance of employees. And this data collection, through semi-structured interviews, helped increase the depth of the data collection. The role of HR in developing employees impacts on employee satisfaction and motivation, which, in tum, impacts on increased organisational performance. The employees within such organisations achieve their career targets within those organisations. This was possible though the research framework of Talent, Training and Tasks. At the heart of this framework is value fit/cultural fit.

Keywords: Human resources, employee, employee development, organisational development.

Introduction

The chapter aims to identify the role of HR in the organisations in the UAE, and the need for improvement in businesses, based on the latest trends in HR. Historically, HR departments in organisations have been called personnel departments, due to their strong focus on the human side of operations after World War II. However, HR departments did not contribute much to the business side of organisational growth. This led to the irrelevance of HR in many organisations. With an ongoing trend towards getting into the business side of its role, HR was limited to following CEO and CFO instructions, without having any say in strategy formulation, its execution, or performance evaluation. Here, performance was defined as a kind of competitive ability through which to estimate a firm's values (Yang et al. 2007). HR was thus out of touch with the business side of organisations, and its influence over them was limited.

Moreover, the HR department has been likened to the role of architects in a construction project, where they are neither the designers nor the executors. However, they are equipped with the information and knowledge which helps organisations build blueprints, which guide the design and construction phases (Ulrich et al. 2009). Thus, when CEOs were asked by Brandl and Pohler (2010) what was the most important resource in their organisations, the response was human resources. Conversely, the HR department was named eighth or ninth-ranking in significance to the organisation. This clearly shows a gap between expectations and practice.

HR must redefine itself. The role of HR is not limited to administration, but can influence the talent, training, and tasking of employees, as per the strategy of the organisation. Human resources management (HRM) is defined as a 'strategic and comprehensive management area that involves establishing policies, practices and administrative structures, which focus on an organisation's most valuable resource; its people'. It has also been defined as "the design of formal systems in an organisation, to ensure the effective and efficient use of human talent to accomplish the organisational goals". (Solomon et al. 2013). But in recent times, there is more emphasis on connecting HR with strategic management. Therefore, there is a shift from a tactical

role for HR (Ulrich et al. 2009), to a strategic role. The strategic role refers to the hierarchical position HR has in the organisation, the participation of senior HR managers in the strategic planning process, and to the involvement of senior management in HR matters, as covered by Storey (1992). Due to the difference in strategy formulation and strategy execution, the role of HR has been limited to its execution; measurement, rewards, staffing, training, and communication. However, there is a call (Charan et al. 2015) to recognise the central role of HR in an organisation, in the form of a Chief Human Resource Officer (CHRO), who should be contributing right from the beginning of strategy formation through to its execution. HR attempts to create a central position within organisations. There is an apparent shift in the role of HR in organisations from 'people oriented' i.e., communicating care, concern, and compassion as strategy architects, to finally connecting HR to customer demands.

Problem Statement

The Harvard Business Review issued an edition in July-August 2015 fully devoted to HR. The title of the issue was "It's Time to Blow up HR and Build Something New." This turned the attention of researchers to the vast domain of HR, which greatly influences the lives of all employees. Some even ask "Why does HR get no respect?" leading to a demand for a seat for HR personnel at the decision table (Vosburgh et al. 2007). This disrespect for HR comes from its being of no significance to organisational success, as the department is not directly executing work for clients or bringing in fees. This even to the extent of being called the 'personnel administration and policy police' - hated by the people. However, the influence of HR is not measured in the form of business and financial targets, as a ROI, but in its influence on finding the right talent, training that talent for the strategic goals, and establishing the culture of performance, which contributes significantly, on a long-term basis, for organisational success. Hammonds (2005) lamented that the HR officer has become a "henchman for the chief financial officer," and that HR has become "a dark bureaucratic force that blindly enforces nonsensical rules, resists creativity and impedes constructive change." Ehrlich (1997) says that the administrative role studied (Beer 1997) was the role which refers to payroll, and benefits leading to promoting employee benefits. HR should be focused on control, compliance, and consistency, with a preventive mind-set. However, the positive impact of the HR role in finding the right talent, and providing adequate training to achieve organisational targets, helps to promote individual satisfaction and motivation. Thus, there is a gap in the literature in theory and practice.

This chapter, therefore, attempts to look back into the historical context and practice of HR within organisations, and reflect about its active involvement in shaping the future of organisations. The research question is the changing role of HR: where do we stand now? No research study was found to have covered this aspect of HR in general, or in the UAE at all.

Literature Review

The Historical Context of HR

The first time the phrase 'human resources' appeared in the Merriam-Webster dictionary was in 1961 (www.marriam-webster.com). The historical change from the administration department to the personnel department happened in the 1970s, due to the influence of industrial business relations theory (Tyson 1987). In the 1980s came HR management, as opposed to personnel management, resulting in 'people management' becoming the heart of the strategic management of the business. The personnel and administration departments were considered as manipulative (Armstrong 1987). Solomon et al. (2013) however, presents the historical context of HR as shown in Table 5.1.

Table 5.1 Evaluation of human resource admi	ministration
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Early Stages	1900-1960	1960-today
Evidence of workers	Personal depart- ment	Business partnership
Voluntary secial program	Strict work safety	S•ft skills
Safety laws	Secial programs	Talent management
Basic hard skills	Hard skill training	War for talent
Schools at factories	Secial pregram for employers	•uts•urcing
	Productivity focus	Leadership
		Diversity
		Innevation

The above table shows that changes in the HR role were aimed at engaging HR departments in strategic planning, and to anticipate the future changes and utilize various components of the organisation, resulting in increased business performance. These changes have been brought about mainly due to rising diversity in the work force, economic and technological changes, innovations, globalization, organisational restructuring, changes in the nature of work, and outsourcing of activities. The detailed description

of the changing role of the HR is presented in the following section.

The Changing Role of HR

The perception of HR is dependent on the measurement of the CEO's, or top management's, expectations from HR, which in turn is limited to their experience of HR, and usually only to executive compensation and succession planning (Vosburgh et al. 2007). Jamrog and Overholt (2004) suggest a need for the evaluation of HR based on the human capital side as a differentiator, in their book Past, Present, and Future. Their emphasis is on the measurement of organisational effectiveness by employing thinking, acting, and measuring devices, in a more systematic way, to see how actions create results.

Boudreau and Ramstad (2007) highlight the decision-making role for HR over its support service. They call for a seat for HR in the decision-making arena, along with the CEO and CFO, because the success of the organisation depends on improved decisions which depend or impact the people. Much of this depends on what the management is expecting from HR, and what management should be expecting from HR, and both are different from each other.

In the past, the role of HR was that of an administrative group not connected with business operations (Ulrich et al. 2008). These HR departments were liked because of their affinity with employees, however they did not succeed on the business side, as HR was not ready to manage the business side of the organisation, such as market intelligence, or assessing the capability and competency of competitors. On the other hand, organisations focusing on the business side alone for results, ran the risk of making shortterm gains, but losing the war of talent. Here's ultimate job is to link the human side of the business with business strategies, and to frame and implement individual abilities and organisational capabilities as a critical source of competitive advantage (Ulrich et al. 1995). Cappelli (2015) shows the difference in the shift from being the personnel department in an organisation to the leadership era of HR. He traces the history of HR during the great depression, when HR was used to 'drive' the performance of the employees by threatening them over performance targets. However, after World War II, when there was a shortage of talent, the importance of HR soared. The modern HR department focuses on coaching, developmental assignment centres, high potential tracks, and succession plans.

The personal administration department was concerned with the technical aspects of hiring, evaluating, training, and compensating employees, whereas HR management was concerned with recruitment, retention, and

motivation of employees to ensure the better performance of the enterprise. Ulrich (1997, in Solomon et al. (2013)) defined HR responsibilities as including strategy execution, administrative efficiency, employee contribution, and capacity for change. There has, therefore, been a continued shift in HR roles, from employee compensation and benefits, relationship between employee and employer, performance appraisal, safety, recruitment, and selection retention, to today's need for strategic human resource management, human resource planning, and strategic human resource management. Solomon et al. (2013) presents the difference between personnel and human resource management, as in Table 5.2.

Table 5.2 Comparison between personnel and human resource management

Dimensions	Personnel	Human Resource
Centract	Careful delineation of written contracts	Go beyond contracts
Rules	Clear mutual agreed rules	Can de eutleek
Guide to manage- ment	Procedures	Business-need
Behaviour	Customs and practices	Values and mission
Managerial task	Monitoring	Nurturing
Speed of decision	Slow	Fast
Management r•le	Transactional	Transf • rmati • nal
Communication	Indirect	Direct
J•b design	Division of labour	Teamw●rk

The changing role of HR, from personnel and industrial relations to human resource management, and its subsequent importance, can be explained by: 1. Motivational theories such as McGregor (1960) and Maslow (1943) in the theory of hierarchy of needs; 2. The rise of the service industry; 3. The rise of global competition; 4. The importance of knowledge workers; and 5. Increased legislation regulating the employment relationship (Ehrlich 1997). Cappelli (2015) calls for the setting of agendas by the HR department, rather than following what it has been asked to do, and finally for it to "bring first-rate analytic minds into the function to help companies make sense of their employee data and get the most from their human capital."

There is no doubt that the people side of HR is essential; the HR department should put a case for the financial gains to be achieved from their actions. This perception of not contributing to the finances in concrete terms comes from the fact that HR practices are not measured in terms of RoI. There is ongoing research on finding tools and metrics that measure talent

investment within organisations, and subsequently connect talent management expenditures with organisational performance (Boudreau and Rice 2015). Moreover, companies seldom have long-term plans with straightforward talent requirements. Therefore, Charan et al. (2015) suggest that organisations bring HR to par with finance, by including a position/role of Chief Human Resource Officer (CHRO) within the organisation, and HR becoming a strategic partner. The CHRO would have a central role in corporate decision making. All organisations need is a better fit between the people and the job, and the HR department can determine what a job needs, and assess if the person selected for the role would be able to achieve strategic targets. This is important because the top 2% of the employees in a business drive 98% of the impact, and nothing overcomes a poor fit (Charan et al. 2015). The CHRO should be armed with information about competitors, and how their key decision makers and executors stack up against those in the CHRO's organisation.

Boudreau and Rice (2015) emphasise the values and culture within organisations that outperform the competition, and place the right person in the right seat as mentioned by Collins (2001). To connect the relationship between HR and business, and to make the former relevant to the present, Boudreau and Rice (2015) suggest HR starts analysing talent with the same framework that business people use to tackle supply chain challenges, focusing on quantity, quality, cost, and timing, talent needed, and what stands in the way of meeting those needs. We should be cautious though, about the perception of the CEO/top management and conditions affecting the HR role (Brandl and Pohler 2010). Similarly, there is a need for management to have training on learning soft skills. The section below discusses development of the research framework.

Developing the Research Framework

This section explains the development of the research framework for this research, based on the above review of the existing research frameworks and the gap left between theory and practice. Brandl and Pohler (2010) studied the perception of CEOs affecting the HR role using a semi-structured interview. This study revealed that factors such as strategy, HR competency, legislation, and governance structure, play a significant role in HR development. Ulrich et al. (2009) provided a research framework dividing the HR role between 'people' and 'business'. The four-fold model Ulrich proposed, in relation to the 'Human Resource Champion', outlined in Vosburgh et al. (2007), includes 'Strategic Partner' and 'Change Agent' on the strategic side, and 'Administrative Expert' and 'Employee Relations Expert', on the

administrative side. This research framework has, however, been criticized for being not applicable to all cultures (Mamman and Somantri 2014).

Other research frameworks include contingency and institutional theories, which are concerned with external factors, such as labor markets, legislation, and unionization (Truss et al. 2002), and internal factors that include centralization of the HR and the aptitude of the HR managers (Guest and King 2004). Strategic choice and negotiated evaluation frameworks call for key personnel, and HR should negotiate for a more strategic role (Truss et al. 2002). The social constructionist framework suggests political manoeuvring by HR (Berger and Luckmann 1966).

All the above research frameworks lack some of the inherent objectives of the HR; connecting talent with roles, and providing necessary training for individual, as well as organisational, success. This comes under talent management for strategic goals. Talent is defined as a recurring pattern of thought, feeling, and behavior (Buckingham and Clifton 2004). Creelman, in McDonnell et al. (2010), showed that talent management is a mindset, and it is at the forefront of organisational success. Blass (2007) considers it as the opportunities made available to the people in an organisation. Cappelli (2008) defines it as a matter of anticipating the need for human capital, and then setting out a plan to meet it. Finally, Boudreau and Rice (2015) call for the measurement tools relating to talent to create HR importance for the finance and management departments. Therefore, there is a gap in the literature and theory, connecting talent with tasks as a part of strategy through appropriate training. This is the hard side of the research framework. The soft side of the research framework is central to the hard side, and is value fit/cultural fit within organisations.

This study, therefore, is based on the framework presented in Figure 5.1.

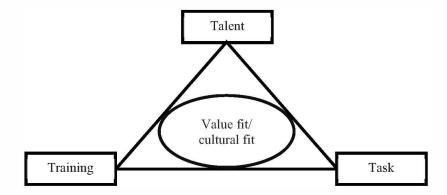


Figure 5.1 HR research framework

In this framework, the business side of HR is Tasks, which are aligned with the strategic objectives of the organisation. The employee selection is based on Talent, and the Tasks to be accomplished by that Talent. Training could be required to increase the skill or knowledge of the employee, as per the role requirements. At the heart of the framework is the value/cultural fit with the organisation.

Methodology

The research methodology for the study was based on the observation method of qualitative research, when both researchers were part of their respective organisations. Semi-structured interviews were also conducted to confirm the data collected during the observations. The participant observation method requires both emotional involvement and objective detachment (Tedlock 2000). This is a method of ethnographic study which collects data in the field, and needs the researchers' hands to get dirty. In this kind of research, the researcher enters the organisation or the research setting and becomes a part of the work team (Sekaran 2003). The observational research method is used to get closer to social reality, which has both social and economic implications. HR should therefore be equipped with both personnel and business model understanding of the organisations, relevant to the research framework presented in Figure 5.1.

Data Collection and Analysis

Data collection was in the form of observation where the researchers were part of their respective organisations. We named the researchers Alpha and Beta for the recording of their narrations during their observations. We divided the data collection during different stages of the career stint within the organisations. This helps to provide understanding of the processes adopted by the organisations, and the involvement of their respective HR departments. Tables 5.3 to 5.5 present the data collected during the observation stage of pre-selection, on-boarding, and finally training and development.

Table 5.3 Pre-selection observational data collection

Alpha	Beta
"The first contact with organisa-	The role of HR was that of "adminis-
tions has always been with HR.	trative arranging for the interview with
However, after arranging an inter-	the technical teams."
view, HR has no role."	
"HR was involved at the time of is-	"In my career of over 27 years and
suing Letter of Appointment (LOA.	changing many organisations, I was
and collecting of the documents for	only interviewed once by HR in an or-
the processing of the visa in the	ganisation."
UAE, which was an administrative	
rele performed by the Public Rela-	
tions Officer (PRO)."	
"No interview was conducted by	"In the past there was no HR depart-
the HR person prior to/after the	ment in the organisations, it was only
technical interview by the line man-	recently that we heard about the HR
agers. During my career it happened	department. Earlier, HR was called the
 •nly •nce that the interview was 	administrative department."
conducted by HR prior to the tech-	
nical interview."	

The analysis of the observation data reveals that both the authors found no role for HR in the selection process of candidates. HR was responsible only for the arrangements of the interview with the technical team, and did not participate in the interview. Therefore, the authors conclude that HR was not focused on the talent of the people being employed, but on the skills and knowledge of the candidates, which was determined by the technical or the line manager. HR, therefore, was not looking at the organisational values/cultural fit of the candidates.

Table 5.4 On-boarding observational data collection

Alpha	Beta
"In all the organisations I worked in,	"After the selection, HR arranged for
none of the HR representatives ex-	the Letter of Award. The on-boarding
plained values, vision and mission	was limited to providing the literature
of their organisations. It shows me	of the company. HR did not introduce
that once the technical acceptance of	the values and vision of the organisa-
the candidate is secured from the	tion. At no stage was information pro-
line manager, the role of HR comes	vided about the strategy of the com-
to an end, in terms of the selection	pany."
of the candidate."	
"No one in HR explained to me	"Strategy was never explained to me
what the strategy of the organisation	during my career."
is, or what the future roles expected	
of me that would enable me to be a	
part of the organisation in the future.	
I wanted career growth in the organ-	
isations. The vision and strategy are	
important from the sustainable em-	
ployment point •f view."	

●n-boarding of the employee includes information about the company profile and the purpose of the organisation. During the career journey of both the researchers, the H■R department did not inform about the values of the company, and there was no emphasis on the value/cultural fit. The mission and vision of the company were never made clear to the employees to enable them to understand the purpose of coming to the office.

Therefore, HR did not play any role in the development of the employees within an organisation. In only one of the organisations that both the researchers worked with at one point in time, was the training course schedule armounced by HR, and at that time the line managers were asked to nominate employees for courses.

Table 5.5 Employee/ organisational development observational data collection

Alpha	Beta
"Attended three courses in two organisations in my career. None of the courses were suggested by HR, but by the line manager. The HR role in development was limited to reimbursing the fee paid for the courses, and that too after acceptance by the line manager."	"HR was not involved in my training and development within the organisations. HR would suggest an upcoming course, and the line manager would propose candidates for the course. I think line managers and HR should know more about their respective roles"
"The role of HR has always been limited to perusing administrative roles, and as such, not connecting talent with tasks through adequate training programs."	"It has been proven over time that the company/firm's inability to recruit and maintain good work force will be a bottleneck for development/growth. Hence both the line manager and the human resource manager should have HR duties. It is important to establish what duties are carried out by the line manager."

Semi-structured interviews

Semi-structured interviews were also conducted to confirm data collection during the observation process. The interview questions were within the three domains of the pre-selection stage, on-boarding, and finally employee development (Tables 5.6-5.7). Table 5.6 presents the questions by Alpha, and the corresponding answers from an HR officer.

Table 5.6 Results of semi-structured interview conducted by Alpha

Questions	HR officer answers	
"Do you participate in the interview process?"	"We participate in the interview process by giving interview calls to the candidates selected by the line managers. After the interviews are conducted, and on the recommendation of the line managers, we issue a lette of award. I (the HR manager) sit in on the interviews for positions above a certain grade. We don't interview below that (director) grade."	
"Do you explain value, vision and mission of the organisa- tion to the employees?"	"We only provide literature on the values, mission and vision, but we don't explain to the employees these aspects of the organisation. I understand that by reading the literature themselves it helps them better understand the vision and mission of the organisation."	
"Do you participate in employee and organisational development?"	"We participate in employee development by arranging required courses for the train- ing. These courses are selected by the line managers. Another important thing is the fi- nances for the training. If we don't have funds, we would not be able to provide training courses to the employees."	

Table 5.7 Results of semi-structured interviews conducted by Beta with HR officers during his career

Organisation	Did HR conduct the	What role did HR	
	interview?	play?	
NE	Ne	Administrative	
SC	N●	Administrative	
N●	N●	Administrative	
HI	N●	Administrative	
NL	Present	Administrative	
AP	N●	Administrative	
CI	No Administrative		
))	No Administrative		

Table 5.7 clearly shows that the HR role was limited to the administrative role, and was not connecting talent with business. This research attempted to fill this gap.

Conclusions and Recommendations

The role of HR has been changing ever since the start of the 20th century, with major changes during the economic cycles of boom and bust. Therefore, there is a need for HR to be connected to business strategy; HR must anticipate change and understand how to implement it, balance employee and business interests, focus on issues rather than personalities, and enhance necessary skills. This research revealed a vast gap in theory and practice connecting HR with business and talent using roles and training. This chapter attempts to fill that gap.

Talent management should take centre stage, where HR becomes an equal partner with finance and management. Management will always need the support of professional HR people to carry it forward. A deep understanding of human behaviour, and the development of work leadership, is beyond the rightful domain of management and the finance department. Therefore, strategic business targets must come from HR, HR must understand organisational business, and accordingly fill the need for talent and adequate training programs. This research recommends further research and development of frameworks connecting HR with customers through the internal framework of talent, tasks, and training (The three 'T's), and value fit/cultural fit.

References

- Armstrong, M. 1987. "Human Resource Management: A Case of the Emperor's New Clothes." *Personnel Management* August: 30-35.
- Bala, Y. 2011. The new human resources management in the 21 Century: A strategic view. Presented at the Annual Conference on Innovations in Business and Management, London, UK.
- Beer, M. 1997. "The transformation of the human resource function: Resolving the tension between a traditional administrative and a new strategic role." *Human Resource Management* 36(1): 49-56.
- Berger, P., and T. Luckmann. 1966. The social construction of reality: a treatise in the sociology of knowledge. New York: Anchor Books.
- Blass, E. 2007. Talent Management: Maximizing talent for business performance. London: Chartered Management Institute and Ashridge Consulting.
- Boudreau, J., and S. Rice. 2015. "Bright, Shiny Objects and the Future of HR." Harvard Business Review July-August: 72-78.
- Brandl, J., and D. Pohler. 2010. "The human resource department's role and conditions that affect its development: explanation from Australian

- CEOs." Human Resource Management 49(6): 1025-1046.
- Buckingham, M., and D. ●. Clifton. 2004. Now discover your strengths. London: Pocket Books.
- Cappelli, P. 2008. "Talent management for the twenty-first century." *Harvard Business Review* 86: 74-81.
- Charan, R., D. Barton, and D. Cary. 2015. "People Before Strategy: A New Role for the CHRO." *Harvard Business Review July-August* 2015: 63-71.
- Collins, J. 2001. Good to great-why some companies make the leap and others don't. New York: HarperCollins Publishers.
- Ehrlich, C.J. 1997. "Human resource management: a changing script for a changing world." *Human Resource Management* 36(1):85-90.
- Goleman, D. 1999. Working with emotional intelligence. London: Bloomsbury Publishing.
- Guest, D. and King, Z. 2004. "Power, innovation and problem-solving: The personnel manager's three steps to heaven." *Journal of Management Studies* 41(4): 401-423.
- Hammonds, K. 2005. "Why We Hate HR." Fast Company 97: 40.
- Jamrog, J., and M. Overholt. 2004. "Building a Strategic HR function." *Human Resource Planning* 27(1): 51-62.
- Mamman, A., and Y. Somantri. 2014. "What role do HR practitioners play in developing countries: an exploratory study in an Indonesian organisation undergoing major transformation." The International Journal of Human Resource Management 25(11): 1567-1591.
- McDonnell, A., R. Lamare, P. Gurmigle, and J. Lavelle. 2010. "Developing tomorrow's leaders-Evidence of global talent management in multinational enterprise." *Journal of World Business* 45:150-160.
- Sekaran, U. 2003. Research Methods for Business A Skill-Building Approach. New York: John Wiley and Sons.
- Solomon, M. V., R. E. Bozga, and M. A. Mateescu. 2013. "Management of Human Resource: Past and Present." In *Proceedings of the Managerial Challenges of the Contemporary Society* 6, 185-190. Cluj-Napoca, Romania: Babes Bolyai University.
- Storey, J. 1992. Developments in the Management of Human Resources.

 •xford: Blackwell.
- Tedlock, B. 2000. Ethnography and Ethnographic Representation. In *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln, 455-486. Thousand Oaks, California: Sage Publications.
- Truss, C., L. Gratton, V. Hope-Haily, P. Stiles, and J. Zaleska. 2002. "Paying the piper: Choice and constraint in changing HR functional roles." Human Resource Management Journal 12(2): 39-63.

- Tyson, S. 1987. "The management of the Personnel Function." *Journal of Management Studies* 24: 523-532.
- Ulrich, D., W. Brockbank, and D. Johnson. 2009. "The role of strategy architect in the strategic HR organisation." *People and Strategy* 32(1): 24-31.
- Ulrich, D., W. Brockbank, D. Johnson, K. Sandholtz, and J. Younger. 2008. HR Competencies: Mastery at the Inter-section of People and Business. Arlington: Society for Human Resource Management.
- Ulrich, D., W. Brockbank, A. Yeung, and D. Lake. 1995. "Human Resource Competencies: An Empirical Approach." Human Resource Management. Journal 34: 4-14.
- Vosburgh, R. M., M. Resorts, and M. G. M. Mirage. 2007. "The Evaluation of HR: Developing HR as an Internal Consulting organisation." *Human Resource Planning* 30(3): 11-23.
- Yang, C., Y. D. Wang, and H. J. Niu. 2007. "Does industry matter in attributing organisational learning to its performance? A case of Taiwanese economy." Asia Pacific Business Review 13(4): 547-563.

CHAPTER SIX

THE IMPACT OF DOWNSIZING ON MANPOWER RETENTION: A CASE STUDY OF THE EDEN RESORT AND SPA, BERUWALA

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Abstract

Enhancing profitability in an organisation has led to the implementation of different strategies to minimize cost and improve productivity. Organisational downsizing is often used to enhance cost efficiency and operational effectiveness. However, the implementation of organisational downsizing may have negative impacts on employee motivation, satisfaction, and retention. The Eden Resort and Spa, Beruwala, Sri Lanka is one of the five-star hotels in Sri Lanka which has implemented organisational downsizing, leading to challenges in the retention of employees. This study investigated the impact of organisational downsizing strategy on employee retention at the Eden Resort and Spa, and adopted a qualitative case study approach to elucidate the multiple realities as result of implementing this organisational downsizing strategy. This investigation incorporated participative observation and personal interviews with top level, middle level, and operational level employees, to bring forth a naturalistic interpretation of the employees at Eden Resort and Spa. The collected data were analysed using descriptive analysis along with data triangulation. The results reveal that the strategy of organisational downsizing is one of the better solutions to reduce costs in an organisation; however, it has a significant negative effect on employee satisfaction, employee motivation, and employee retention. The findings of this study provide a novel contribution to the Eden Resort and Spa, Beruwala, who want to retain and encourage their employees to work in the organisation, and to other hoteliers in the management of human resources effectively in their organisations.

Keywords: Employee satisfaction, manpower retention, organisational downsizing, employee motivation, human resource management.

Introduction

Human resources are vitally important in the hospitality and tourism industry. Managing the personnel of hospitality-related businesses is somewhat different from that of another business. First, this kind of business is purely customer-motivated. The major objective of these kinds of organisations is guest satisfaction. Because without satisfying the guests, it is difficult to maintain reputation and remain in the industry. The hospitality industry provides a series of services, and employees should consider the individual preferences of each customer. The employees in the hospitality industry directly and closely build up relationships with the guests.

Each employee's performance, efficiency, and attitude is very important in this situation. Hospitality businesses deal primarily with tourists, people from distant lands or other parts of the country, people with different language, cultures, religions, and other beliefs. They come to our organisations to spend, so with more hours and more remote origins they spend more. Therefore, the employees in the hospitality business have a big responsibility to welcome and treat them well, and personal dedication impacts on the overall performance of hospitality business. An employee's personal dedication is very important in treating the guests properly, so the hospitality business cannot give good service to guests using inexperienced, demotivated, and dissatisfied employees. Therefore, the management of the organisation must think about their employees to achieve success. This is team work, so all the players should be strong and in a healthy mind-set to make efforts to build up and fulfil organisational goals.

•ver the past three decades, organisational downsizing has been a popular economic intervention instrument for organisations (Cascio, Morris and Young 1999, Mirable and De Young 2005). The evidence shows that downsizing is employed for the following four reasons: economic turnarounds, cost efficiencies, merging organisations, and as an organisation change process (Macky and Ryan 1998). Downsizing is an organisation intervention for cost reduction. The organisation uses cost-reduction strategies to reduce

costs and increase efficiency, productivity, profitability, and competitiveness. Most organisations try to reduce costs to make more profit, and most of them successfully reduce their costs without harming their productivity or employee satisfaction towards the organisation. But the hospitality industry is different from other industries in the business world; it is highly dependent on manpower. For example, according to the International Standards Organisation, in the hospitality industry, there are four employees recruited to provide service to each room.

Using a downsizing strategy in the hospitality industry may therefore create more issues for the workforce in an organisation. The current tendency to restructure, and ultimately to downsize, therefore, has a major impact on the organisations themselves, and on their current and terminated employees. The remaining employees' workload is increased, according to the reduction of the workforce, and this creates negative effects on employee satisfaction toward the organisation. Finally, downsizing has considerable effects on manpower retention in an organisation as a result.

Nowadays, the hospitality industry is booming in Sri Lanka, therefore there are a considerable number of employment opportunities in this sector. It's highly competitive and mirrors the huge expansion in the economy after the end of the thirty years of civil war in Sri Lanka. The problem of employee downsizing in individual firms, therefore, creates both positive and negative impact in organisations. Unlike other industries, the hospitality industry requires more manpower overall. Therefore, downsizing creates both positive and negative issues for organisations. In this study, the researchers used the Eden Resort and Spa as a representative micro unit in the hospitality sector, to study the issues of downsizing strategies.

Methodology

This research was done to identify the issues arising for manpower retention in relation to the organisational downsizing of the Eden Resort and Spa at Beruwala. This study used the qualitative analysis method to carry out the research, constructing a case study that used unstructured interviews, direct observation, and electronic publications like Trip Advisor and agoda.com, as methods of data collection. Based on the interviews, this study analysed the data using descriptive statistics. The conceptual framework was created by the researchers, according to the literature review (see Figure 6.1).

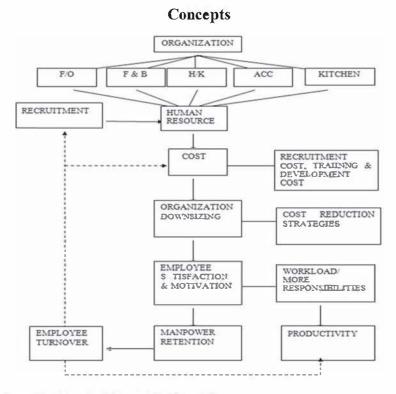


Figure 6.1 Conceptual framework of the study

Human Resource Management

Good human resource management can reduce costs for an organisation. For example, good recruitment policies and processes mean that organisations can efficiently recruit people who will carry out their jobs effectively. Good systems for performance management therefore mean that organisations can ensure that they are getting the best from their staff (Boella 2013).

Organisational Downsizing

Organisational downsizing consists of a set of activities that are undertaken by management, and are designed to improve organisational efficiency, productivity, and/or competitiveness. It represents a strategy that affects the size of the firm's workforce, and its work processes. Downsizing

is a term that has arisen out of popular usage, not precise theoretical construction. On the surface, downsizing can be interpreted simply as a reduction in organisation size (Cameron 1991).

Employee Satisfaction

According to Ahamed (2011) a satisfied worker is more likely to be creative, flexible, innovative, and loyal. Unhappy employees are partly motivated by a fear of job loss, and will not give 100% of their effort. Sageer, Rafat, and Agarwal (2012) note that, "Satisfaction refers to the level of fulfilment of one's needs, wants, and desires. Satisfaction depends basically on what an individual wants from the world, and what he gets." Employee satisfaction is therefore a measure of how happy workers are with their jobs and working environment.

Manpower Retention

Employee retention means keeping the right people in the right jobs in every organisation. Griffeth and Hom (2001) stated that, "Given today's extremely low unemployment rates, and weak company loyalty, employees are increasingly 'jumping ship' for better job opportunities elsewhere." Griffeth and Hom (2001) have argued that, in recent times, employee retention has become one of the leading challenges for organisations.

Results and Discussion

This section presents the findings of the study. According to the conceptual framework, the impacts of organisational downsizing on manpower retention should be obvious (Sekaran 2010). Under that impetus, the researchers describe employee satisfaction, employee motivation, training and development, the impact of productivity, and manpower retention. The Eden Resort and Spa was the location of the study. Using these factors, researchers sought out the positive and negative impacts of organisational downsizing on retaining manpower.

Human Resource Recruitment

When the researchers considered the recruitment undertaken by the resort, some factors were identified. According to the employee details of The Eden Resort and Spa, the organisation is downsizing on manpower. According to a statement from the human resource executive in the resort, the resort

has a policy that it does not exceed a limit of three hundred employees. They do not change that policy for any reason.

The research used guest comments to analyse the impact of organisation downsizing, such as the following:

"I concur with many of the reviews that everyone has their own expectations, and for a 5-star rated hotel, you expect nothing but the best of accommodation and facilities. Sadly, the Eden Resort does not provide those. Let me start out with the positives: the staff could not have been friendlier, they were always pleasant, but, most of the time moved at a snail's pace. Even in their advertised 5-star restaurant, the food was good, but the service was sorely lacking. There was one waiter for ten tables, who had to act as maitre'd, waiter, and bus boy, making the experience, as you would expect, a bit lacking" (Trip Advisor 2016).

According to this comment, guests suggest that there are not enough staff in the hotel. Because of the downsizing strategy in the organisation, the hotel does not recruit the employees for the work, therefore one employee must play many roles in the restaurant. The workload is double for one staff member. This leads to employee demotivation and dissatisfaction. In addition, that comment exposes another thing; the employees try to escape from busy situations, and this produces a bad image of the organisation in the guest's mind. Finally, when the organisation tries to cut costs, because of reduced sales due to dissatisfaction with service, the total revenue in the organisation goes down.

Another aspect of this problem is that because there are fewer staff, and increased employee workload, one employee must do many things. Because of this situation, service is delayed:

"Staff at the restaurant and pool bar are very slow and unhelpful. You can ask few times and then wait for tea, or drinks or the bill for ages" (Trip Advisor 2016).

According to this statement, service is delayed in the restaurant at the Eden Resort because there are not enough staff members to give a smooth service to guests. As a service-providing organisation, the main thing is to provide the best service to guests who come to the resort, and without doing this, the resort carmot survive in the future. If the resort wants to stay in the industry for a long period of time, it must maintain a good service and image. Guests repeat visits and recommend the resort to others. On their visits, the researchers also observed the delay problems when guests ordered drinks and asked for their bills. The restaurant employees have many tasks; they must seat the guests, take beverage orders, serve the beverage and food,

clear the plates, clear the table after meal courses, and serve the bills. As a result, the researchers interviewed some employees in the food and beverage department of the resort to obtain comments from them about their workload.

Employee Satisfaction

Respondent A said: "There are only ten employees, with supervisors in the restaurant staff for one shift, and there are three stations. Each station only has two employees. We can seat 180 people in the restaurant, and during the season, some days our rooms are fully occupied. So, many guests come to the restaurant all at once. In fact, on some days, the breakfast and dinner count is above 300, so in that situation it is not easy to give a smooth service to guests. We must also work with trainees, and they carmot take beverage orders, so some days I must take all beverage orders as well as serve, and I must take care of their bills, and their additional orders. When I am working in the outside section in the restaurant, I must come to the restaurant bar to place beverage orders one by one, and to the cashier to take bills. So, in this situation, it is difficult to give a quick service to the guests" (Personal Communication 2016).

The buffet restaurant is one of the main characteristics of a resort. The restaurant should therefore be outstanding, because when a guest comes to a resort, one of their main activities is having meals. Guests like to enjoy their meals freely and peacefully, and their packages usually include buffet restaurant meals. Most of the in-house guests, therefore, have their meals in this main buffet restaurant, and the total number of guests that do so is higher than other restaurants in the resort. So, according to the total number of guests, management should increase the total number of employees for this restaurant to serve the guests. But the Eden Resort has many complaints about the delays in restaurant services. Most of the guests are not satisfied with the service of the main buffet restaurant in the resort.

According to the statements of employee A, employee downsizing means an increase in the workload of the employees. Because of this downsizing strategy, one employee must do two employees' work. This situation mostly impacts on the more experienced employees, because they are the people who clearly know about the resort operations and about guests. So, their workload is increased. Also, they supervise others and guide them to handle these situations. Finally, they become dissatisfied with their work and try to leave the establishment. When the employees are dissatisfied, their lack of motivation means that organisational productivity is decreased. To gain more productivity there needs to be a good environment for work;

with negative feelings people cannot work well.

As employee A suggested, the researchers directly observed the situation in the main restaurant of the resort. From the researchers' view, there is a huge problem with the staff allocation in this restaurant. The staff members working in this restaurant suffer from both sides. When there is a service delay, the guests complain to the management, and the management also blames their employees when the guests are dissatisfied. But in busy periods, management needs to increase the total number of employees and experienced employees. In this resort most of the waiters are trainees, they carmot manage the service operation or provide smooth service to the guests, an added problem.

Employee Motivation

As organisational downsizing has a great impact on employee performance and productivity, motivation of employees critically determines the success of organisational downsizing. In elucidating a naturalist interpretation of the employee, respondent B said:

"In this period the rooms are fully occupied, so the guest count is also higher than on normal days. Every Saturday our department organizes a BBQ dinner in the garden, where we must arrange the garden as a restaurant. Tables for guests, tables for arranging the buffet, table stations for the mis-en-place, all must be provided. We must bring all the service equipment like cutlery, crockery, and other necessary things, into the garden, and we must bring the food into the garden from the kitchen. The kitchen is a long way from the garden. On some days, the dinner ends after 10pm. Then we bring everything back into the restaurant and the kitchen, and clean the garden. And then we must do mis-en-place in the restaurant for the next morning's breakfast. For this we have only eight to ten staff members, with supervisors. Our shift ends at 12.30am, or it may be 1am, and sometimes we must be on the next day's morning shift. Also, there are no additional staff members when we have any special occasions or events. Everything must be done by the same staff members" (Personal Communication 2016).

According to the statement of employee B, employee downsizing has a strong influence on the organisation's daily operations. The employee said that they must do all the work without any additional staff members to help them. Their workload is too great because of this situation, and they suffer a lot. They are not happy with their working schedule, or their workload. According to the above statement, there is no better planning process for scheduling the staff in the resort. Therefore, the remaining employees suffer

from overload. There is, in fact, no standard for hours or days of work. Because of these situation, employees are demotivated, and this influences the daily operations of the resort.

Manpower Retention

When organisational downsizing affects the motivation and workload of employees, this can determine the retention of manpower. Respondent E stated:

"We work more than 12 to 18 hours for one shift some days. If there is a beach party, tree-hut dinner, repeat dinner, B.B.Q dinner, or any special function, we work more than normal hours of work. But we do not receive overtime payments or extra payments for that" (Personal Communication 2016).

According to the above statement, respondent E said that the organisation does not pay overtime for their extra working hours. According to his statement, the researchers understand that the employees are dissatisfied with the organisation because of the workload, and the non-payment for extra working hours. Any employee likes to have more benefits from their employer. So, when they work more than normal hours they hope to have overtime payments for their extra effort for the organisation. According to Hertzberg's two-factor theory, salary is one of the extrinsic factors in any job situation. So, if an organisation wants to retain employees, they must think about their satisfaction. Motivational factors are one of the main ways employees gain satisfaction in an organisation. Without this satisfaction, the organisation can't retain experienced employees; they leave for positions with more employment benefits.

An operational-level employee expressed his opinion in the interviews. The researchers introduce him as employee A. He said: "We do not have medical allowances from our resort. The employees in our resort do not have any medical benefits from our resort. Only the permanent employees can get medical leave. When we take leave in addition to rostered days off or casual leave, then we must take leave without pay." According to this study, every employee likes to have more benefits from their employer. So, the employees hope for medical benefits from their employer. So, to satisfy their employees and retain them, an organisation must fulfil employee requirements, otherwise employees are dissatisfied, and will leave.

Training and Development

An operational-level employee expressed the following opinion on training and development (employee B):

"I came to The Eden Resort as a trainee. But an orientation programme was only organized after three months. Because there were not enough new employees for the organisation to hold an orientation programme, our work was made more difficult. When a guest asks anything about the resort we don't know how to guide them. From the first day of my work in this hotel I had to work as an experienced employee. Because guests don't know whether I am a trainee or experienced employee, they expect five-star level service from me immediately. Management should give training before including us in that service. At least they must give an orientation programme for new employees" (Personnel Communication 2016).

The resort does not plan orientation programmes or training and development programmes for employees. Accordingly, the above comments about the human resource management in The Eden Resort suggest that it is not sufficient. They do not organize training programmes for employees to develop their skills and knowledge. We then tested these comments with the human resource manager of the Eden Resort and Spa. The human resource manager expressed the following view:

"Normally we maintain three hundred employees in our resort. We are not exceeding our limit of employees. From November till May, we recruit employees, because in this season we have lot of guests; our resort is fully occupied in this period. But we do not recruit above three hundred. In this period employees must sometimes sacrifice their leave. They cannot get the entire roster of leave. But at the end of the season, they can take their balance of leave. We pay compensation for our employees twice within the month. We pay the salary on the 25th of the month, and service charge payments on the 15th of the month. In season, the employee's service charge payment is increased, according to the revenue increment of the resort. Every employee in the organisation can have that advantage. But our organisation does not pay any payment for medicals. As a human resource manager of the resort, we always try to satisfy our employees" (Personnel Communication 2016).

According to the comments of the human resource manager of the Eden Resort and Spa, the resort tries to manage, satisfy, and fulfil employee needs in the resort. According to her, they increase compensation during the season for employees in the resort. And they pay compensation twice within the month. But she mentioned that their number of employees is limited to three hundred, and they always try to maintain this range.

They do not plan, or use any strategy to face the season. For example, they do not increase their workforce by recruiting temporary employees, and do not outsource employees for the resort. In her statement, she mentioned that during the season, sometimes, employees must sacrifice their leave because of the higher workload. This comment suggests to the researchers that the resort management does not follow the international standard and norms relating to five-star resort employees. The Eden Resort and Spa has 158 rooms. In season the resort is fully occupied, so in this situation it is difficult to arrange guest services without delays, due to lack of labour.

Table 6.1 International Standard Ratio

l		Ratio	No of rooms	No of employees
Interna Standa		1:4	100	400
Eden Spa	Resort	& 1:2	158	250

No of employees for one room =
$$\frac{\text{Total no of employees}}{\text{Total no of rooms available}} = \frac{250}{158} = 1.58$$
 or nearly two employees per room

The International Standard employee ratio for five-star hotels is 1:4. According to the above standard ratio, as a five-star hotel, a resort requires four employees for one room as the workforce. But in the Eden Resort and Spa, according to the collected data, the researchers identified that the organisation does not employ a reasonable number of employees, and because of this situation, the employees who work in the organisation suffer and are dissatisfied (Table 6.1).

Conclusions

People are the main resource in any service-providing organisation; without manpower the organisation cannot give good service to its guests or customers. So, in a service-providing resort, human resources play a vital role. Nowadays, organisations use cost-reduction strategies to enhance profitability, and to minimize costs and improve productivity. Organisational downsizing is a prevalent strategy to enhance cost-efficiency and operational effectiveness. However, implementing organisational downsizing has negative impacts on employee motivation, satisfaction, and retention.

The objective of this study was to investigate the impacts of organisational downsizing on manpower retention in the Eden Resort and Spa. The Eden Resort and Spa, Beruwala, Sri Lanka is one of the five-star hotels in Sri Lanka, and we adopted the qualitative case study approach to elucidate the multiple realities resulting from the implementation of organisational downsizing strategy. This investigation incorporated participative observation, electronic documentations like Trip Advisor comments, and personal interviews with top level, middle-level and operational-level employees, to bring forth the interpretation by the employees of Eden Resort and Spa. The collected primary and secondary data were analysed, using descriptive statistics based on a coding system, along with data triangulation.

In the opinion of the interviewees, the human resource department does not plan well. They said that most of them are not satisfied with the training and development programmes. According to their comments, the resort has not planned or organized, at least, an orientation programme for new workers, and most of the employees were not satisfied with their roster schedules. They said that the management of the resort is not concerned about employees when scheduling the roster. So, the employees are suffering from cancellation of their rostered leave, and the doubling of their shifts. Most employees are also not satisfied with their benefits and compensation. They said that they do not have overtime payments. And some employees said that any overtime payments they might get are not at a satisfactory level. The researchers investigated these problems and are satisfied that they influence the operations and attitudes of employees, and thus, the operations of the Eden Resort and Spa.

The results reveal that the strategy of organisational downsizing is one of the better solutions to reduce the cost in an organisation, but has significant negative effects on employee satisfaction, employee motivation, and employee retention in an organisation. The findings of this study provide a useful contribution to The Eden Resort and Spa, Beruwala, if that organisation wants to retain and encourage its employees to work in the Resort, and to hoteliers who want to manage human resources effectively in their organisations.

References

Boella, Michael, J., and Steven Goss-Turner. 2013. *Human Resource Management in Hospitality Industry*. Routledge Publications.

Cascio, W. F., C. E. Young, and J. Morris. 1997. "Financial Consequences of Employment Change Decision Major U.S. Corporations." *Academy of Management Journal* 40(5): 1175-1189.

- Griffeth, R.W., and P. W. Hom. 2001. Retaining Valued Employees. Thousand Oaks, CA: Sage.
- Ryan, L., and K. A. Macky. 1998. "Downsizing organisations: Uses, Outcomes and Strategies." Asian Pacific Journal of Human Resources 36(2): 29-45.
- Sageer, A., S. Rafat, and P. Agarwal. 2012. "Identification of variables affecting employee satisfaction and their impact on the organisation." IOSR Journal of Business and Management 5(1): 32-39.
- Sekaran, U. 1999. Research Methods for Business: A Skill Building Approach. New York: John Wiley and Sons, Inc.
- Trip Advisor comments. 2016. "The Eden Resort and Spa, Beruwala." https://www.tripadvisor.com.

CHAPTER SEVEN

THE IMPACT OF WORK-LIFE BALANCE ON EMPLOYEE WORK PERFORMANCE IN THE HOTEL INDUSTRY OF SRI LANKA

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Abstract

In the ever-changing business world, achieving a higher level of work performance through managing employee work-life balances is still challenging, and remains an issue in the literature, as well as practically in organisations. This situation is critical in the hospitality industry, and the issue has become an inherent characteristic of the industry. Work-life balance heavily impacts on employee performance, and the work-life balance issue is an inherent characteristic of the hotel industry, because employees work mostly at lower and part-time levels. This study focuses on the work-life balance of employees in Sri Lanka, and its impact on employee performance. The study is based on three main dimensions of the work life balance; job content, personal factors, and family factors. The study was carried out at a leading hotel chain in Sri Lanka with 187 executive level employees. Data were collected through a standard and validated questionnaire survey, and face-to-face discussions with family members of the selected employees. Data collected through questionnaire surveys were analysed by using multiple linear regression, and content analysis was employed to summarize the data collected through discussion. The results reveal that there is a high positive relationship between all three dimensions and employee performance, confirming the results of previous studies. The factors relating to

job content, personal, and family situations positively contribute to employee performance. The hotel industry can further improve its employee performance, through creating a conducive work environment that allows the employee to have a positive work-life balance. This study contributes to the understanding within the hotel industry of the need to maintain the work-life balance of employees to improve their work performance.

Keywords: employee performance, family factors, job content, personal factors, work-life balance.

Introduction

With the rapid development in disposable income, free time, and curiosity for new knowledge, people are motivated to travel, and experience new things around the world, and generally that requires them to stay away from their homes. This has helped to develop the hotel industry, and currently tourism has become one of the most important factors in the economies of most countries. As a highly labour-intensive industry, success in the hotel trade is heavily based on quality of service, and that depends upon the people who are involved with the business operations. To successfully compete with rival players, hotels should not only have enough employees, but also employ people with the essential skills, in a motivated workforce, for higher performance that will create competitive advantage (Bednarska 2012).

Development in the business world relies on strong competition in all industries, regardless of their type and nature. Hence, it often influences employees to work like machines during their work shifts, and the hotel industry is no exception, however, it also can be worse than in many other industries. Although hoteliers are expected to be worked like machines in the interests of higher performance, it is obviously impossible to ensure this where employees and clients are human beings, with a set of emotions and psychological reactions. Therefore, the requirements of the hospitality industry often clash with employee/client expectations, and the actual behaviour and performance of employees raises many issues, including the balance of the family, and work life of the employees.

Work-life balance can be defined as the ability to meet both work and family commitments. Mohanty and Mohanty (2014) note that work-life balance is essential for good performance, but the nature and characteristics of the trade often negatively affect a hotel employee's work-life balance, through unfriendly shifts with unsocial long working hours, heavy work-loads, low payments, and the low status of existing jobs. Such factors also

impact on their respective organisations. Mohanty and Mohanty (2014) argue that many hoteliers fail to manage their work-life balance, due to these industry characteristics, so that unexpected consequences can arise for both worker and organisation. Currently, work-life balance has become the 'buzzword' in the trade, and it can result in poor employee performance, then lower customer satisfaction, and ultimately, an unsuccessful organisation.

Research Problem

The prime purpose of any hotel or any other hospitality organisation is to achieve the highest employee performance standards, to ensure customer satisfaction, better service quality, and organisational performance. Since human resources are a critical asset towards achieving such goals, it is important to have a talented, satisfied, and loyal, pool of employees in organisations (Jayawardhana, Silva, and Athauda 2013).

Achieving work-life balance through improving the working atmosphere helps in gaining a loyal and satisfied workforce. Work-life balance has a positive impact on an employee's performance (Mohanty and Mohanty 2014), therefore hotels will have to pay attention to making sure a balanced work-life relationship is available to their employees. As the job characteristics of the hospitality industry become more pressure-driven, the tendency for work-life issues to arise is rather high. Hence, the hoteliers should pay more attention towards maintaining a balance between the employee's work and family life.

Currently, hoteliers have taken more action to maintain the work-life balance of employees, through job sharing, leave (parental/study), childcare benefits and facilities, transformational leadership, buying time, controlling time, flexible working hours, working from home, and so on. But most of these measures are not very effective, or not well implemented. They are just organisational policies and principles and are not really active. When employees are stuck with performing their specified tasks, the lack of work-life balance creates employee job dissatisfaction and disloyalty. Previous researchers argue that, although educational institutions train employees to be nice, with smiley faces, in front of guests, behind the screen their mood is stressful and de-motivated. Thus, we have realized that employees just do their duty, but not anything beyond that, for the development of the organisation.

Our preliminary study at a leading hotel chain in Sri Lanka proved that the annual employee attrition rate between 2012 and 2015 was around ten

percent. Annually, the hotel chain conducts performance appraisals covering all their direct employees, and approximately 45% of these are working below the required average performance level. Similarly, the symptoms, and other indicators, such as high labour tumover, frequent absenteeism, low performance, and so on, are also interlinked with the work-life balance issues in the hotel industry.

By considering all these factors, a preliminary survey was conducted to investigate the current situation of the work-life balance (WLB) issue in the hotel industry in Sri Lanka. The survey was conducted using the framework developed by Mayer and Allen in 1991. The questionnaire consisted of six questions relating to WLB, and was distributed among 30 executives at six different hotels. According to the survey results, the mean value was 2.24, and this was lower than the average value of 2.5. Thus, the data indicate the poor work-life balance of the employees in the hospitality industry is comparable to all other business organisations. Based on this milieu, the main objective of the present study is to identify the work-life balance, and its impact on employee performance, in the hotel industry in Sri Lanka. In addition to that, the study investigates the relationship between employee performance and job content, personnel factors, and family factors.

Theoretical Background

Introduction

Rapid economic development, along with higher disposable incomes and leisure time, has meant that more people tend to travel around the world at the present time, and therefore the tourism industry has become one of the major foreign exchange generators in both developed and developing countries. At the same time, tourism has become the major growth sector in many countries, especially in small islands having appropriate natural and cultural resources (Deery and Jago 2009). The tourism industry is a growing market all over the world, and it caters for people who are away from home, with the purpose of sightseeing, holidaying, leisure, recreation, health, sport, and so on.

The world tourism market has grown at an average of 3.7% during the past decade, and is supposed to grow by an average of 4.9% within the next five to six years. At the same time, the statistics indicate that travel and tourism activity-related jobs are stressful and hard to hang on to, but the sector worldwide still provided over 239 million jobs during 2013. As part of this, the hotel industry has developed as a global industry, within which both customers and service providers are spread all over the world (Lahap

et al. 2015). Thus, the hotel sector has emerged as a subsector of the tourism industry, which has strengthened the business.

The ever-aggressive nature of the hotel industry in attaining service excellence drives hotel organisations to constantly look for new approaches in building positive experience and satisfaction for their customers. At the same time, it is vital for a hotel organisation to stay adhered to the current and future requirements for advancing the business, and to supply the needs and wants of hotel guests to meet their expectations. Here, Bednarska (2013) highlights that the hotel industry is one of most important and significant sectors, making major contributions to the economic development of many different countries. The hotel industry is a people-centred and highly human-contact industry, where the employees of each organisation are an integral part of its customer experience and satisfaction.

Deery and Jago (2009) argue that the hotel industry is presently experiencing a growing labour shortage. The hotel industry has a higher than average skills shortage and labour turnover, and it is hard to fill vacancies. Moreover, the hotel industry is heavily characterized by the need to provide services round-the-clock. At the same time, the hotel industry is linked with seasonality problems, and it is facing higher attrition rates, as well as a shortage of trained manpower. This situation influences employees to take up the extra workload by working for long and unsocial hours, and most of the time their duties are stretched to 16 to 24 hours per day. This factor has contributed to a negative impact on balancing career life and personal life, since employees do not get enough time for their personal and social commitments. Thus, they are trapped in scheduling conflicts, and feel the pressures of multiple, and multitask, roles (Lahap et al. 2015). Almost all employees working in the hotel industry experience poor working conditions, thereby making their day-to-day job more stressful and challenging. On the other hand, when they lose work-life balance it also causes a loss of performance.

Work-Life Balance

Hughes and Bozionelos (2007) define work-life balance as an employee's ability to manage the effect of his, or her, career on their personal life, and the effect of his or her personal life on their career, while giving the same priority to both factors. According to Kim (2014), work-life balance is balancing the time which they have allocated for family life and career life in the same marmer. This work-life balance concept has emerged and developed as a significant issue during the last few decades. With the

emergence of factors such as economic uncertainty, organisational restructuring, and increasing business competition, an intensification of the matter of work-life balance has occurred (Hughes and Bozionelos 2007).

Performance

Performance is one of the deciding factors of organisational success, and the literature has discussed its significance in many ways (Jayawardhana et al. 2013). Ajang (2008), suggests that job performance is the act of performing, of doing something, of using knowledge, as distinguished from merely processing it. Generally, a performance comprises an event in which one group of people behaves in a certain way for another group of people.

Methodology

A research paradigm is a set of propositions that explains how the world is perceived, and therefore this study employed a mixed method with both positivism and post-positivism approaches, because of the complexity of the subject matter. It is frequently advocated that the positivist researcher will be likely to use a highly-structured methodology to facilitate replication (Gill and Johnson, as cited in Sounders et al. 2009).

This study was carried out at a leading hotel chain in Sri Lanka called John Keels Hotels (Pvt) Ltd. The study population consisted of 419 executive level employees, excluding training executives. Blacker (as cited in Loner 1993), suggests that a sample is an exact set of elements taken from a population that is expected to represent the entire population. Random probability sampling was employed to select 200 respondents for the questionnaire survey. In addition, 20 families were selected from the 200 executives, so that we could have discussions with spouses to identify the real issues in work-life balance.

A questionnaire survey was employed to collect the primary data to meet the objectives of the study. Work-life balance was measured by a questionnaire consisting of five Likert scale-type questions for each of the three dimensions of work-life balance, and all together there are 18 questions. Finally, the statistical package for social sciences (SPSS) software was utilized to analyse the data through descriptive statistics, correlation, and regression analysis.

Conceptual Framework and Hypothesis Development

Employee job performance can be explained as whether an employee executes their job duties and responsibilities in the expected way for the employer. Most organisations measure their employees' job performance annually, or quarterly, to identify any areas that need to be improved. Simply, employee performance is the critical factor in the success of an organisation (Mohanty and Mohanty 2014, Kim 2015). It is also a concept that emphasizes proper prioritizing between work (career life and ambition) and lifestyle (pleasure, leisure, health, family, and spiritual development). It heavily impacts on employee performance and is mainly decided by the dimensions of job content, psychological/personal factors and family factors (Hughes and Bozionelos 2007). The conceptual fiamework of the study appears in Figure 7.1.

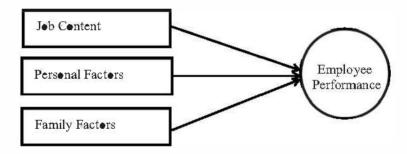


Figure 7.1 Conceptual framework Source: Authors (2016).

Hypotheses

H1a: There is a positive relationship between job content and employee performance;

H1B: There is a positive relationship between personal factors and employee performance;

H1c: There is a positive relationship between family factors and employee performance.

Data Analysis

The questionnaires were distributed among 219 selected employees, however, only 188 responses were returned. The response rate was therefore 85.8%, and the current analysis is based on 188 questionnaires.

Nature of the Sample

According to the data, 43% of employees were aged between 26-35, 25% between 36-45, and 22% 25 years or below. In terms of tenure, 58% represented the employees who had 1-3 years of service, 23% less than 1 year, and 15% 4-6 years. The sample consisted of 53% male employees and 47% female employees. At the same time 34% of employees were single, 61% were married, and another 5% were divorced.

Multi-collinearity

Variance Inflation Factor (VIF) and Tolerance were used to measure multi-collinearity (Table 7.1). The variables which have a VIF value greater than 10 need to be eliminated. In statistical terms, multi-collinearity is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy. Analysing the VIF values and Tolerance of independent variables, High interrelationship (VIF value >10) among independent variables cannot be seen. All the VIF values are less than 10 (Table 7.1), and therefore this study does not violate the multi-collinearity assumption.

Table 7. 1 VIF values of independent variables

Variable	VIF
JC	3.12
PF	3.831
EF	3.444

	JC	PF	FF
P	0.800		
P	0.000		
F	0.775	0.818	
P	0.000	0.000	
E	0.75€	0.801	0.823
P	0.000	0.000	0.000

Table 7. 2 Coefficient and P value

Table 7.2 shows that there is a high positive relationship between the dependent variable (employee performance) and all three independent variables (job content, personal factors, and the family factors). The correlation coefficient matrix depicts the Pearson correlation coefficient between all pairs of variables in the study. The Pearson correlation coefficient of employee performance and job content is 0.750, which means there is a high positive correlation between employee performance and job content. The Pearson correlation coefficient of employee performance and personal factor is 0.801, and this also indicates that there is a high positive correlation between the employee performance and personal factors. Moreover, there is a high positive relationship between employee performance and family factors. The relevant value is 0.823.

Multiple Regression Analysis

Table 7. 3 Model summary

R2	Adjusted R2	Std. Error of the sample
73.3%	73.0%	0.576592

According to Table 3, the R2 value of the model is 73.3%, thus it shows that 73.3% of the total variation can be explained from the selected factors of job content (JC), personal factors (PF), and family factors (FF). R² is used to test the goodness of fit of the model. R² (coefficient of determination) indicates how well data points fit a line or curve. R² also explains how much of the variance in the dependent variable is accounted for by the independent variable in the sample. It is the proportion of variance in the outcome variable that is shared by the predictor (Saunders, Lewis and Thombill 2009). The results indicate that only 26.7% of the variation cannot be explained by the dependent variable.

The regression equation of these variables is as follows:

$$Y = β0 + β1X1 + β2X2 + β3X3$$

 $EP = 0.223 + 0.167 JC + 0.328 PF + 0.457 FE$

The regression model can be interpreted as: Intercept - The expected amount of EP is 0.223, when JC, PF and FF are zero; $\beta1$ value represented when JC is increased by one unit, EP will increase by 0.167 units when all other variables remain constant; $\beta2$ value if PF is increased by one unit, EP will increase by 0.328 units when all other variables remain constant; B3 value if PF is increased by one unit, FF will increase by 0.457 units when all other variables remain constant.

Hypothesis Testing

Table 7. 4 Coefficient and P Value

Predictor	Coefficient	P value
Constant	0.1574	0.159
JC	0.07519	0.027
PF	0.07887	0.000
FE	0.07131	0.000

Source: Survey data (2016).

The study developed a few hypotheses and tested whether these should be rejected or not:

H1a: There is a positive relationship between job content and employee performance;

H0a: There is no relationship between job content and employee performance.

According to Table 7.4, the calculated P value is **0.0**5. There is enough evidence to reject H**0**a therefore, because there is a clear relationship between job content and employee performance. Thus, we can conclude that the first hypothesis is supported.

H1b: There is a positive relationship between personal factors and employee performance;

H0b: There is no relationship between personal factors and employee performance.

Relating to the second hypothesis, the calculated p value is **0.05**. Hence there is enough evidence to reject H**0**b and accept H1b. Employee personal factors thus impact on the performance of the executive level employees of the hotel chain

H1c: There is a relationship between employee's family factors and employee performance;

H0c: There is no relationship between family factors and employee performance

Table 7.4 shows that the calculated P value of the family factor is less than the critical P value of **0.05**, so there is enough evidence to reject H**0**c. Therefore, we can conclude that the family factor has an impact on the performance of the hotel industry employees. Therefore, we can conclude that hypothesis H1c is supported by this study.

Although Deery and Jago (2009) argue that hotel industry employees often struggle with severe work life imbalance situations, according to this study, the work-life balance and performance of employees in the hotel industry are neither good nor bad. Moreover, according to the statistical analysis, there is a positive relationship between employee performance (independent variable) and the independent variables of the study i.e. job content (JC), organisational factors, and the family factors (FF). Here, the coefficient value between job content and employee performance is 0.0751, between personal factors and employee performance is 0.0788, and between family factors and employee performance is 0.713. This shows that there is a high positive relationship between all three independent variables and employee performance. Put simply, when each dimension is going up in a positive manner, employee performance will also go up. At the same time, when those factors run towards the negative side, performance is also going down.

When considering the methods that John Keels has used to prevent work life imbalances, several actions were identified during the discussion with management. These included job sharing, career guidance, and personality development programs, welfare facilities, annual get-togethers, annual trips, day care facilities for employee's kids, counselling, and stress release activities. When it comes to the consequences which can arise due to poor work life balance, we can now see that, automatically, employee performance will go down. As the hotel industry is heavily dependent on employee interaction, when their performance goes down, it impacts on customer satisfaction and leads to poor organisational performance which directly affects profit and image.

Conclusions

The hotel industry is heavily dependent on employee performance, and there is a direct link between work-life balance and employee performance. Hoteliers have identified the importance of this factor for the success of the organisation, and always consider the working conditions to help their employees maintain a balance between their work life and family life. But as an inherent characteristic of the hospitality industry, the work-life imbalances of employees negatively impacts on organisational performance.

This situation is common for the employees of the studied hotel chain as well, and when the researchers noticed that some work-life balance issues exist within that organisation, after conducting a preliminary survey, the research reported on in this chapter was conducted to understand what these were, what is their level, and how this impacts on their performance.

The study conceptualized employee performance as the dependent variable, and the independent variable as the dimensions of the work-life balance. The results reveal that both employee performance and work-life balance are neither in good or bad shape, however, there is a slight bias to the negative side. Moreover, according to the statistical values, there is a high positive relationship between all three dimensions of work-life balance and employee performance.

Working shifts and irregular working hours have been identified as two of the major causes affecting the imbalance between working life and family life. The hoteliers we talked to have also identified the negative impact of this issue, and have identified various actions and strategies to mitigate the issue; for example, job sharing, working at home, job sharing, and so on. However, all these are still not implemented successfully. Therefore, this research suggests re-establishing, or boosting, such programs within the organisation.

Most of the employees we talked to believe that it is very difficult to maintain a balance between family life and work life, due to the nature and characteristics of the hospitality industry, however, they also believe the management can assist them to maintain a balance, through facilitating their work life. However, the results revealed that more than sixty percent of the employees were not happy at all about the training that they have received, and the recognition that they have received within, and outside, the organisation. Thus, it is important to implement a proper performance appraisal system within hotels, to identify their training needs, and then train employees in a suitable marmer. However, if employees are not happy about their recognition, they themselves should act to establish

some programs such as 'employee branding', 'employee praising meeting', or counselling and seminars for family members, and so on.

Hoteliers can assist their employees to maintain their work-life and family balance, by taking care of the unique needs of employees individually. This may mean an extra burden for the organisation; however, it will bring more advantages in the long run, through improvements in customer satisfaction, goodwill and reputation, and the image of the organisation, which will lead ultimately to better financial performance.

References

- Ajang, P. E. 2008. Assessing the role of work motivation on employee performance. Unpublished Master thesis. Sweden: Umea School of Business and Economics.
- Bednarska, M. A. 2013. "Quality of Work Life in Tourism Implications for Competitive Advantage of the Tourism Industry." *Journal of Travel and Tourism Research* 3(1/2): 1-17.
- Deery, M., and Jago, L. 2009. "A framework for work-life balance practices: addressing the needs of the tourism Industry." *Tourism and Hospitality Research* 9(2): 97-109.
- Hughes, J., and N. Bozionelos. 2007. "Work life balance as source of job dissatisfaction and withdrawal attitudes: An exploratory study on the views of male workers." *Personnel Review* 36(1): 145-154.
- Jayawardhana, A. A. K. K., S. de Silva, and A. M. T. P. Athauda. 2013. "Business Strategy, Market Orientation and Sales Growth in the Hotel Industry of Ancient Cities in Sri Lanka." *Tropical Agricultural Research* 24(3): 228−237.
- Kim, H. K. 2014. "Work- Life Balance and Employees' Performance: The Mediating Role of Affective Commitment." Global Business and Management Research: An International Journal 6(1): 37-51.
- Lahap, J., N. S. Ramli, S. M. Radzi, N. M. Said, and R. A. Zain. 2015. "A Study of Brand Image towards Customer's Satisfaction in the Malaysian Hotel Industry." *Procedia Social and Behavioral Sciences* 1-8.
- Mohanty, K., and S. Mohanty. 2014. "An empirical study on the employee perception on work-life balance in hotel industry with special reference to Odisha." Journal of Tourism and Hospitality Management 2(2): 65-81.

CHAPTER EIGHT

A STUDY OF THE IMPACT OF FAIR TREATMENT AND WORKING ENVIRONMENTS ON ORGANISATIONAL COMMITMENT

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Abstract

Gaining and retaining a committed work force is challenging for any organisation. After the results of a pilot study were analysed, the current study was aimed at investigating the impact of fair treatment and working environment on the organisational commitment of employees at a firm operating in the apparel industry in Sri Lanka. Since machine operators play a vital role in a garment manufacturing factory, they were treated as the target population for this study. Out of 867 machine operators, a sample of 269 was selected, using the cluster sampling method. The data were collected through a questionnaire survey. A multiple regression analysis was performed to investigate the impacts of the variables we were interested in. Pertaining to the previous research findings, the current study also brought evidence of the significant positive impact of fair treatment on organisational commitment. This will help organisations to rethink their perceptions of justice in relation to their employees, with a view to increasing their commitment. In contrast to previous research findings, this study highlighted the negative impact of working environment on organisational commitment. This study is a novel contribution to the existing theoretical gap, as well as to the industry, which needs to gain, and maintain, a committed workforce to achieve its goals and objectives.

Keywords: fair treatment, organisational commitment, working environment

Introduction

A rapidly changing environment threatens the survival of many business organisations. Hence, the business environment makes it necessary for an organisation to be alert for these quick changes, in order to gain competitive advantage over its rivals. More importantly, organisations need high performers to meet their goals, deliver high quality products and services, and finally, ensure a sustainable competitive advantage. In the apparel industry, which is the largest export industry in Sri Lanka, there must be a highly committed and performing workforce to enable its survival in the market place. The Central Bank Annual Report of Sri Lanka (2010) notes that the apparel industry remains competitive through increased productivity, improved quality, diversification, and a gradual recovery in external demand.

This industry provides more than 330,000 direct jobs, or five percent of the country's total employment, in more than 1,060 garment factories (Dheerasinghe 2009). Even though the apparel industry has a high significance in the economy, it is facing issues related to labour laws, and other factors, globally as well as domestically. Among these issues, human or labour-related issues are more critical when compared to the others, because the entire industry is more highly dependent on the efficiency and effectiveness of manpower, than on its machines. Since non-managerial employees play a vital role in the apparel industry, their commitment is critical for the success of the organisation. According to Cohen (1996), among all forms of work commitment, organisational commitment enjoys the most widespread popularity. The primary concern of HRM is to generate and retain an appropriate and contented workforce, which makes the maximum individual contribution to the success of the organisation (Opatha 2009). To achieve this, • patha (2009) introduced several objectives of HRM, including getting and improving employee commitment. Hence, commitment to work is a crucial determinant of organisational success.

According to Tammita et al. (2010) lack of faithfulness in coming to work, or absenteeism, shows a lack of organisational commitment. The apparel industry is providing many career opportunities all over the country, and thousands of people are depending on that. To work properly, and to enjoy a long tenure in this industry, commitment to a specific workplace is critical. The researchers have been able to identify that a problem exists in this unaddressed area. Therefore, the research problem of this study was, why is organisational commitment low among machine operators? In a

wider sense, the aim of this study was to understand the factors impacting on employee commitment to an organisation.

Literature Review

In past decades, the concept of organisational commitment (\bullet C) has grown in popularity in the literature on industrial/organisational psychology and organisational behaviour (Mathieu and Zajac 1990). The concept has received a great deal of empirical study, both as an antecedent for, and a consequence of, other work-related variables of interest. Many researchers have contributed to the field of organisational commitment, and there are many definitions for the concept. Commitment is defined as, "a psychological link between the employee and his or her organisation, that makes it less likely that the employee will voluntarily leave the organisation" (Allen and Mayer 1996, 252). According to Mathieu and Zajac (1990), an employee's level of commitment to an organisation may make them more eligible to receive both extrinsic rewards (wages and benefits) and psychological rewards (intrinsic job satisfaction and relationships with co-workers), associated with membership.

According to Meyer and Allen (1984), commitment is a three-component model that includes affective commitment, continuous commitment. and normative commitment. Affective commitment denotes an emotional attachment to, identification with, and involvement in, an organisation. According to Mayer and Allen (1984, 375) affective commitment was defined as "positive feelings of identification with, attachment to, and involvement in, the work organisation." Employees exhibit a strong belief in, and acceptance of, the new organisation's goals and values. Continuance commitment denotes the perceived costs associated with leaving the organisation. According to Mayer and Allen (1984, 375), continuance commitment can be defined as "the extent to which employees feel committed to their organisations, by virtue of the costs that they feel are associated with leaving." Continuance commitment refers to employees' assessment of whether the costs of leaving the organisation are greater than the costs of staying. Employees who perceive that the costs of leaving the organisation are greater than the costs of staying, remain because they need to. Employees in this situation remain with the organisation not out of loyalty or innate beliefs. However, normative commitment of the employee reflects a strong feeling of obligation to the organisation in which they worked. Employees with high levels of normative commitment stay with the organisation because they feel they ought to (Allen and Meyer 1991).

According to Noah and Steve (2012), about 80% of productivity problems reside in the work environment of organisations. An improved work environment enhances an employee's productivity. Work environment is the sum of the interrelationship that exists between employees, and between the employees and the environment in which they work. Employees will be more attached to the organisation if they experience a supportive work environment (Gilbert, Winne, and Sels n.d). Origo and Pagani (2008) also assert that work environmental factors have a fundamental influence on an employee's level of job satisfaction and organisational commitment. According to Cho, Laschinger, and Wong (2006), having access to opportunities for learning, growth, and advancement in the organisation, plays a key role in employees' work satisfaction and productivity. Furthermore, they have pointed out that employees who enjoy these opportunities are more motivated, committed, and innovative in their jobs. In contrast, employees who are experiencing low opportunities have described as feeling 'stuck' in their jobs, resulting in lower levels of organisational commitment. In the current study, the researcher has given a significant consideration to work environment, and the impact of it on the commitment of employees.

It is obvious that work environment is a key component impacting on employee motivation, performance, job satisfaction, and organisational commitment. Origo and Pagani (2008) add to this the effect that these elements have as a fundamental influence on an employee's level of job satisfaction and organisational commitment. Similarly, Origo and Pagani (2008) also assert that work environmental factors have a fundamental influence on an employee's level of job satisfaction and organisational commitment.

Fair treatment in the workplace has received increased attention by organisational researchers (Donovan, Drasgow, and Munson 1998). Perceptions of fairness also expand beyond performance appraisals, into overall treatment on the job, looking at personnel decisions in areas such as training, discipline, job assignments, awards, pay, and promotions. Employees perceive outcome fairness when they believe they receive the rewards they deserve for the work performed, as compared to others. Moorman, Niehoff and Organ (1993) have reported a robust relationship between fairness perceptions and various forms of employee commitment. As one of the antecedents of organisational commitment, fair treatment of employees is one of the major themes, along with support from the organisation and the supervisor (Jeon 2009). Therefore, it can be stated that fair treatment has a significant impact on employees' commitment.

Available studies indicate that perceptions of organisational justice are involved with fairness in treatment, and most of the studies show a similar-

ity between concepts of fair treatment and organisational justice. In a colloquial sense, justice and fairness encompass virtues such as moral rightness, equity, honesty, and impartiality. Fairness, or justice, is one of the most fundamental concerns in society (Fujishiro 2005). In this study, justice and fairness will be used interchangeably, when they are used alone.

Methodology

The material in the existing literature on the interested areas has been used to develop the following hypotheses:

H_{1A}: Fair treatment has an impact on the organisational commitment of employees;

H_{1B}: Working environment has an impact on the organisational commitment of employees.

The research is based on the deductive approach, because in this, the researcher comes to a reasonable conclusion after assembling information on a certain phenomenon. The purpose of the present study was to identify the impact of fair treatment and working environment on organisational commitment of employees. Therefore, the study is an explanatory one, which explains the cause and effect relationship between the variables of interest to the researcher.

The respondents of the current study are the sewing machine operators of an apparel firm. The researchers targeted these respondents because they are considered as the most valuable assets in any industry. In the apparel industry, sewing machine operators play a vital role in the entire production process. The population of the study was the total number of sewing machine operators at the apparel firm (N=867). According to the approach advocated by Krejcie and Morgan (1970), the required sample size was decided as 269. By considering the possibility of missing values and errors, the researcher planned to distribute 280 questionnaires to gather the responses of the employees. The researcher selected the sample using the stratified random sampling method, by considering the 36 teams/production lines on the production floor.

• organisational commitment was measured by the measures developed by Allen and Mayer (1990). The scale was comprised of 24 items representing eight items for each dimension of commitment as affective, continuous, and normative, respectively. Fair treatment was measured by the measures used by Donovan et al. (1998) in their research on *The Perceptions of Fair*

Interpersonal Treatment Scale. Work environment was measured by the measures which were used by Opare and Saani (2014) in their research on The Influence of Work Environment and Supervision Style on Health Workers Commitment to the University of Cape Coast. The scale included 12 items representing four items for each of the three dimensions of work environment. Therefore, the validity and reliability of the scales had been previously tested in earlier studies.

This study used multiple regression to investigate the impact of two independent variables on the dependent variable. Based on those findings, the researchers determined whether the developed hypotheses should be accepted or rejected. SPSS 21 statistical software and Minitab 16 were used to analyse the data from the study.

Data Analysis

A sample of 280 was selected for the analysis. The sample consisted of 236 female machine operators and 44 male machine operators. The majority of the respondents were aged between 19 years and 26 years, and only 5% were older than 40 years. The analysis results showed that the Cronbach's alpha value of all the three variables was at an acceptable level (working environment: 0.796, fair treatment: 0.720, organisational commitment: 0.702). Since the current study consisted of two independent variables, the researcher had to perform a multiple regression to identify the impact of each independent variable on organisational commitment. According to the regression analysis, the researchers were able to reach the conclusions described in the next section.

Table 8.1 Model Summary

Model	R	R Sq	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.194a	.038	.030	.28205	1.272

a. Predictors: (Constant), FT, WE

b. Dependent Variable: OC

In Table 8.1, R-Sq explains how much of the dependent variable is explained through the fitted regression line. According to the regression analysis statistics, the R-Sq value is 38%, and based on that, it can be stated that 38% of the variation of organisational commitment can be explained through the fitted regression model.

Table 8.2 ANOV	VA
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I	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.813	2	.407	5.111	.007 ^b
1	Residual	20.763	261	.080		
	Total	21.576	263			
a. De	pendent Variabl	le: ●C		-		
b. Pr	edictors: (Consta	int), FT, WE				

The AN VA test can be used to confirm the significance of the model. The results showed that the fitted model is significant.

Table 8.3 Coefficients

Model	Unstandardized Coefficient		Standard- ized Coeffi- cients	Т	Sig.	Collinear tics	ity Statis-
		Std. Er- ror	Beta			Tolerance	VIF
1 (C•n- stant) WE_ FT_	2.769 •52 .•83	.116 .023 .034	139 .15 0	3.939 -2.284 2.456	.015	.99 ● .99 ●	1. 0 1 0 1. 0 1 0

a. Dependent Variable: OC

Fitted Regression Model

- ●rganisational Commitment = 2.769 0.139 Working Environment+
- ●.15● Fair Treatment

Results and Discussion

When considering the significance of the variables, the p value of β_1 (WE) is 0.023 and β_2 (FT) is 0.015, which shows that all the values are lower than the alpha value of 0.05. Based on this, it can be stated that there is enough evidence to reject H_0 , and B_0 is significantly different from 0. Therefore, both the variables are significant, and it can be concluded that there is an impact of the predictors on organisational commitment.

 H_{1A} : Fair treatment has an impact on the organisational commitment of employees.

According to the results of the regression analysis, H₁was proved, since P< •.•5, and the impact was a significant one. This reflects that the effect of the working environment is constant. If fair treatment is increased by 1 unit, the expected value of organisational commitment will be increased by .15• units. The results also indicated that the nature of the impact was positive.

 H_{1B} : Working environment has an impact on the organisational commitment of employees.

This hypothesis was also supported by the results obtained by the regression analysis. However, the results indicated an inverse relationship between working environment and organisational commitment. According to the results, when the effect of fair treatment is constant, if the conditions of working environment are increased by 1 unit, the expected value of organisational commitment will be reduced by .139 units. Even though the impact was negative, it was significant, since p (0.023) < 0.05, and H_{1B} was accepted.

Consistent with the previous literature, the findings of this research evidenced a positive impact of FT on \bullet C, but the impact was not strong in this context. According to the results of regression analysis, there is a significant positive relationship between the two variables. Thus, machine operators who feel they are fairly treated by their organisation will be more committed towards their organisation. In addition to the above relationship, the current study aimed to investigate the impact of WE on \bullet C. Previous research has brought evidence to this relationship in many ways: \bullet rigo and Pagani (2008) also assert that work environmental factors have a fundamental influence on an employee's level of organisational commitment. However, according to our findings, the impact of WE on \bullet C was significant, but the relationship was negative and weak. Nevertheless, \bullet pare and Saani (2014) suggest that working environment is not enough to determine the commitment level of employees in this context, and there will be other more factors which impact on \bullet C more than WE.

Conclusions

The main purpose of this study was to investigate the impact of working environments and fair treatment on the organisational commitment of machine operators. The researchers conclude that, if the firm can treat their

employees fairly, they will be able to show more commitment towards the company, and consequently absenteeism and staff tumover will also be reduced. Consistent with previous findings, this study also concluded that fair treatment has a significant impact on organisational commitment of employees.

Another major concern of this study was to investigate the impact of WE on ulletC. According to the results obtained, there is a significant negative impact. Moreover, by reviewing the literature, the researcher has brought evidence about the significant positive impact on these two variables in earlier chapters. However, ulletpare and Saani (2014) suggest that working environment is not enough to determine the commitment level of employees in this context, and that there will be some more factors, other than WE, which impact on ulletC. We assume that response biases, cultural differences, and age variations of the respondents may have affected this inverse impact. This research shows that WE can positively or negatively impact on an employee's organisational commitment. Finally, the study concluded that WE and FT can significantly impact on employees' organisational commitment in this context.

References

- Allen, N. J., and J. P. Meyer. 1990. "The measurement and antecedents of affective, continuance, and normative commitment to the organisation." *Journal of Occupational Psychology* 63: 1-18.
- Allen N.J., and J. P. Meyer. 1991. "A three-component conceptualization of organisational commitment." *Human Resource Management Review* 1(1): 61-89.
- Allen, N. J., and J. P. Meyer. 1996. "Affective, continuance, and normative commitment to the organisation: An examination of construct validity." *Journal of Vocational Behaviour* 61: 20-62.
- Central Bank. 2010. Annual Report of Sri Lanka. Colombo: GOSL.
- Cho, J., H. K. S. Laschinger, and C. Wong, 2006. "Workplace empowerment, Work engagement and Organisational Commitment of New graduate nurses." *Canadian Journal of Nursing Leadership* 19:43–60.
- Cohen, A. 1996. "On the discriminant validity of the Mayer and Allen measure of organisational commitment: how does it fit with the work commitment construct." *Journal of Applied Psychology* 73: 139-145.
- Dheerasinghe, R. 2009. "Garment Industry in Sri Lanka Challenges, Prospects and Strategies." Staff Studies 33(1/2): 33-72.
- Donovan, M.A., F. Drasgow, and L. J. Munson. 1998. "The Perceptions of Fair Interpersonal Treatment Scale: Development and Validation of a

- Measure of Interpersonal Treatment in the Workplace." *Journal of Applied Psychology* 83(5).
- Fujishiro, K. 2005. Fairness at work: its impacts on employee well-being.
- Gilbert, C., S. D. Winne, and L. Sels. 2010. The influence of line managers and HR department on employees' affective commitment. Department of Marketing and Organisation Studies, Catholic University of Leuven. Leuven: Catholic University of Leuven.
- Jeon, J. H. 2009. The Impact of ●rganisational Justice and Job Security on ●rganisational Commitment Exploring the Mediating Effect of Trust in Top Management. Unpublished PhD Thesis, University of Minnesota. Minneapolis: University of Minnesota.
- Krejcie, R. and D. Morgan. 1970. "Determining Sample Size for Research Activities." Educational and Psychological Measurement 30: 607-610.
- Mathieu, J. E., and D. M. Zajac. 1990. "A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organisational Commitment." *Psychological Bulletin* 108(2): 171-194.
- Meyer J. P., and N. J. Allen. 1984. "Testing the "Side-Bet Theory" of ●rganisational Commitment." Canadian Review of Sociology and Anthropology 21: 21-46.
- Moorman, R.H., B. P. Niehoff, and D. W. Organ. 1993. "Treating employees fairly and Organisational Citizenship Behaviour: sorting the effects of job satisfaction, org commitment and procedural justice." *Employee Responsibilities and Rights Journal* 6(3), 209-225.
- Noah, Y., and M. Steve. 2012. "Work Environment and Job Attitude among Employees in a Nigerian Work Organisation." *Journal of Sustainable Society* 1(2): 2012.
- •pare, F. K., A. J. Saani. 2014. "The Influence of Work Environment and Supervision Style on Health Workers Commitment to the University of Cape Coast." European Journal of Business and Social Sciences 3(3): 292-301.
- •patha, H. H. D. N. P. 2009. Human Resource Management: Personnel. Colombo: Department of HR, University of Sri Jayewardenepura.
- •rigo, F., and L. Pagani. 2008. "Workplace flexibility and job satisfaction: some evidence from Europe." International Journal of Manpower 29(6): 539-566.
- Tammita, U., B. M. D. Seedevi, D. G. T. S. Jayarathne, A. Welianga, and L. H. K. Madushanka. 2010. "A Study of Employee Absenteeism in the Apparel Industry." *Human Resource Management Journal* 1(1): 91-108.

CHAPTER NINE

THE EFFECT OF JOB SATISFACTION AND JOB STRESS ON THE PERCEIVED JOB PERFORMANCE OF INSURANCE AGENTS IN SRI LANKA

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Abstract

This study examines the factors affecting the job performance of an insurance agent in Sri Lanka. Job satisfaction and job stress were selected as the major factors which affect job performance. A convenience sample of 50 insurance agents from different insurance companies was selected, and survey questionnaires were used to collect the required data. A regression model was used to analyse the collected data. Two models were developed to describe the single linear relationship between two independent variables with the dependent variable. Before moving to the regression, the correlations were tested by Pearson's Correlation Coefficient. The correlation results showed that, though there is higher association between job performance and job satisfaction, job stress has a lower association with job performance. The regression results show that job satisfaction affects job performance. This is a significant negative relationship. But it is a contradictory one, because the previous literature shows a positive relationship between these two variables. Our result implies that when satisfaction increases performance will be reduced. To test this result in the first regression model, a Granger causality test was carried out. The result of the causality test

showed that, in a one-way causal relationship, satisfaction influences job performance, but performance has no effect on satisfaction. The results of the Granger causality test confirmed the relationship observed in the regression analysis. The second regression model showed that there is no relationship between job stress and job performance.

Keywords: Job performance, job satisfaction, job stress, insurance agents.

Introduction

Insurance companies have made an immense contribution to the development of the economy, progress and prosperity of any country in the world. Unfortunately, this is one of the neglected sectors in Sri Lanka. Sri Lanka, being a developing country, would benefit from the development of insurance culture. Kondajji (2006) listed ten motivations which determine the buying behaviour of life insurance policies by people. The basic reason for taking out life insurance is to be protected from the uncertainties and risks of life. Even though it is highly important, Sri Lankans are reluctant to get insurance. This may be a result of the attitude of the people to insurance companies. They think it is hard to make successful claims from insurance companies, especially in life insurance. Therefore, a heavy burden is put on insurance agents to sell policies to the public.

In marketing life insurance, insurance agents are often considered to be marketing services which are complex (Nik Kamariah 1995). Hence, it is important to keep in mind that the customer comes first, and keeping their trust and integrity becomes an essential factor for the business (Slattery 1989). Customers are placing a high value on their agent's integrity and advice (Zeithaml, Berry, and Parasuraman 1993). Therefore, agents must fully understand the customers' needs and requirements, and build a trusting relationship between themselves and their clients to promote long-term, mutually beneficial, relationships (Crosby, Evans, and Cowles 1990).

To create strong relationships with clients, insurance agents must be highly motivated, and must have a positive attitude towards selling insurance. But it is a common factor that most of the country's insurance agents are not full-time employees of insurance companies; they work on a commission basis (Annuar 2004). Nevertheless, they are the ambassadors and the backbone of the insurance industry (Malliga 2000). In this situation, keeping a motivated workforce is a big issue. If the agents are not motivated, their performance is lower. The under-performance of insurance agents directly relates to the financial stability of the insurance company. Under-performance is where the level of performance achieved by an employee is

below the standard expected within the role. This may be in terms of skill, aptitude, and/or application (Bourke 2011). To be motivated in the first place though, they must have confidence, and be satisfied with their job. At the same time, an agent must feel that he/she can work the job freely.

Further, insurance agents are not born with these talents. As such, respective insurance companies must create them. When an agent joins a life insurance company, he may, or may not, have specialized knowledge. He certainly may not be familiar with the company's philosophy, its thinking in respect of its products, or the market and its organisational operations. It is essential that before an agent begins work in the field, she/he is educated and trained in market strategy and is made a 'company man' (Mishra 1998). Then they feel free to work, and have the confidence to work in the field. That affects the performance of the agent.

Job satisfaction and job stress were found to be basic factors which influence the job performance of insurance agents. As we know, job satisfaction is the level of contentment a person feels regarding his or her job. This feeling is mainly based on an individual's perception of satisfaction. Job satisfaction can be influenced by a person's ability to complete required tasks, the level of communication in an organisation, and the way management treats employees. As well, job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health, and even injury. Whatever the field, these two factors are critical and should be studied. Therefore, in the insurance industry, research is needed, to have some idea about job performance of agents through satisfaction and stress. With the objective of detailing the relationship between the selected variables, this study assessed how job satisfaction and job stress impact on the performance of insurance agents.

Literature Review

When it comes to previous studies relating to factors affecting the performance of insurance agents, it is hard to find many in the Sri Lankan context. Some famous studies in the foreign context are considered, to identify the present situation of the selected problem. McElroy, Morrow, Power, and Iqbal (1993) collected data from 166 insurance agents, to examine how three forms of commitment - job involvement, professional commitment, and community commitment, are related to job perceptions, attitudes, and performance. Their findings suggested that job involvement is significantly associated with some specific job perceptions and attitudes, but not with performance.

Much general research has been done which attempts to isolate the determinants of a salesperson's performance. Churchill, Ford, Hartley, and Walker (1985) explored role variables, skill, motivation, personal factors, aptitude, and organisational/environmental factors. Their meta-analysis, based on 116 studies, found that, on average, single predictors of sales performance accounted for less than 4% of the variation in salesperson performance. Aptitude accounted for less than 2% skill levels slightly more than 7%, and motivation for 6.6%. Role perception was by far the best predictor, accounting for as much as 14% of the variation in performance, while personal variables (age, height, sex, etc.) accounted for 2.6%, and organisational and environmental factors accounted for about 1%. They concluded that personal characteristics, while important, are not as important as the influencing factors such as training, company policies, skill levels, motivation, and so on.

Ryans and Weinberg (1979) studied company marketing activities, salesforce policies and procedures, field sales manager and salesperson characteristics, territory characteristics, and competition, as the six factors affecting sales response. Their study focused on objective, non-psychological variables, and concluded that individual characteristics, span of control, and territory potential, are indeed good predictors of sales. The other factors proved difficult to operationalize, and the results were, at best, non-conclusive. Cravens, Ingram, LaForge, and Young (1993), explored the relationships between compensation/control systems and performance. Their results indicate that the type of control system, i.e., management control versus commission control, is correlated to several measures of success. Sales performance was more affected by commission control than by management control.

Lamont and Lundstrom (1977) studied a combination of personality attributes (dominance, endurance, social recognition, empathy, ego strength) and personal characteristics (age, height, weight, formal education, outside activities, membership of civic and professional organisations) as predictors for sales success. Their results indicated that personality variables were more successful in predicting success as evaluated by management ratings, while personal characteristics were better predictors of sales results. In a meta-analytic study of personality predictors of job performance, Tett, Jackson, and Rothstein (1991) generally supported the use of personality measures in selection. Even though significant, the amount of variation explained by these factors was small, and the measure of performance was largely a subjective performance rating.

In a study predicting the sales performance of life insurance agents, Bluen, Barling, and Bums (1990) found the number of policies sold correlated with age (r = .06ns), tenure, education, the impatience-irritability component of type A behaviour, and the achievement strivings component of type A behaviour. In a non-quantitative-based exploration of the nature of leadership, Kirkpatrick and Locke (1991) focused on the traits of drive, leadership-motivation, honesty and integrity, self-confidence, cognitive ability, knowledge of the business, and an 'other' category that included creativity, charisma and flexibility. While the focus there was not on sales per se, the traits discussed, and the concept of leadership are certainly sales enhancers. Caldwell and O'Reilly (1982) found self-monitoring to be positively related to job performance, and Dubinsky and Hartley (1986) found self-monitoring to be unrelated to performance. For the sake of parsimony, to avoid the difficulties of operationalizing conceptually complex constructs, and to avoid data-gathering difficulties, their study focused only on objective characteristics.

Methodology

Questionnaires were used to collect the data. The questionnaire was designed according to the selected factors, in four parts. Part one covered the demographic factors of the respondents. Parts two, three, and four covered the variables. Part two of the questionnaire looked at job satisfaction of the respondents and contained 18 questions. Part three asked about the job stress of the respondent using 25 questions. Part four identified the job performance of the respondents. Finally, five questions were used to measure performance.

Single linear regression was used first to analyse the individual effects, and then multiple linear regression was used to check the combined effects. Correlation analysis was used to identify the correlation between independent variables. According to the results of the correlation analysis, a model was fitted. Finally, the Granger causality test was used to check the dynamic relationship between the variables, and to confirm the regression relationship.

The Model

Two factors were considered for the analysis, and a multiple regression model was built:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_t \tag{1}$$

where Y is job performance, and \$1 indicates the coefficient of job satisfaction. We expect this to have a positive value, as when job satisfaction increases, performance also goes up. \$2 is job stress, and the expected figure is negative, reasoning that when the stress gets high, performance is lower. X1 and X2 are job satisfaction and job stress respectively.

A Granger causality test (Granger 1988) was used to check the causal relationship between job performance and job satisfaction/job saress:

$$\Delta \mathbf{J} \mathbf{P}_{t} = \beta_{0} + \sum_{j=1}^{q} \beta_{1j} \Delta \mathbf{J} \mathbf{P}_{t-i} + \sum_{j=1}^{q} \beta_{2j} \Delta \mathbf{J} \mathbf{S}_{t-j} + \varepsilon_{1t}$$

$$\Delta \mathbf{J} \mathbf{S}_{z} = \boldsymbol{\varphi}_{0} + \sum_{j=1}^{r} \boldsymbol{\varphi} \mathbf{i}_{1t} \Delta \mathbf{J} \mathbf{S}_{t-j} + \sum_{j=1}^{r} \boldsymbol{\varphi}_{2i} \Delta \mathbf{J} \mathbf{P}_{z-i} + \varepsilon_{2t}$$
(2)

where JP₁ and JS₁represent job performance and job satisfaction/job stress. ϵ_{1t} and ϵ_{2t} are uncorrelated stationary random processes, and t denotes the time interval.

Development of Hypotheses

To determine the relationship between job performance with job satisfaction and job stress, the following hypothesis was formed:

He:
$$\beta_i = 0$$
 Vs $H_1: \beta_i \neq 0$
 β_i —the coefficients of job satisfaction and job stress

Results and Discussion

The collected data was analysed using regression methodology. Before moving to the regression analysis, accretation analysis was done. First, the correlation between job performance and job satisfaction showed the following results:

The results show a significant negative association between two variables, because the correlation coefficient -0.704 (p-0.000). It can be confirmed, with \$5% confidence, that the correlation between satisfaction and performance is significantly different from zero. Then the regression model was run. The result of single linear regression for the relationship between job

performance and job satisfaction was as follows:

The regression equation was: Y = 12.0 - 2.47 X1

Predictor:	Coef	SE Coef	T	P
Constant:	11.965	1.286	9.31	0.000
X1:	-2.4715	0.3596	-6.87	0.000

$$S = 0.757971 \text{ R-Sq} = 49.6\% \text{ R-Sq (adj)} = 48.6\%$$

Analysis of Variance:

Source	DF	SS	MS	F	P
Regression	1	27.143	27.143	47.24	0.000
Residual Error	48	27.577	0.575		
Total	49	54.72			

Durbin-Watson statistic = 1.98217

The results of the ANOVA table indicate that the fitted model is significant, as the p value corresponding to F was 0.000 (<5%). Thus, it confirms the linear relationship between performance and satisfaction is significant. The fitted model can therefore explain 50% of the variability of performance ($R^2 = 49.6\%$). Furthermore, the testing of parameters found that the gradient is significantly different from zero. The Durbin-Watson statistic is closed at two (DW = 1.98), indicating that the errors are random. In other words, there was no systematic pattern in the error, confirming that the fitted model can be accepted.

The result of the correlation between job performance and job stress was:

Pearson correlation of Y and X2 = 0.130P-Value = 0.367

It can therefore be confirmed, with 95% confidence, that the correlation between stress and performance is not significantly different from zero because the p value on the Pearson correlation coefficient was 0.367 (>0.05). As well as this, the coefficient showed a 13% relationship between variables, which is evidence that these two factors have a lesser association.

A single linear regression for job performance and job stress was then run. The results of the regression analysis came with five unusual observations (•bservation Nos 7, 16, 26, 4• and 48), which have standardized residual values of more than 2, meaning they should be removed from the data

set. After removing all unusual variables, the regression was re-run. The results were:

The regression equation was: Y = 2.19 + 0.339 X2

Predictor	Coef	SE Coef	T	P
Constant	2.185	2.117	1.03	0.308
X2	0.3390	0.5896	0.57	0.568

$$S = 0.815266 R-Sq = 0.8\% R-Sq (adj) = 0.0\%$$

Analysis of Variance

Source DF SS MS F P Regression 1 0.2197 0.2197 0.33 0.568

Residual Error 43 28.5803 0.6647

Total 44 28.8000 Durbin-Watson statistic = 1.39978

The result of the ANOVA indicates that the fitted model is not significant, as the p value corresponding to F was 0.568 (> 0.05). Thus, it confirms that there is no linear relationship between performance and stress. The fitted model is not able to explain the variability of performance because R^2 is 0.8%. Furthermore, the testing of parameters found that the gradient also is not significantly different from zero (p = 0.568). The Durbin-Watson statistic is not closed to two (DW = 1.39), indicating that the errors are not random. This confirms the fitted model cannot be accepted, so we conclude that only first model is able to be accepted.

To verify the relationship between job performance and job satisfaction, a Granger causality test was carried out. The results confirmed that there is a one-way causal relationship between two variables because one null hypothesis accepted and the other rejected. Though the X1 has a Granger causality value of Y (p = 0.12 > 0.05), Y does not mean a Granger causality value for X1 (p = 0.04 < 0.05).

Pairwise Granger	Causality	Tests
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Null Hypothesis:	●bs	F-Statistic	Probability
X1 does not have a Granger causality of Y	48	2.18767	0.12451
Y does not have a Granger causality of X1		3.25739	●.●4817

Conclusions

This study examined the factors affecting the job performance of an insurance agent. The previous literature discussed the reasons to select job satisfaction and job stress as the major factors which affect job performance. This was tested in the Sri Lankan insurance industry context among 50 insurance agents from different insurance companies. Questionnaires were used to collect the data from the selected sample.

Regression analysis was used to analyse the collected data. Two models were developed to determine the single linear relationship between the two independent variables and the dependent variable. Before moving to the regression, a correlation was tested using Pearson's correlation coefficient. The results showed that, though there is higher association between job performance and job satisfaction, job stress has no higher association with job performance. The regression results showed that there is a job satisfaction effect on job performance, but that this was a significant negative relationship. This is a contradictory situation, because the previous literature shows a positive relationship between these two variables. Our result implies that, when satisfaction increases, performance will be reduced. To test the result in the first regression model, a Granger causality test was carried out. The results of the causality test showed a one-way causal relationship, that satisfaction has an impact on job performance, but performance has no effect on satisfaction. The results of the Granger causality test confirmed the regression relationship. The second model showed that there is no relationship between job stress and job performance.

References

Annuar, H. A. 2004. "Al-Wakalah and Customers' Preferences towards It: A Case Study of Two Takaful Companies in Malaysia." *The American Journal of Islamic Social Sciences* 22(1): 29-49.

- Bluen, S., J. Barling, and W. Bums. 1990. "Predicting Sales Performance, Job Satisfaction, and Depression by Using the Achievement Strivings and Impatience-Irritability Dimensions of Type A Behaviour." *Journal of Applied Psychology* 75: 212-216.
- Caldwell, D., and C. ●'Reilly. 1982. "Boundary Spanning and Individual Performance: The Impact of Self-Monitoring." *Journal of Applied Psychology* 67: 124-127.
- Churchill, G., N. Ford, S. Hartley, and ●. Walker. 1985. "The Determinants of Sales Person Performance: A Meta-Analysis." *Journal of Marketing Research* XXII: 103-118.
- Cravens, D., T. Ingram, R. LaForge, and C. Young. 1993. "Behaviour-Based and Outcome-Based Sales Force Control Systems." *Journal of Marketing* 57: 47-59.
- Crosby, L. A., K. R. Evans, and D. Cowles. 1990. "Relationship quality in services selling: an interpersonal influence perspective." The Journal of Marketing 54: 68-81.
- Dubinsky, A., and S. Hartley. 1986. "Antecedents of Retail Salesperson Performance: A Path-Analytic Perspective." *Journal of Business Research* 14: 253-268.
- Granger, C. W. J. 1988. "Causality, Cointegration, and Control." *Journal of Economic Dynamics and Control* 12: 551-559.
- Kerlinger, F. N. 1986. Foundations of Behavioural Research, New York: Holt Rinehart and Winston.
- Kilpatrick, S., and E. Locke. 1991. "Leadership: Do Traits Matter?" Academy of Management Executive 5: 48-60.
- Lamont, L. and W. Lundstrom. 1977. "Identifying Successful Industrial Salesmen by Personality and Personal Characteristics." *Journal of Marketing Research* XIV: 517-529.
- Malliga, R. 2000. "Marketing of LIC policies a study on agents of Tirunelveli division." *Indian Journal of Marketing* 12(8-10): 6-9.
- McElroy, J. C., P. C. Morrow, M. L. Power, and Z. Iqbal. 1993. "Commitment and insurance agents' job perceptions, attitudes, and performance." *Journal of Risk and Insurance* 60(3): 363-384.
- Mishra, M.N. 1998. Appraisal of Marketing Strategies of the Life Insurance Corporation of India." *The Insurance Times* 8, October 1988.
- Nik Kamariah, Nik Mat. 1995. Determinants of Sales Performance in Insurance Industry: A Cross-Cultural Comparison between the UK and Malaysia. Unpublished PhD thesis, The University of Aston in Birmingham.
- Nunnally, J. C. 1978. Psychometric Theory. New York: McGraw-Hill.
- Robson, C. 1993. Real World Research: A Resource for Social Scientists

- and Practitioners-Researchers. Oxford: Blackwell.
- Ryans, A., and C. Weinberg. 1979. "Territory Sales Response." *Journal of Marketing Research* XVI: 453-65.
- Slattery, T. 1989. "Special report: Nichols, we've forgotten the consumer." *National Underwriter* 48 (November): 11.
- Tett, R., D. Jackson, and M. Rothstein. 1991. "Personality Measures as Predictors of Job Performance: A Meta-Analytic Review." *Personnel Psychology* 44: 703-742.
- Zeithaml, V. A., L. L. Berry, and A. Parasuraman. 1993. "The nature and determinants of customer expectations of service." *Journal of the Academy of Marketing Science* 21(1): 1-12.

CHAPTER TEN

THE IMPACT OF THE BIG FIVE PERSONALITY TRAITS ON EMPLOYEE JOB INVOLVEMENT IN BRANDIX APPAREL SOLUTIONS LIMITEDINTIMATE APPAREL, WALISARA

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Abstract

Human behaviour plays a significant role in every organisation, and maximizing organisational efficiency and effectiveness through human capital is one of the main objectives of an organisation. In particular, any effort to maximize organisational effectiveness requires a high degree of job involvement (JI) among members of an organisation. A fully job-involved workforce is one of the main assets of an organisation. The reason for this, is that the success of any organisation or institution depends on the job-involved workers. In other words, poor employee performance is a result of lack of JI. Job involvement is a better predictor of voluntary turnover and absenteeism. Since JI is crucial factor to the organisation, it is worth investigating further in the Sri Lankan context.

Keywords: Human behaviour, job involvement, employee performance.

Introduction and Research problem

As Brandix is a large exporter in the apparel industry, there should be a high level of job involvement. Therefore, the researchers decided to conduct a preliminary survey to identify the level of job involvement within the employees of Brandix Apparel Solutions Limited - Intimate Apparel (BASLIA), in Walisara, Sri Lanka. The researchers randomly selected 30 participants for the pilot survey, and distributed a questionnaire containing 10 questions, in the five Point Likert scale format developed by Kanungo (1982), to measure the level of JI.

Table 10.1 Pilot Survey Results

ℚ No	01	02	03	04	05	06	07	08	09	10	Overall
											mean Value
Mean	1.97	2.30	2.17	2.07	2.33	2.13	2.30	2.40	2.2	2.27	2.21

Table 10.1 shows that the overall mean value is 2.21, and that it was lower than the expected average value (3) on the scale. This indicates the low level of job involvement among employees in BASL-IA in Walisara. Therefore, the researchers formulated the research problem of this current study as:

"Why there is a lack of job involvement by employees in Brandix Apparel Solutions Ltd - Intimate Apparel in Walisara?"

Since employees' job involvement directly affects employees' efforts, and the firm's performance, many researchers (Agbor 2012, Lubakaya 2014, Seng et al. 2012, Liao and Lee 2009) have specifically focused on studying the different factors affecting job involvement, such as personal factors, training, work environment, and job characteristics. According to Agbor (2013), and Liao and Lee (2009), JI is one of the individual differences, and is primarily an attribute of the person, or a response to the job. When considering II definitions Liao and Lee (2009) said that personality traits have more strength to explain the JI of employees than other factors, such as training and job characteristics, because of the inherent differences in the degrees of JI among employees due to variations in personality. The big five model is a personality assessment model that taps five basic dimensions. These are extraversion, agreeableness, conscientiousness, neuroticism (emotional instability), and openness to experiences (Goldberg 1990). These personality factors have been observed to greatly determine how people see their jobs, their relationships with the working environment, the job itself, and how their work and life are committed (Agbor et al. 2013).

Mahajan (2015) stated that those who report high scores on extroversion are more likely to report higher scores on job involvement, as their work

enables them to meet their aspirations and exhibit their talents. Eswaran, Islam, and Yusuf (2011), Agbor (2013) and Bozionelos (2003), argued that extroversion has a positive impact on job involvement, "Because of the employee's tendency to interpret experiences under negative light, individuals who score high on neuroticism should be less likely to develop positive attitudes towards their job" (Bozionelos 2003, 69). Also, Mahajan (2015) said that agreeable employees tend to regard their work as a platform to improve their personal value and earn respect, therefore, such employees should be more involved in their jobs. Eswaran (2011) and Agbor (2013) found that there is a positive impact of agreeableness on job involvement.

Further, according to Mahajan (2015) individuals who report high scores on conscientiousness should report more involvement in their job, due to their sense of duty towards every role they assume. According to Agbor (2013) and Bozionelos (2003), conscientiousness has a positive impact on job involvement. Individuals who score high on openness to experience should be more likely to report involvement in their job (Mahajan 2015). According to the findings of Agbor (2013) and Bozionelos (2003), openness to experiences has a positive impact on job involvement. Based on this literature, we developed the research questions, objectives and hypothesis as given below.

Research Objectives

- To identify whether neuroticism negatively impacts the job involvement of employees in BASL-IA in Walisara;
- To identify whether extroversion positively impacts the job involvement of employees in BASL-IA in Walisara;
- To identify whether openness to experience positively impacts the job involvement of employees in BASL-IA in Walisara;
- To identify whether agreeableness positively impacts the job involvement of employees in BASL-IA in Walisara; and
- To identify whether conscientiousness positively impacts the job involvement of employees in BASL-IA in Walisara.

Literature Review

The concept of job involvement was originally developed by Lodahl and Kejner in 1965, and further enriched by Kanungo, who eliminated the ambiguity in the individual's belief towards his or her present job, and stated that job involvement acts as a catalyst to satisfy the individual's present needs (as cited in Seng et al. 2012, 38). The term 'Big Five' was coined by

Lewis Goldberg in 1976, and was originally associated with studies of personality traits used in natural language (Figure 10.1). Roccas, Sagiv, Schwartz, and Knafo (2002), stated in their introduction that, "the Five Factor Personality Model is the dominant approach for representing the human trait structure today" (as cited in Eswaran 2011, 167). The big five consists of: neuroticism, extroversion, openness, agreeableness and conscientiousness (Costa and McCrae 1985, Mount and Barrick 1995, Figure 10.1). Cooper (2003) stated that, "an extroverted personality tends to be sociable, assertive, gregarious, talkative, and ambitious" (as cited in Liao and Lee 2009, 25).

In other words, those who report high scores on extroversion are more likely to feel the need to occupy a central position in their work environment, so they can satisfy their ambitions and domineering tendencies. Finally, this leads to increases in employees' job involvement (Bozionelos 2003). "People who are neurotic would feel worried, insecure, depressed, overly anxious, and angry" (Eswaran 2011, 168). Because of their tendency to interpret experiences under negative light, individuals who score high on neuroticism should be less likely to develop positive attitudes towards their job, and it may lead to low job involvement (Bozionelos 2003). "Agreeableness refers to interpersonal orientation" (Lubakaya 2014, 83). Overall, a highly agreeable employee indicates positive perceptions of job involvement, because agreeable employees would be more involved in their jobs, tending to regard work and career achievement as congruent with their desire to improve their personal value and earn respect (Lubakaya 2014). In addition, when interacting and cooperating with others, agreeable employees also achieve better effects (Barrick and Mount 1991), which likely increases their job involvement.

Conscientiousness is the ability of an individual to work hard, and the motivation to pursue goal accomplishment (Lubakaya 2014, 83). Further, Lubakaya mentioned that an employee with high JI is likely to attain greater job efficiency, which further leads to job involvement. Those with low conscientiousness work only to meet immediate demands, regardless of goals, rules, standards, and future results (Lubakaya 2014, 83). "Openness to experiences, which is the ability to be imaginative, curious, unconventional, broad-minded, and cultured, characterize this dimension" (Agbor 2013, 3). This also reflects the extent to which a person has broad interest and the urge to take risks in dealings (Eswaran 2011, 168). According to the findings of Agbor (2013), and Bozionelos (2003), there is a positive openness to experiences impact on job involvement.

Conceptual framework

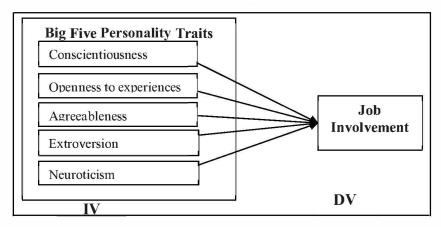


Figure 10.1: The Conceptual Framework

Methodology

There are 702 employees in BASL-IA and this was considered the base population. From these, 200 employees were selected as the sample by using a stratified random sampling method. The researcher collected primary data through a survey, by using a self-administered structured questionnaire. Job involvement was measured by the 10-item job involvement scale developed by Kanungo in 1982 (Seng et al. 2012). In Kanungo's study the scale was reliable when the Cronbach Alpha coefficient was at 0.81. The big five personality types were measured by a forty-four (44) item scale developed by John and Srivastava (1999), who reported a validity test value of 0.92, and a Cronbach Alpha value of 0.83 for reliability. Multiple regression through the backward elimination method was the main analytical tool used in the present study to fulfil the research objectives.

	Independent Variables										
DV		Neuroticism		Openness to Experience	Conscientiousness	Agreeableness					
Job In- volve- ment	Correlation Coefficient	-0.623	0.829	0.673	●.785	●.173					
mont	P Value	0.000	0.000	0.000	0.000	0.028					

Table 10. 2 Results of the Correlation Analysis

Table 10.2 shows that all four independent variables reported positive correlations with job involvement, while the neuroticism variable had a negative correlation with II.

Multiple Regression Analysis

H_{1D}: Agreeableness has a positive impact on the job involvement of employees in BASL-IA.

Model 1 in Table 10.2 indicates that the p-value for agreeableness (0.846) is greater than 0.05, thus there was not enough evidence to reject H₀. Hence it can be concluded that agreeableness has no positive impact on job involvement of employees in BASL-IA.

H_{1A}: Neuroticism has a negative impact on the job involvement of employees in BASL- IA.

According to Model 2 in Table 10.3, since the p value for neuroticism (0.000) is less than 0.05, there is enough evidence to reject H₀. Therefore, we can conclude that neuroticism has a negative impact on job involvement of employees in BASL-IA.

H_{1B}: Extroversion has a positive impact on the job involvement of employees in BASL-IA.

Model 2 in Table 10.2 shows that since the p value (0.000) is less than 0.05 for extroversion, there is enough evidence to reject H₀. Therefore, it can be concluded that that extroversion has a positive impact on the job involvement of employees in BASL-IA.

H_{1C}: •penness has a positive impact on job involvement of employees in BASL- IA.

According to Model 2 in Table 10.2, the p value (0.000) was less than 0.05 for openness to experiences, which provides enough evidence to reject H₀. Therefore, we can conclude that openness to experiences has a positive impact on the job involvement of employees in BASL-IA.

H_{1E}. Conscientiousness has a positive impact on job involvement of employees in BASL-IA.

According to Model 2 in Table 10.2, since the p value of conscientiousness (0.000) is less than 0.05, there is enough evidence to reject H₀. Hence it can be concluded that conscientiousness has a positive impact on the job involvement of employees in BASL-IA in Walisara.

Table 10. 3 Regression Output through the Backward Elimination Method

Model	Variable	Unstandardized Coefficients		Standard- ized Coef- ficients	T	Sig.
		В	Std. Error	Beta		
1	(Constant)	.777	.138		5.648	.000
l	Neuroticism	180	.019	287	-9.569	.000
l	Extraversion	.362	.031	.433	11.581	.000
	•penness t• experience	.125	.031	.140	4.013	.000
	Conscien- tiousness	.273	.030	.328	9.034	.000
	Agreeableness	004	.023	005	195	.846
2	(Constant)	.768	.129		5.945	.000
	Neuroticism	180	.•19	287	-9.636	.000
	Extraversion	.362	.031	.433	11.617	.000
	•penness t• experience	.124	.031	.139	4.057	.000
	Conscien- tiousness	.272	.030	.328	9.071	.000

Model Adequacy

Table 10. 4 Coefficient of Determination

R- Sq (adjusted)
0.886

According to the adjusted R² in Table 10.4, 88.6% of the variation in JI can be explained through the fitted regression line.

Table 10. 5 Analysis of Variance (ANOVA)

Model		Sum ●f Squares	Df	Mean Square	F	Sig.
2	Regression	25.599	4	64000	313.931	.000
	Residual	3.201	157	.020		
	Total	28.799	161			

Analysis of Variance tests whether the model is significantly better at predicting the outcome than using the mean as a best guess (Field 2005, 236). According to Tables 10.2 and 10.5, the p value (0.000) is less than 0.05, and there is enough evidence to reject H₀. Hence, the researchers concluded that the fitted regression model is significant.

The Fitted Regression Model

$$E(Y_i /_{x_1, x_2, x_3, x_4}) = \hat{\beta}_0 + \hat{\beta}_1 X_1 + \hat{\beta}_2 X_2 + \hat{\beta}_3 X_3 + \hat{\beta}_4 X_4 + \varepsilon_i$$

where Yi is job involvement ($\mathbb{D}V$); β_0 , β_1 , β_2 , β_3 , β_4 , β_5 are regression coefficients, X_1 is neuroticism (IV), X_2 is extroversion (IV), X_3 is openness to experience (IV), X_4 is conscientiousness (IV), and \mathcal{E}_i is the randomness error.

Solved, we get E (job involvement/ $_{Ne,Ex,\, \bullet p,\, Co}$) = 0.768 - 0.180 neuroticism + 0.362 extroversion + 0.124 openness to experiences + 0.272 conscientiousness.

According to this regression model, we expect to get 0.768 units of employee job involvement when there is no effect from all other factors. When neuroticism is increased by 1 unit, it is expected to decrease employees' job involvement by 0.180. Extraversion is expected to increase job involvement by 0.362 units, because of the increment of extraversion by 1 unit. If openness to experiences increases by 1 unit, job involvement will increase by 0.124 units. Further, when conscientiousness is increased by 1 unit, it is expected to increase job involvement by 0.272 units. All these are possible while keeping all other variables constant at each moment.

Results and Discussion

According to the research findings, extroversion, conscientiousness, neuroticism, and openness to experiences, have significant impacts on job involvement. Eswaran (2011) and Bozionelos (2004), reported that extroversion positively impacts on job involvement. This study also found a positive impact from extroversion on job involvement, while reporting the highest regression coefficient (0.362) in the fitted model. This could be due to the nature of an employee's job, because most employees of BASL-IA are dealing with customers and suppliers directly. Agbor (2013), found that there is a significant positive impact of conscientiousness on job involvement (β =0.232). This was confirmed in the present context.

Conscientiousness had the second highest impact (0.273) on job involvement in the present research context. Hence, if an organisation gives consideration to increasing the conscientiousness aspect of the personality of employees, this will lead to improved job involvement. For neuroticism, Agbor (2013) revealed that this variable has a significant negative impact on job involvement (β = -0.131). The researchers also found that there is a significant negative impact from neuroticism on job involvement (-0.180). By reducing employees' insecurity, worry, and anger, the characteristics of neuroticism, job involvement should be increased in BASL-IA.

Bozionelos (2004) and Agbor (2013) reported that openness to experience has a positive impact on job involvement, but this was not found by Eswaran (2011). Our study showed that openness to experiences does have a positive impact on the job involvement (β =0.125) of employees in BASL-IA. Hence, by increasing the openness to experiences personality trait, job involvement of the employees of BASL-IA can be increased. Finally, Agbor (2013) and Eswaran (2011) found that agreeableness has an impact on job involvement in the context of their studies, but this was not found in the present study.

Conclusions

The findings of this study revealed that extroversion has a significant positive impact on job involvement. This implies that, when we increase the number of employees who are extroverted, this will lead to the enhancement of the level of job involvement in an organisation. Further, openness to experiences also has a positive impact on job involvement. Moreover, conscientiousness is also shown to have a significant positive impact on job involvement. But neuroticism has a significant negative impact on job involvement. This implies that employing people with less neuroticism will lead to increased job involvement. On the other hand, agreeableness has an insignificant relationship with job involvement in the present context. Since the extroversion personality trait has the highest impact on JI, management should pay attention to enhancing this characteristic among employees, to increase job involvement in BASL-IA.

References

- Agbor, N. S., B. E. Nwankwo, M. Iroegbu, T. •bi, and S. A. Agu. n.d. The big five personality traits and job involvement: an investigation of university lectures in South Eastern Nigeria. Lagos: •pen Science Repository of Psychology.
- Barrick, M. R., and M. K. Mount. 1991. "The Big Five personality dimensions and job performance: A Meta-analysis." *Personnel Psychology* 44: 1 26.
- Bozionelos, N. 2003. "The big five of personality and work involvement." Journal of Managerial Psychology 19(10): 69-81.
- Costa, P. T., and R. R. McCrae. 1992. Revised NEO Personality Inventory (NEOPI R) and NEO Five-Factor Inventory (NEO-FFI) Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Eswaran, S., A. Islam, and D. Yusuf, D. 2011. "A study of the relationship between the big five personality dimensions and job involvement in a foreign based financial institution in Penang." *International Business Research* 4(4):164-175.
- Field, A. 2009. Discovering Statistics using SPSS. London: SAGE Publications Inc.
- Fletcher, D. E. 1998. Effects of organisational commitment, job involvement, and organisational culture on the employee voluntary turnover process. Unpublished PhD Thesis. Lubbock: Texas Tech University.

- Goldberg, L. R. 1993. "The structure of personality traits: Vertical and horizontal aspects." In *Studying lives through time: Personality and development*, edited by D.C. Funder, R.D. Parke, C. Tomlinson-Keasey, and K. Widaman, 169-188. New York: APA Science Volume Series.
- John, ●. P., and S. Srivastava. 1999. "The big-five trait taxonomy: history, measurement, and theoretical perspectives." In *Handbook of Personality: Theory and Research*, edited by L. A. Pervin and ●. P. John, 102-138. New York: Guilford Press.
- Liao, C. S., and C. W. Lee. 2009. "An empirical study of employee job involvement and personality traits: the case of Taiwan." *Economics and Management*: 22-36.
- Lubakaya, C. W. 2014. "Factors affecting job involvement in an organisation: a case of Nzoia sugar company limited." *International Journal of Innovative Research and Development* 3(6): 77-105.
- Mahajan, K. 2015. "An Empirical study of job involvement and personality traits." *International Journal of Scientific Research*: 56-58.
- Seng, G. C., H. W. Xin, K. Y. Tong, and T. Y. Chin. 2012. Factors affecting employees' job involvement in the fast food industry. Unpublished BBA (Hons) Thesis, Department of Business. Kampar Perak, Malaysia: Universiti Tunku Abdul Rahman.

CHAPTER ELEVEN

A STUDY OF THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CONTRACT AND EMPLOYMENT

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Abstract

Research on psychological contracts is increasingly focusing on the mutual relationship between employee and employer. This study examined the relationship between psychological contract and employment outcomes. The objective of this study was to find the relationship between different types of psychological contracts and the employee outcomes of commitment, organisational citizenship behaviour, and turnover intention. Employee and employer obligations and their relationship with commitment, organisational citizenship behaviour and turnover intentions were also measured. The study also investigated the types of psychological contract breaches that can be seen in an organisation.

The research approach was deductive. The research type was descriptive, and the data were collected from 120 employees in a ship repair and offshore engineering firm in Colombo, Sri Lanka, through interviewer-ad-

ministered questionnaires modified after pilot testing (10 subjects). A stratified random sampling technique was used to sample from the population of 2.000 employees. Correlation and descriptive analysis were performed to analyse the data and find the relationships. The results of the research revealed that there is a positive correlation between relational contract, balanced contracts, and employer and employee obligations, with commitment and organisational citizenship behaviour. Negative correlations were found between relational contracts, balanced contract, and employee and employer obligations with employee turnover intention. Transactional contracts and transitional contracts showed negative correlations between commitment and organisational citizenship behaviour, while positive correlation can be found with turnover intention. Psychological contract breaches were measured, and it was revealed that the relational contract type was breached for employee participation in decision making and the receipt of performance appraisals. Transactional, balanced and transitional contracts do not show strong psychological contract breaches.

Keywords: Employee commitment, organisational citizenship behaviour, psychological contract, turnover intention.

Introduction

Employment relationships are very important when an organisation needs to keep and retain quality staff. When an individual is part of an organisation, that employee forms a relationship with the employer which consists of a set of mutual promises and obligations (Rousseau 1989). Psychological contracts refer to mutual, unwritten expectations that exist between an employee and employer regarding the policies and practices in their organisation, and are not part of the legal employment contract. The general definition of psychological contract is: 'a set of reciprocal but unwritten expectations between individuals and their employers.' Lane (2012) states that this means that all the time there are concerns about expectations arising in an individual's mind in every organisation, and thus they become powerful determinants of employee behaviour. Even though employees are given expected job responsibilities in the hiring process, the individual belief in reciprocal obligations, or unwritten expectations between the individual and the organisation, can be different or indifferent. The lack of fulfilment of aspects of the psychological contract will lead to a violation of the contract, with a change in attitudes and of behaviour being a consequence of this. This may lead to strong emotional reactions such as anger, resentment, and sense of injustice, and employee turnover, meaning various negative employee outcomes. Psychological contracts influence the job attitudes and performance of employees. Psychological contract breach has been verified as a solid predictor of negative workplace outcomes.

The main objective of this study was to identify the relationship between psychological contract and employment outcome. Further, this chapter focusses on the relationship between employee and employer obligations in employment outcomes. Organisational commitment, organisational citizenship behaviour (OCB), and turnover intentions, are considered as employment outcomes. Finally, this study measures the psychological contract breaches of the four types of psychological contracts: relational, transitional, balanced, and transactional.

The organisation of the chapter is as follows. The next section discusses the theoretical and empirical background of psychological contracts, and establishes the research gap. The third section discusses the research methodology adopted in conducting the study, while the following section presents the findings of the study and the relevant discussion. The chapter concludes with the implications of the study and further suggestions for research.

The Nexus of Psychological Contract and Employment Outcomes

Psychological contracts are of four types (Rousseau 2000); they are relational, balanced, transactional, or transitional contracts (Figure 11.1). In examining psychological contracts, it is convenient to study employee and employer relationships because of their effect on violation and fulfilment in workplace behaviour and attitudes. Argyris (1960) describes the psychological contract as, "Implicit agreements about leadership and job performance between a foreman and his team." The concept includes those mutual obligations, expectations, values, and aspirations which operate over and above the formal contract of employment in the employment relationship (Lane 2012). The psychological contract is also dynamic (Levison et al. 1962). This is also true for organisations that are not stable, adaptable, and flexible, and their speed of response requires attention.

Table 11. 1 Types of Psychological Contracts

		Specific	Weak
Time	Short term	Transactional	Transitional
	•pen ended	Balanced	Relational

Source: After Rousseau and Wade-Benzoni 1994.

The transactional contract happens when an employee is only obliged to carry out a certain fixed number of duties, and is being paid by the employer in return. So, the involvement with the organisation is monetary, and limited. Training and career development is low because of this monetary transaction. Robinson, Kraatz, and Rousseau (1994) state that transactional contracts only govern specific legal exchanges between parties over time. Transactional contracts characteristically involve competitive wage rates, and the absence of long-term commitment. Relational psychological contracts have less specific agreements, and they include training and development opportunities, and long-term career paths. Employees respond to this condition by being more loyal and committed to the organisation.

A balanced psychological contract happens when both employer and employee contribute to the other's needs at the same time (Rousseau 2000). Two types of balanced contracts are formed between employer and employee. They are external employability, and internal employability. External employability means the employee is obliged to develop marketable skills through career development. Internal employability happens when the employee is obliged to develop skills which are valued by the organisation, such as following career development programmes provided by employers. With the absence of commitment regarding future employment, and limited performance, this type of contract is violated, and that is one of the characteristics of transitional contracts. With the violation of a transitional contract, the employer changes the relationship, and the violated party loses faith in the relationship. There are three characteristics of this transitional contract (Rousseau and Wade-Benzoni 1994). They are: 1) Trust is violated, with the employer being inconsistent regarding its intention towards the employee; 2) The employee is uncertain regarding his or her obligation; and 3) Trust can be diminished by the employer's motives.

Psychological Contract Violation in Employees

Violation or breach of the psychological contract may cause differential impacts on employees, because their career goals can be different (Rousseau

1990). Organisational commitment has been recognized as a variable outcome in psychological contract violation (Kraft 2008). Other than organisational commitment, job satisfaction, organisational citizenship behaviour, and turnover intentions can also be identified as outcome measures (Kraft 2008). Past research reveals that contract violation can greatly affect those who are strongly tied to the organisation (Robinson and Rousseau 1994). Conversely, for employees who are less strongly tied to the organisation, a contract violation would affect them to a lesser degree.

Organisational Citizenship Behaviour

This is psychological, and was first defined by Dennis •rgan in 1988 as, "an individual behaviour which is not rewarded by a formal reward system, but that, when combined with the same behaviour in a group, results in effectiveness." Work productivity and employee effectiveness can be greatly influenced by organisational citizenship behaviour in organisations. When employees are grouped together, it is most likely that they will show organisational citizenship behaviour no matter whether they are in same department or are working on a temporary basis.

Organisational Commitment

McMahon (2007) revealed that commitment attaches employees to the organisation psychologically. Higher organisational commitment reduces employment turnover, and gives form to personal targets. There are, however, differences between attitudinal commitment and behavioural commitment. Attitudinal commitment means a mindset in which individuals are relating to their goals and values. Behavioural commitment means individuals' past behaviours attach them to the organisation. But in general, organisational commitment is seen as an outcome, and is affected by any breach of the psychological contracts in organisations.

Employee Turnover Intentions

With high employee turnover, organisational effectiveness can be decreased, together with its productivity, and the morale of existing employees (Bhat 2014). The turnover costs can be higher, and the organisation may lose employees with a lot of knowledge, skill and ability. This may cause an organisation to suffer a lowered reputation. But, because of their implicit nature, turnover costs are hard to measure. Finally, this can lead to lower service quality for customers.

Thus, finding turnever intentions rather than actual turnevers for the outcome variables is crucial, because self-expressed intentions are the best predictors. There is huge support and evidence for the relationship between actual turnever and turnever intention. The definition of turnever intention is, "the (subjective) probability that an individual will change his or her job within a certain time period" (Bhat 2014). This chapter examines the relationships between different types of psychological contract and their employment outcomes, in a heavy manufacturing industry firm in Sri Lanka (Figure 11.1). Thus, this study adds to the literature on psychological contracts, from a context hitherto absent in the literature.

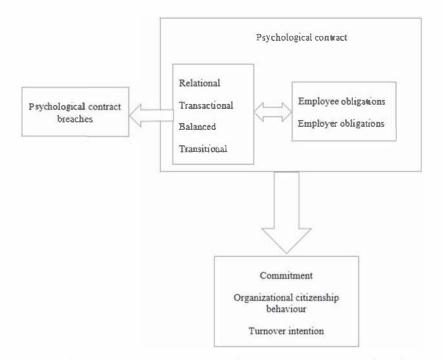


Figure 11.1 Framework for Psychological Contract and the Employment Relationship

Research Methodology

Surveys were used as the data collection strategy. The stratified random sampling technique was used as the sampling method. Here, job roles were considered as separate strata, namely executives/engineers, supervisor/foreman,

permanent operational staff, and contract-basis operational staff. Then, roughly 30 respondents were randomly selected from each stratum, giving a total of 120 responses. The study was conducted at Colombo Dockvard PLC, the largest and oldest shipbuilding company in Sri Lanka. There are around 2,000 employees working at Colombo Dockyard PLC. While a sample size of 322, according to the 95% confidence level and 5% margin of error, would be appropriate, with the common limitations, a sample size of 120 was considered enough. That is around 6% of the population, Primary data were collected through an interviewee-administered structured questionnaire, which consisted mainly of Likert-scale-type questions, apart from the socio-demographic details. The questions were taken from a standard questionnaire on psychological contract developed by Rousseau (1989). For this research, a pilot test was conducted with ten respondents, prior to distributing the questionnaires to all respondents. Based on those results, certain questions were revised after identifying the difficulty of understanding of the questions.

Five-point Likert-scale questions were used to get respondent opinions about: a) unwritten obligations and expectations which may be created with the employer; b) opinions as to what extent the employer has made commitments/has obligations to the respondent; and c) opinions as to what extent the respondent has made commitments/has obligations to the employer. Further, a four-point Likert scale was used to measure: d) the employer's relationship with the respondent; e) the respondent's relationships with the employer, f) employer obligations; and g) employee obligations.

The quantitative analysis of the data was carried out using the SPSS statistical package. The first objective was to identify the relationship between the four types of psychological contracts, and organisational commitment, organisational citizenship behaviour, and turnover intention. The second objective was to identify the relationship between employee/employer obligation and organisational commitment, organisational citizenship behaviour, and turnover intention. Both these objectives were met using correlation analysis. Correlation analysis is a powerful, yet simple, method to evaluate the relationships between two variables in terms of strength and direction. To study the psychological breaches, frequency analysis was employed. The hypotheses were formulated to check the relationship between four types of psychological contracts with employee outcome; organisational commitment, organisational citizenship behaviour (OCB), and turnover intentions.

Results and Discussion

The sample consisted of 63% from permanent operational staff, 15% from contract-basis operational staff, 3% from the supervisor/foremen group, and 19% from trainees. The respondents included 49% maintenance employees, 39% production section employees, 1% service personnel, and 11% from other employees. Three quarters of the employees (73%) had education up to G.C.E. •/L, and 27% of them were educated up to G.C.E.A/L. It is noteworthy to remember that the organisation in question is an offshore, heavy manufacturing industry, and physical labour is crucial. Thus, the sample consists of only male employees. The relationships between the four types of psychological contracts and organisational commitment, organisational citizenship behaviour (•CB), turnover intention were tested.

Table 11.2 Correlation Results for the Relationship Between Psychological Contracts and Employee Outcomes

Psychological Contract	Employee outcome	Correlation Coefficient	P value	
	Commitment	●.39●*	0.000	
Relational	●CB	€.116	●.2●7	
	Tumever intention	-0.24	€.795	
	Commitment	-0.098	€.286	
Transactional	●CB	-0.189*	●.●39	
	Turnever intention	●.137	0.135	
1	Commitment	●.363*	0.000	
Balanced	●CB	●.●97	€.294	
	Turnever intention	-0.101	€.274	
	Commitment	-0.076	●.41●	
Transitional	●CB	-0.063	€.497	
	Tumever intention	●.651*	0.000	

^{*}significant at the 0.05 significance level

The results (Table 11.1) revealed that there are positive correlations between relational contract and employee commitment.

CB and tumover intentions do not show a correlation with relational contract. The reason for this relationship is that relational contracts include employees' long-term stability, and open-ended employment arrangements. Based upon mutual trust and loyalty, commitment can have a positive correlation with relational contracts (Rousseau 2000).

A transactional contract has a weak negative relationship with \cdot CB, and the other two employee outcomes do not show any relationship in this study. Since transactional contracts represent limited involvement in the employment relationship, there can be negative correlations between transactional contracts and OCB. Though it is not significant, since turnover intention means that employees plan to leave their position, it is possible that transactional contracts may have positive correlation with turnover intentions. Employee commitment and balanced contracts posit a statistically significant, mild, positive correlation. Since balance contracts represent the employer and employee contribution to each other's development, there can be a positive correlation between balanced contracts and commitment. The results revealed that there is a statistically significant, moderate, positive relationship between transitional contracts and turnover intention. Since transitional contracts represent employees' uncertainty towards their employer, turnover intention can have a positive correlation between transitional contracts and turnover intention. When there is high uncertainty present, there is a greater chance of higher turnover intentions. For each type of contract, the aggregate value of all the relevant Likert-scale questions was used.

The results (Table 11.2) also revealed that there exists a statistically significant, mild correlation between commitment and employee obligations. Since employee obligations represent employees' fulfilment of their obligations to their employer, there can be a positive correlation between employee obligations and commitment and **©CB**, while negative correlation can be found between employee obligation and turnover intention. That is, when the employee tries to fulfil his/her obligations, that will cover the duties in contract of employment and, to a certain extent, obligations which are not stated in the contract of employment.

Table 11.3 Correlation Results for Employer and Employee Obligations and Employee Outcomes

Obligation to work	Employee outcome	Correlation Coefficient	P value
	Commitment	●.441*	0.000
Empleyee ebligation	●CB	●.261*	0.004
	Turnever intention	-0.033	€.€67
	Commitment	●.19●*	0.037
Employer obligation	●CB	●.174	●.●57
	Turnever intention	-0.65	0.481
2 2000			

^{*}significant at the 0.05 level.

All three employee outcomes show weak correlation with employer obligation (Table 11.2). Statistically significant, weak, positive correlations exist between commitment and employer obligations. Employer obligations represent employers' fulfilment of obligations to employees. For employee and employer obligations, turnover intentions show a negative correlation, though it is not statistically significant. So, whoever deviates from their obligations, there is a possibility for higher staff turnover in the organisation. These deviations could lead to breaches of the psychological contract. We measured these relationships to analyse different types of psychological contract breaches that can occur in each contract type.

Psychological contract breaches can be found in the relational contracts of participation in decision making, and the receipt of formal performance appraisals during the past year. Around 95.8% of people disagreed on participation in decision making (Table 11.3). On the receipt of formal performance appraisals, 82.5% of people disagreed. There were no psychological contract breaches in transactional contract terms. Most of the employees commented on the contract statements; however, the statements were negative, thus most of them disagreed with these statements. Since employees do not have limited involvement in their organisation, and they do not have limited duties and responsibilities in their organisation, there are no transactional contract breaches.

Also, there were no psychological contract breaches in balanced contract terms. All the employees agreed on balanced contract statements. Since balanced contracts represent employer and employee contribution to each other's development, there were no balanced contract breaches. Moderate level contract breaches in transitional contract type were observed. Especially, breaches were found in the employee perception that the employer does not trust the employee. Employees did not all show breaches in other transitional contract statements. That means there were no contract breaches in 'difficulty to ascertain future with the employer', and 'employee cannot believe what employer tells them.'

Table 11.4 Psychological Contract Breaches in Relational Contracts

Psychological Contract	Statement	Agree (%)	Disagree (%)	Undecided (%)
	Expectation of growing in the organisation	99.16	•	●●.84
	Loyal to this organisa- tion	100	•	-
	Feeling part of a team in the organisation	84.16	15.84	-
Relational	Participation in decision making in the organisation	●4.16	95.83	-
	Receiving formal performance appraisal during the past year	17.5	82.5	-
	Employer concerning for personal welfare	61.66	38.33	-
	Not involved in the job	●●.83	99.16	-
Transactional	Doing the job just for money	•	90.83	-
	Coming to work purely to get the job done		100	-
	Job providing develop marketable skills	70.83	14.16	15
Balanced	Employer giving developmental opportunities	87.5	14.60	-
	Employer providing op- portunity to learn and develop professional ca- pabilities through on the job training	75.83	24.16	٠
	Difficult for employee to ascertain future with the employer	6.66	93.3	-
Transitional	Employee cannot believe what the employer tells them	0.03	83.33	13.33
	Employee thinks employer doesn't trust them	43.3	50	6.66

^{*}Frequencies for psychological contract breach statements are in bold type.

For transactional contracts, the statements were negative, which leads to disagreeing with the statement.

Conclusions

The aim of this study was to fird the relationships between psychological contract types and employee outcomes, in aheavymanufacturing industry context. Relational and balanced contract types showed a positive correlation with commitment. The transactional type revealed a negative correlation with ©CB, and transitional contracts had a positive relationship with turnover intention. Employee and employer outcome had a positive relationship with commitment and ©CB. Psychological contract breaches were found in the areas of relational and transitional contract types. Transactional and balanced contracts did not show any strong psychological contract breaches.

Though this was a descriptive study, these findings can be used as a guide for employers and employees to reduce conflicts which may affect a company's overall productivity. Employers can use these to minimize negative employee outcomes, such as employee turnover intentions, lack of commitment, and organisational citizenship behaviours of employees. Since the relational contracts of having performance appraisals for employees, and getting participation for decision making, can be breached, employers minimize them, to maintain healthy relationships with their employees, to reach maximum employee performances, and finally, to ensure maximum profits. The context in this firm within the heavy metal industry, is different from other management firms, thus the application of research findings may not be universal to all management organisations.

References

- Argyris, C. 1960. *Understanding Organisational Behaviour*. Homewood, IL: Dorsey Press.
- Bhat, F. 2014. "HR practices and employee turnover intentions: A correlational analysis." Global Journal for Research 3(7): \$160.
- Kraft, J. M. 2008. Psychological contracts and organisational commitment profiles: Effects of contract fulfilment and violation on employee outcomes. Unpublished Masters Dissertation. Ontario: University of Windsor.
- Lane, E. 2012. An Investigation of the psychological contract among temporary employee's in a chosen organisation. Unpublished Bachelors Dissertation. Dublin: National College of Ireland.
- Levinson, H., C. R. Price, K. J. Munden, H. J. Mandl, and C. M. Solley.

- 1962. Men, management and mental health. Boston: Harvard University Press.
- McMahon, B. 2007. rganisational commitment, relationship commitment and their association with attachment style and locus of control. Unpublished Masters dissertation. Atlanta: Georgia Institute of Technology.
- ●rgan, D.W. 1988. *●rganisational citizenship behaviour: The good soldier syndrome*. Lexington Books/DC: Heath and Com.
- Robinson, S. L., M. S. Kraatz, and D. M. Rousseau. 1994. "Changing obligations and the psychological contract A longitudinal study." *Academy of Management Journal* 37(1): 137.
- Robinson, S. L., and D. M. Rousseau. 1994. "Violating the psychological contract not the exception but the norm summary." *Journal of Organisational Behaviour* 15(3): 245.
- Robinson, S. L. 1996. "Trust and breach of the psychological contract." Administrative Science Ouarterly 41(4): 574-599.
- Rousseau, D. M. 1989. "Psychological and implied contracts in organisations." Employee Responsibilities and Rights Journal 2(2): 121-139.
- Rousseau, D. M. 1990. "New hire perceptions of their own and their employer's obligations: A study of psychological contracts." *Journal of Organisational Behaviour* 11(5): 389-400.
- Rousseau, D. M. and M. M. Greller. 1994. "Guest Editors' •verview psychological contracts and human resource practices." *Human Resource Management* 33(3): 383.
- Rousseau, D. M., and K. A. Wade-Benzoni. 1994. "Linking strategy and human resource practices: How employee and customer contracts are created." *Human Resource Management* 33(3): 463.
- Rousseau, D. M. 2000. *Psychological Contract Inventory*. Technical Report. Pittsburgh, PA: Carnegie Mellon University.

PART III:

MARKETING AND CONSUMER BEHAVIOUR

CHAPTER TWELVE

BANK INTEREST RATE REDUCTION AND ITS IMPACT ON CHANNELLING OF FUNDS IN SRI LANKA

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Abstract

This study examines to what extent the recent bank interest rate reduction in Sri Lanka is consistent with the financial market reforms carried out from 1977 onwards, and whether its expected results have been achieved. Prior to the reforms, a policy of an administered rate of interest was followed, but high inflation in this era made real interest rates negative, creating a shallow financial market, channelling even the meagre funds accumulated to sub-optimal projects in the public sector, at the cost of optimal projects elsewhere. This was identified as a major cause of the economic stagnation prior to 1977. But with the financial market reforms, bank rates were increased to make real interest rates positive, so that a deeper market would be able to charmel more funds to optimal projects. However, until the recent past, high inflation in the economy forced the Government to keep nominal interest rates high, to maintain the positive rates of real interest needed to attract more funds to banks. This, however, generated huge discontent among investors, who complain that the cost of funds is unbearable. Consequently, the Central Bank substantially reduced bank rates, starting from 2007 onwards. Although this reduction made savers unhappy, it was expected that it would be welcomed by investors. However, since these changes are not yet researched, this study, based on the McKinnon-Shaw hypothesis of financial market reforms, and carrying out a survey of a selected bank customers, examined to what extent investors have responded to the interest rate reductions. The study found that, although the recent bank interest rate reduction is not contrary to the financial reforms so far carried

out, bank lending, irrespective of investors' long agitation for such a reduction, has only moderately increased.

Keywords: Financial reforms, inflation, McKinnon-Shaw hypothesis, real interest rates, funds channelling.

Introduction

The financial market in Sri Lanka operated freely when the country was following laissez-faire economic policies, up to the end of the 1950s. However, in the ensuing period, the country was forced to follow more inward-oriented and controlled policies (Patabendige 2006). Consequently, government intervention in financial market functions also increased in this era, through giving monopoly powers to the government's commercial banks, and prohibiting the opening of new foreign bank branches:

These actions completely insulated the domestic financial sector from international financial and capital markets during this period (Athukorala and Jayasuriya 1994). Throughout this period, real interest rates remained negative, which highly reduced flowing deposits to the banking system, reducing financial intermediation. Even the scanty funds so accumulated in the banking system were channelled to sub-optimal projects in the public sector at the expense of high-return ventures in the formal private sector, resulting in reducing the efficiency of resource allocation (Lee 1987).

These dismal economic outcomes paved the way for switching over to more liberalized trade policies and financial market reforms from 1977 onwards:

These new policies contributed to converting the negative real interest rates into positive rates, deepening the financial market and mobilizing more funds to optimal projects in the private sector (Patabendige 2006). However, from commentators' points of view, now, although more than three decades have passed with these reforms, expected results could not be achieved even by the middle of the 2010 decade (Aluthge 2001).

In this regard, it has been pointed out that bank interest rates were still too high for the private sector to obtain funds, especially for long-term investment. To respond to this phenomenon, from 2007 onwards, both deposit rates for savings and interest rates for loans (speeding up from 2013), were reduced through the Central Bank's direct involvement. However, the effects of this reduction of bank rates has not yet been surveyed by researchers.

Problem Statement

Financial reforms carried out along with trade liberalization starting from 1977, largely failed to offer the lowest possible lending rates, until the recent past, while paying the best rates to attract deposits (Aluthge 2001). Since inflation remained high and volatile throughout the post-liberalization period until the recent past, the policy decision to maintain positive real interest rates has caused the nominal interest rate to rise above inflation rates, and these excessively high interest rates are believed to be the most likely cause of reduced bank lending, and the direction of the financial flow. Highlighting this phenomenon, starting from 2013 onwards, compared with 2007 levels, bank rates were reduced by more than 50% on the Central Bank's directives. However, evidence during this period shows that irrespective of the long agitation mounted by investors to reduce lending rates, the demand for funds has not equally increased in response to the recent reduction of bank interest rates. Accordingly, it seems that this trend is inconsistent with the theoretical relationships between interest rate behaviour and the demand for lending, therefore, investigation into this conflict solution is the research problem addressed by this study.

Research Objectives

Main Objective: to examine to what extent the recent bank interest rate cuts have contributed to increased bank lending and made changes to the direction of channelled funds.

Sub Objectives: 1) to identify reactions of investors (those who demand bank loans) to reduced rate of loan interest; and 2) to ascertain the areas to which bank funds have been channelled (including whether there has been more channelled to the public sector or to private sector investors).

Literature Review

Financial Market Repression in the Initial Years

Financial market repression occurs when the financial sector is not allowed to function according to the interplay of market forces (Chowdhury and Islam 1993). Since this kind of hindrance could not be seen before the 1960s, financial market repression in Sri Lanka in that era remained low (Cooray 2003).

Meanwhile, from 1960 onwards, the country had to stop following laissez-faire economic policies because of the continuous deterioration in its terms of trade. As a result, the government started manipulating, not only trade activities, but also the functioning of the financial market, mainly by following a policy of administered or controlled rates of interest, making the country's economic performance worse in the ensuing years. As such, the Bank of Ceylon and the People's Bank were expanded, and given some monopoly power as the government's commercial banks, starting from the early 1960s. The opening of new foreign bank branches and new accounts in foreign banks was prohibited. Also, the monopoly of insurance activities was given to the government's Insurance Corporation from 1964 onwards. In 1972, the government set up the National Savings Bank (NSB) for capturing savings and fixed deposits to be used for budgetary purposes. In this era, inflation remained at a higher level than interest rates, making real deposit and interest rates negative, and, as a result, the financial sector became extremely repressed, giving little room for independent financial intermediation until the mid-1970s.

For example, by 1977, the degree of financial intermediation measured by the M₂/GDP ratio had declined, or remained stagnant, in most years (Khatkhate 1982). Also, almost 60% of the total credit extended by all financial market institutions was directly absorbed for budgetary purposes, and the balance was rationed in favour of preferred institutions. Under these policies, the public sector expanded significantly, from 5.7% in 1961 to 20% of GDP by 1977 (Athukorala and Rajapatirana 1991).

In this setting, economic performance became extremely weak. For instance, the average annual growth in GDP slumped to 3%, and showed even a negative output/employment gap in certain sectors, such as the manufacturing industry. Even then, the level of unemployment remained around 20% between 1970 and 1977. With this background, the new political regime which came to power in 1977 decided to reform the economy by introducing more liberalized economic policies, and taking some steps to reform the financial market as well.

Liberalization of Financial Markets (1977 to 2007)

The following major measures were used to reform financial markets after 1977:

 As a major emphasis in financial market reforms, interest rates were increased to become more realistic (have a positive real rate of interest), to encourage financial savings; and The Finance Act 1961 was amended to make a competitive environment in financial markets based on the idea of the McKinnon-Shaw hypothesis.

After the economic and financial market reforms initiated in 1977, the banking and financial systems expanded considerably. However, with the expansion of commercial banks, and other non-banking financial institutions, in this period, the need for supervision of these institutions also arose. As such, the Banking Act No. 30 in 1988, and the Finance Companies Act No. 78 in 1988, were passed, giving the Central Bank more powers to regulate banking institutions and finance companies. Although with these reforms, many alternative financial assets were introduced for people to invest in a broader financial market, the pre-eminence of the two state commercial banks (Bank of Ceylon and People's Bank) could still not be reduced:

Thus, as a result, until the recent past, these changes failed to make the financial sector competitive and efficient enough to reduce loan interest rates charged, while paying the best deposit rates to attract savings to the banking system (Aluthge 2001).

Under these circumstances, to correct this phenomenon, bank interest rates have been drastically reduced, along with deposit rates, on government instruction, from 2007 onwards. This reduction sped up particularly after 2013, emphasizing the need for increasing investment once the inflation rate was drastically reduced.

The Need for Savings and Investment

Developing countries are said to be caught in a vicious circle of poverty. This concept starts with the notion that low income leads to low savings, and that low savings is the main cause for low investment. Low investment, in turn, creates low productivity, and low productivity again spells low income; continuing a long-lasting, vicious circle of poverty, which is believed to be difficult to break through small efforts, or inadequate investment, made here and there in the economy. Economists such as Kindleberger, Nurkse, Rosenstein-Rodan, and Rostow, have suggested that a high level of investment as a big push, or critical minimum effort for take-off, is a prerequisite to break the vicious circle of poverty to acquire a high growth for these countries, as cited in Thirlwall (2003). However, there has been a continuously huge resource gap between domestic savings and domestic investment in Sri Lanka, which has increased from an annual average of 7.5% of GDP in 2001-2005 to 11.2% of GDP in 2006-2012. In this setting, Sri

Lanka's current investment ratio is around 30% of GDP, but it has been estimated that, to acquire a growth rate of 8-10%, the country requires an annual gross rate of investment equivalent to 35% of GDP (Indraratine 2013).

In this case, the financial markets can play a big role in accumulating savings in banks and channelling funds to the more dynamic sectors of the economy, if it is competitive. However, if the financial market is repressed and shallow, as the MacKinnon-Shaw hypothesis emphasizes, lower amounts of funds come to the banking sector, even that lesser amount is rationed and channelled to sub-optimal projects in the public sector, and as a result, economic growth becomes restricted.

The McKinnon-Shaw Hypothesis

According to the McKinnon-Shaw hypothesis, what is important is not the nominal deposit rate, but the real deposit rate, in promoting savings, and thereby increasing investment. Real interest or deposit rate can be defined as follows: Real rate of interest or real rate of deposit = nominal rate of interest or nominal rate of deposit -rate of inflation. According to this relationship, if inflation is higher and exceeds the nominal interest or deposit rate, the real interest or deposit rate becomes negative. However, negative real deposit rates penalize savers and encourage the public to hold a larger proportion of their savings in non-financial assets, such as real estate, consumer durables, precious metals, gems, artworks, and, wherever possible, in foreign currency (Agarwala 1983).

These trends reduce the money lost by the banking sector and lower the supply of loanable funds, and thus, the financial sector becomes shallow, requiring credit to be rationed. In this setting, the McKinnon-Shaw hypothesis highlights the role of the banking sector in attracting more funds through financial sector reforms, and channelling funds so accumulated (investment flow) to the optimal projects of the private sector, for acquiring a higher growth. As such, now, hundreds of empirical studies have been carried out examining the different aspects of financial market situations in various countries. Of these, Athukorala and Jayasuriya (1994), Authukorala and Rajapathirana (1991), Aluthge (2001), Cooray (2003), Edirisuriya (2007), Abiad, Detragiache, and Tressel (2008), and Seelanatha (2010), provide evidence that there is a positive relationship between real deposit rates and the rate of saving, creating a financial deepening and improvements of resources distribution as an important component of the programme of structural reform in Sri Lanka.

However, Aluthge (2001), and some other critics, suggest that the Sri Lankan financial market reforms during the last three decades since 1977 failed to reduce the interest rate spread of banks, or to encourage them to offer the lowest possible lending rates while paying the best deposit rates to attract deposits. In this setting, from 2007 onwards, a trend of reducing bank rates through government intervention can be witnessed, especially when this process sped up from the beginning of 2013. Accordingly, compared with the 2007 level, the bank rate reduction was more than 50% by 2013. In this respect, the government's argument is that this reduction would lead to an increase in the demand for bank loans (investment), and thereby increase economic growth, although some commentators are of the view that this reduction has been done solely to mitigate the government's domestic debt burden. Also, anecdotal evidence shows that, even after this reduction, a considerable response from both investors and depositors was still not seen. Therefore, this study attempts to identify the impacts of bank rate reductions on funds demand and channelling, based on the guidance highlighted by the McKinnon-Shaw hypothesis of financial market reforms.

Methodology

A mixed research approach of inductive and deductive reasoning was followed in this study.

Conceptual Framework

Considering the literature review, particularly on the McKinnon-Shaw hypothesis, and the theoretical framework on financial market reforms in Sri Lanka and other countries, the following conceptual framework is developed for this study (Figure 1).

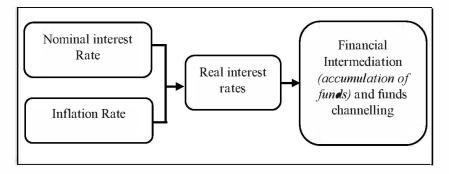


Figure 12.1 Conceptual Framework Source: Developed by the author Based on the McKinnon - Shaw Hypothesis.

Data Presentation, Testing Hypotheses and Analysis

For testing the first hypothesis, the data were mainly obtained by primary data collection from the selected sample of bank customers in Kurunegela Township (Table 12.1). The second hypothesis was tested based totally on secondary data obtained from the annual Central Bank Reports. The snowball method of sampling was used, it helped to contact respondents through known persons, and obtained the relevant data by administering the questionnaire developed for the study. Accordingly, a 68% response rate was obtained from the 100 persons in the sample. The study period mainly covers the financial market situation from 2007 to 2014.

 H_0 - The recent bank interest rate reduction has not significantly increased bank lending.

 H_0 - The recent bank interest rate reduction has not significantly increased funds channelling in favour of the private sector.

The reliability test on the questionnaire was carried out using the SPSS software programme and the Cronbach's Alpha value was 0.716.

Table 12.1 Summary of the Calculated Statistics

Statistics - Loan Rates									
		Opinion on Government Policy	Opinion on Future Business Prospects	Opinion on the Interest rate of the loan	Opinion on Tax Con- cession	Opinion on Infla- tion	Opinion on Competition		
N	Valid	68	68	68	68	68	68		
	Missing	•	•	•	•	•	•		
Mea	an	3.76	3.85	4.21	3.38	2.97	3.31		
Med	dian	4.00	4.00	4.00	3.50	3.00	3.00		
Mo	de	4	4	4	4	3	4		
Std.	. Deviation	.979	.935	.636	1.008	.828	.868		

Results and Discussion

The results of testing the first hypothesis are given in Table 12.2. Table 12.2 shows that the p-value is 0.000, and since p < 0.05 at the 95% confidence level, H0 is rejected, and the alternative hypothesis is accepted. That means recent bank lending rate reductions have increased credit demand, or increased the bank loans given. This behaviour is somewhat supported by the trend line of macro level secondary data presented in Figure 12.2.

Table 12. 2 One Sample t - Test

		Test Valne = 3.58							
	t	df	Sig. (2- tailed)	Mean Dif- ference	terval of	fidence In- the Differ- ice			
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Lower	Upper			
Opinion on the Interest rates of the loan	8.113	67	.000	.626	.47	.78			

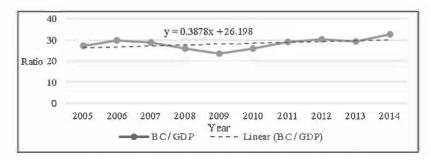


Figure 12.1 Graphical Presentation of BC/GDP Ratios for the Period 2005-2014

The slope of the bank credit (CD)/GDP trend line shows a small positive number (0.3878), indicating that, during the study period, the issuing of bank credits has increased, but only slowly (Figure 12.2). The second hypothesis is tested using the macro level secondary data available in the Central Bank's annual reports, rather than using a statistical testing method. The relevant data are graphically shown, along with the estimated trend equations to show the evidence to support rejection of the second hypothesis, in Figure 12.3. Gradients of all the trend lines in the channelling of credits show

positive values, especially in the highest gradient value for the private sector, indicating that there has been a large funds allocation to the private sector. As a result, the H2 null hypothesis is rejected, and the alternative hypothesis; 'bank interest rates reduction has significantly increased funds channelling in favour of the private sector', is accepted.

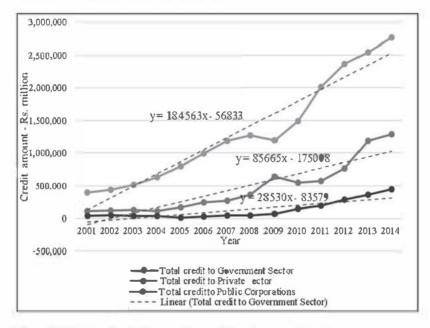


Figure 12.3: Total Credit Allocated to the Major Sectors of the Economy

Conclusions

The overall conclusion of the study is that recent bank interest rate reductions have only moderately contributed to increase bank lending. Investors, in addition to seeing the lower interest rates (giving mean value of 4.21 to interest rates), have given considerable weight to the factors of future business prospects (mean value of 3.85), and the government policy (mean value of 3.76) in making decisions for borrowing money for investment. Since these latter reasons are generally not in favour of increasing investment, demand for loans has not responded to the reduction in bank loan interest rates. Also, the study found that the highest amount of funds has been channelled to private sector businesses which show signs of acquiring higher growth in the future.

References

- Abiad, A., E. Detragiache, and T. Tressel. 2008. "A New Database of Financial Reforms." *IMF Working Paper* 8(266).
- Agarwala, R. 1983. "Price Distortions and Developing Countries." World Bank Staff Working Papers, 575.
- Aluthge, C. 2001. "Financial Liberalization and Efficiency of the Financial System: The Case of Sri Lanka." Sri Lanka Economic Journal 2(1): 1-34.
- Athukorala, P., and S. Jayasuriya. 1994. Macroeconomic Policies, Crisis and Growth in Sri Lanka 1960–90. Washington DC: World Bank.
- Athukorala, P., and S. Rajapatirana. 1991. "The domestic financial market and the trade liberalization outcome: the evidence from Sri Lanka." World Development 21(7): 1191-1203.
- Central Bank of Sri Lanka. (Various) Annual Reports. Colombo: GoSL.
- Chowdhury, A., and I. Islam. 1993. The Newly Industrializing Economies of East Asia. London: Routledge.
- Cooray, A. 2003. Financial Reforms: The Sri Lankan experience. Sri Lanka: A Stamford Lake Publication.
- Edirisuriya, P. 2007. "Effects of Financial Sector Reforms in Sri Lanka: Evidence from the Banking Sector." Asia Pacific Journal of Finance and Banking Research 1(1): 45-63.
- Indrarathne, A. D. S. 2013. Economic Performance in the Recent Past, Financial Review. Sri Lanka: The Island Newspaper.
- Karunatilake, H. N. S. 1987. *The Economy of Sri Lanka*. Colombo: Centre for Demographic and Socio-Economic Studies.
- Khatkhate, D. 1982. "Anatomy of Financial Retardation in a less Developed country: The case of Sri Lanka 1951-76." World Development 10(9): \$29-840.
- McKinnon, R. I. 1973. Money and Capital in Economic Development. Washington, D.C: Brooking Institution.
- Patabendige, A. J. 2006. Industrial Policies and Employment Generation in Sri Lanka. Sri Lanka: E.S.S. Advantos (Pvt.) Ltd.
- Seelanatha, L. 2010. "Market structure, efficient and performance of banking industry in Sri Lanka." Banks and Bank Systems 5(1): 20-31.
- Shaw, E. S. 1973. Financial Deepening in Economic Development. New York: Oxford University Press.
- Thirlwall, A. P. 2003. Growth and Development with Special Reference to Developing Economies. London: Macmillan.

CHAPTER THIRTEEN

FACTORS AFFECTING THE CROSS SELLING OF DWELLING HOUSE AND PERSONAL ACCI-DENT INSURANCE TO PRIVATE MOTOR CAR POLICYHOLDERS IN SRI LANKA

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Abstract

The aim of this study was to examine the cross-selling viability of private motor car insurance in dwelling house and personal accident insurance policies in the Sri Lankan non-life insurance industry. There were 15 general insurance companies in Sri Lanka after the segregation regulations were implemented, while three companies are still operating as composite insurers. The industry accounts for 55.3 billion rupees of growth-written premiums, and it grew by 3.7% in general insurance terms in 2014. The Insurance Board of Sri Lanka plarmed to strengthen the non-viable insurance companies by segregating the life and non-life businesses from 2015. All the general insurance companies' portfolios are dominated by motor insurance, which is the highest loss line class among general product classes (76.5%). Cross-selling non-motor products to motor insurance policies became an essential requirement for general insurance companies, because it improves the combined performance ratio. This study was carried out using a range of qualitative and quantitative methods consisting of questionnaires, and randomly selecting 250 insurance advisors for the survey. Additionally, indepth interviews with 25 senior managers from 18 insurance companies provided secondary data. The study revealed that cross-selling direct antecedents, such as cross-selling self-efficacy, motivation, and role clarity, were valid predictors of cross-selling sales performance, and that there was a positive impact from those variables. The study shows that managers also perceive that cross-selling is an ideal strategy for developing new business in the general insurance industry, to face future challenges. The insurance industry should initiate the introduction of non-motor insurance products into sales advisor job inductions using structured training programmes. Further, a proper reward system, with a valued incentive system, must be implemented with sales advisors for a better development of the general insurance industry.

Keywords: Cross selling, self-efficacy, role clarity, non-life insurance.

Introduction

The stiff competition in the modern business environment has resulted in greater need for the service industry to build closer relationships with customers, and be highly concerned with customer retention strategies. The reason for concern with retention strategy is that existing customers are the best customers to generate new business, because it is five to ten times more cost effective to retain an existing customer than to attract a new prospect for an organisation (Bansal and Bhatia 2014). To develop a strong customer relationship, cross-selling is one of the most effective tools in customer relationship management. Cross-selling is the practice of selling an additional product or service to an existing customer. This differs from industry to industry. Among the service industries, cross-selling is most important for the banking and insurance industry (Bansal and Bhatia 2014), moreover Zboja and James (2006) reveal that insurance companies have been adopting cross-selling strategies faster than the banks.

Insurance is a 'people business', which is entirely dependent on its customer relationships. The insurance industry was evident in Sri Lanka through the Control of Insurance Act No.25 (1962), which was repealed by the Regulation of Insurance Industry Act No.43 (2000). The regulator has plarmed to strengthen nonviable insurance companies by implementing international practices (Nair, Vivek, and Acharya 2014), therefore regulators amended the law to segregate life and non-life business from 2015 (IBSL 2014).

Penetration by the general insurance industry into the market in Sri Lanka is very low (Weeralingam and Illangasekara 2011), 0.61% in 2013, compared to 0.66% in 2012. This is very low against the average in the

Asian region (BSL 2014). Moreover, compared to 2010, general insurance gross written premiums (GWPs) dramatically decreased in 2014. Presently, the main problem of this industry is that most of the general insurers are surviving mainly on motor insurance business, but this is a loss line class in the industry. According to the BSL report, the total GWP generated by insurance companies engaged in general insurance business amounted to Rs. 55,262 million in 2014 compared to Rs. 53,311 million in 2013, up by 3.7%. This lower growth rate was mainly due to slow growth experienced in the marine, miscellaneous, and motor insurance businesses, and the negative growth recorded in the fire insurance business (BSL 2014, 47). This has affected the profit margin of the companies as well as creating a long-run survival problem for general insurance players in the market.

In Sri Lanka there has been little research on insurance cross-selling. This is especially true for literature sources on the general insurance industry regarding this field. Many general insurance insurers have stated that their company's non-motor cross selling projects fail to achieve their objectives, but they do not know the exact reason for these failures. Zaboja and James (2006) suggest that the reason many cross-selling initiatives fail is not the strategy behind them, but rather its implementation. Thus, insurers need to find key factors for their cross-selling failures. Malms (2014) said that the reason that so many unanswered questions are left regarding the cross-selling concept is because there are few researchers studying cross-selling.

The author selected individual line products from non-motor class insurers, such as dwelling house policies as a fire insurance product, and personal insurance policies classified under the miscellaneous insurance class. The products are selected for several reasons. According to product nature and technicality, retail and profit line products were selected for this study. In Sri Lanka, almost all vehicle owners have motor insurance, because a third-party insurance policy is mandatory in law. Therefore, there is room for cross-selling non-motor products to existing motor customers to increase industry sales. Further, the researcher identified that there is a significant gap in non-motor cross-selling performance in the general insurance industry. The main objective of this study was, therefore, to find the key factors affecting the cross-selling sales performance of dwelling house and personal accident policies for private motor car insurance policy holders in the Sri Lankan general insurance industry.

Methodology

The study was carried out using a range of qualitative and quantitative methods, consisting of questionnaires delivered to a randomly selected 250 insurance advisors, and in-depth interviews with 25 senior managers from 18 insurance companies as primary data. Other data were obtained through reports and other documents. The concepts have been defined according to the literature review, and the conceptual model has been adapted from prior studies. The research used this model to test the cross-selling sales performance (dependent variable) and its direct antecedents; self-efficacy, motivation, and role clarity (the independent variables) in the Sri Lankan general insurance industry (Figure 13.1).

Josias (2005) suggests that the sample size should be 30% of the population, so the study adopted 250 as the size of the sample for the current study. This was supported by in-depth interviews with 25 senior managers from 18 insurance companies. The study revealed that cross-selling direct antecedents, namely cross-selling self-efficacy, motivation, and role clarity, were valid predictors of cross-selling sales performance, and that there was a positive impact from those variables.

The questionnaire included a total number of 31 close-ended questions, and was designed to measure the main variables of this study, as noted above. The questionnaire had two parts; part I consisted of four (01-04) questions regarding general information, and part II consisted of 27 (05-31) questions relating to both independent and dependent variables. This was further subdivided into; part (II-1) of six questions (5-10), relating to cross selling self-efficacy, part (II-2) of nine questions (11-19) relating to crossselling motivation, part (II-3) of nine questions (20-28) relating to the clarity of the cross-selling role, and part (II-4) of three questions (29-31) relating to cross-selling performance. The questions in part II were designed using a five and seven-point Likert scale (Schmitz, Lee, and Lilien 2014). The Likert scale is designed to examine how strongly subjects agree or disagree with statements, on a pre-set continuum (Sekaran 2010). This well-structured questionnaire was developed by past researchers (Krishnan, Netemeyer, and Boles 2002, Sujan, Weitz, and Kumar 1994, Bartkus et al. 1994, Chonko, Howell, and Bellenger 1986, Zboja and James 2006, Schmitz et al. 2014).

According to Sekeran (2010), qualitative data analysis consists of three steps. The first step is data reduction, which is the process of selecting, coding and categorizing the data. Secondly, data display refers to presenting the data by selecting quotes, a matrix, a graph, or a chart, that displays the patterns in the data. The quantitative data were analysed in this study using

descriptive and statistical techniques (mean, median, and standard deviation), and correlation between variables was tested by regression analysis, conducted by utilizing SPSS software 16.0.

Data Analysis

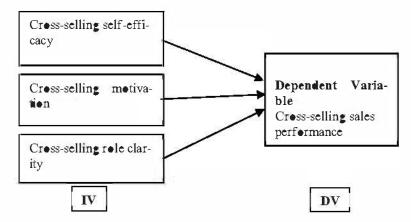


Figure 13.1 Conceptual Framework of the Study Source: Adapted from Zboja and James (2006, 6).

Concepts

Self-efficacy

Self-efficacy reflects how a person feels, thinks, and motivates themselves to behave. Personal behaviour mainly depends on self-efficacy expectation (Bandura 1977). "Self-efficacy beliefs contribute significantly to the level and quality of human functioning" (Bandura 1993). Wang and Netemeyer (2002) point out that learning gives more knowledge and judgmental capacity for a sales person through learning self-efficacy.

Metivation

Petcharak (2002) defined motivation as: "The result of processes, internal or external, to the individual, that arouse enthusiasm and persistence to pursue a certain course of action." Motivation influences a person's behaviour (Ball 2013). Motivation is a major factor which directly affects a sales person's sales performance (Rizal et al. 2014). Petcharak (2002) suggests that,

in an organisation, motivation can be affected in two ways - intrinsic motivation and extrinsic motivation - which improve a direct sales force's work commitment and job satisfaction (Petcharak 2002). Extrinsic motivation mainly influences sales performance (Teck-Hong and Waheed 2011).

Role Clarity

Role clarity has been defined as: "The lack of role ambiguity and role conflict." According to this definition, role conflict is defined as "a condition of incompatible roles set for a person," and role ambiguity as "lack of clarity in the set of roles" (Nandal and Krishnan 2000, 234). The employees who know what their job role is, and if they perform this in a discretionary way, it will increase satisfaction in their job (Chebet and Kollias 2000).

Sales Performance

Brown and Peterson (1994) defined the degree of sales performance as dependent on a sales person's hard work. The dependent variable of this study is defined as sales person's knowledge, confidence level, motivation, and skill, as the important factors which affect sales performance and the sales person's personality (Kazen 2013). Similarly, key performance measures are skills, adaption of product portfolio, and selling skills of the sales person (Zaboja and James 2006).

Results and Discussion

This section presents the findings of the study generated through the data analysis. For testing the internal consistency of the instruments, Cronbach's coefficient alpha was used. All the alpha values were above the rule of thumb of **0.7** for a reliable scale; hence Table 13.1 shows that all the dimensions are reliable.

Table 13.1 Reliability Statistics

Cronbach's Alpha	Number of Items		
0.865	27		

KM• is a test which measures the adequacy of the index in which examines the factor appropriateness. A value of •.725 reveals the generalizability of the sample to the population.

Bivariate Analysis

The results reveal the direction, strength, and significance of the bivariate relationship among all the variables. The relationship between self-efficacy and sales performance showed a strong positive correlation and significance at the 95% level (r=0.716, p=0.000). The highest positive relationship was between motivation and sales performance; the correlation r=0.835 and p=0.000 at 95% significance level. A moderate positive relationship is indicated between role clarity and sales performance, since r=0.416 and p=0.000.

Multiple Regression Analysis

The final model of stepwise regression is indicated in Table 13.2.

Table 13.2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	0.879ª	0.773	0.769	0.26413	1.741

a. Predictors: (constant), Cross-selling role clarity; Cross-selling motivation; Cross-selling self-efficacy.

b. Dependent variable: Cross-selling sales performance.

Table 13. 3 Coefficient Table

Model	Unstandardized Coef- ficients		Standardized Co- efficients	t Sig	Sig.	Collinearity Sta	Statistics	
	В	Std. Error	Beta		Sig.	Tolerance	VIF	
1 (Constant)	0.235	●.113		2.086	0.000			
	●.612	0.044	●.617	13.827	0.000	0.594	1.683	
$M \bullet T$								
	0.284	0.046	●.282	6.245	0.000	0.58	1.729	
SE								
	●.128	0.035	●.134	3.639	0.000	●.87	1.147	
RC								

a. Dependent variable: Cross-selling sales performance.

The regression equation was as follows:

 $y_{c/s \text{ sales performance}} = 0.235 + 0.612_{(c/s \text{ motivation})} + 0.284_{(c/s \text{ Self efficacy})} + 0.128_{(c/s \text{ role clarity})} + u.$

The Factors Affecting Cross-selling Performance in the Sri Lankan General Insurance Industry

The following themes emerged from these analyses:

The State of the Insurance Industry in Sri Lanka

Twelve managers explained this. The general insurance industry recorded low growth in 2014, and this slow growth was seen in the marine, miscellaneous, motor, and fire insurance. The main issue insurers faced was the challenge to boost underwriting discipline among companies. The general insurance industry saw constraints on low penetration, high price competition among insurance companies, lack of awareness about insurance and insurance benefits, and low disposable income in the country (IBSL 2014). Manager A explained:

"The general insurance market is very difficult to promote because of the price competition among insurers."

Additionally, Manager B said:

"Tariffs which regulated motor, fire, and workmen's compensation insurance were withdrawn from 1 January 2002, 2005, 2007 respectively, but the market does not have a discipline of de-tariffing. Insurers face bad competition because of ineffective underwriting rates."

Furthermore, he mentioned that regulators should ensure strict underwriting discipline amongst companies.

Customer Awareness

This theme was suggested by ten managers. As pointed out by Manager B, "Sri Lankan citizens' mentality makes it difficult to cross-sell, because they do not understand the necessity of insurance."

Manager J's view was that:

"Customers have not realized the importance of insurance yet, because customers still don't know how to evaluate their risk profile."

Manager G said: "Practically, people know about motor products more than non-motor, because the motor policy is mandatory in the Motor Vehicle

Act." In addition, Manager E said that: "Customers are not willing to buy insurance because they have lost trust in insurance, because some agents' malpractices have ruined the market." Manager C explained that some highend customers do not hesitate to spend on entertainment, but they hesitate to buy insurance products. Manager J also mentioned that customers prioritize insurance needs last, because of their lack of knowledge of insurance. Thus, lack of awareness of insurance is a main factor which affects the cross-selling performance.

Sales Advisors' Lack of Interest in Non-motor Products

Thirteen managers demonstrated this theme from different angles. Manager C expressed the view that the sales advisors' lack of interest in non-motor products is the main reason weakening effective cross-selling performance. Through interviews and discussions with managers and senior sales advisors, the researcher found that there is definitely a problem with sales advisors' interest in non-motor products.

Technical Knowledge Gap

Compared to the motor products, non-motor policies are technical, and contain difficult-to-understand policy wordings. Manger F said non-motor policy warranties, condition, extension, excess, and perils are complex. Customers don't even know the meaning of these words, because most sales advisors do not have the capacity to educate them.

Lower Returns

Undercutting by insurers is a problem that reflects on non-motor products, such as dwelling house policy and personal accident policy rates. Manager I said:

"A sales advisor can earn an 85,000/= premium, through only two vehicles, but to fulfil this by non-motor sales, he has to sell more than 20 non-motor policies. Hence, sales advisors have a low interest in cross-selling non-motor products, because of the low return."

Fear of Cross-selling

All sales advisors try to build up a strong relationship with their motor customers, hence they feel cross-selling non-motor products will break this.

Cross-selling Training

Training is an important factor to improve cross-selling, but it impacts on a sales person's motivation and self-efficacy (Zaboja and James 2006). Twenty-two managers commented on this factor. Manager C said: "We

have to educate sales advisors about cross-selling." Managers J and K also focused on training, and said it should be practical. Without structured cross-selling a training programme company will fail on cross-selling. Hence, training is extremely important to improve cross-selling.

Motivation

The significance of motivation for improving cross-selling performance was emphasized by 18 managers. Manager G's viewpoint is indicative: "There is a huge gap in cross-selling motivation factors in the industry." Manager E agreed that sales distribution managements were not aware that cross-selling will improve a sales advisor's income level.

Conclusions

The overall objective of this study was to understand non-motor product cross-selling viability in the general insurance industry. Using correlation analysis, all three independent variables identified by this study were shown to have a significant positive relationship with cross-selling sales performance. The regression analysis evidence on all three independent variables in this study showed they have a strong relationship (87.9%) with cross-selling sales performance, and a strong relationship (77%) with the dependent variable. The key determinants of the cross-selling performance of the Sri Lankan general insurance industry is affected by customer awareness, sales advisors' lack of interest in non-motor products, training, and motivation. Therefore, it can be concluded that the study achieved its objectives, and is a most essential initial step in the exploration of these questions.

References

- Bandura, A. 1977. "Self-efficacy: toward a unifying theory of behavioural change." *Psychological Review* 84(2): 191.
- Bandura, A. 1993. "Perceived self-efficacy in cognitive development and functioning." *Educational Psychologist* 28(2): 117-148.
- Bansal, S., and B. S. Bhatia. 2014. "Cross selling strategies and employees stress: a study of commercial banks." *Journal of Business Management and Social Sciences Research* 3(9): 15-24.
- Brown, S. P., and R. A. Peterson. 1994. "The effect of effort on sales performance and job satisfaction." *The Journal of Marketing*: 70-80.
- Chebat, J. C., and P. Kllias. 2000. "The impact of empowerment on customer contact employees' roles in service organisations." *Journal of Service Research* 3(1): 66-81.

- Insurance Board of Sri Lanka. 2014. Annual Report 2014. http://www.ibsl.gov.lk/ (accessed 17 August).
- Kazén, M., J. Kuhl, S. Boermans, and S. L. Koole. 2013. "Excelling at selling: the charming personality style predicts occupational activities, sales performance, and persuasive competence." *Psychology Journal* 2(2): 86-100.
- Nair, M., S. Vivek, and V. Acharya. 2014. Sri Lanka 2013 Insurance Industry Report. India: Insure Risk Management and Insurance Broking Services Pvt. Ltd.
- Nandal, V., and V. R. Krishnan. 2000. "Charismatic leadership and self-efficacy: importance of role clarity." *Management and Labour Studies* 25(4): 231-243.
- Petcharak, P. 2002. The Assessment of Motivation in Saint Paul Hotel Employees. Unpublished PhD Thesis. Menomonie, Wisconsin: University of Wisconsin-Stout.
- Rizal, M., M. S. Idrus, and M. R. Djumahir. 2014. "Effect of Compensation on Motivation, Organisational Commitment and Employee Performance (Studies in Local Revenue Management in Kendari City)." *International Journal of Business and Management Invention* 3(2): 64-79.
- Sekaran, U. 2006. Research Methods for Business: A Skill Building Approach. New York: John Wiley and Sons.
- Sekaran, U. 2010. Research Methods for Business: a skill building approach. New York: John Wiley and Sons.
- Tan, T. H., and A. Waheed. 2011. "Herzberg's Motivation-Hygiene Theory and Job Satisfaction in the Malaysian Retail Sector: The Mediating Effect of Love of Money." *Asian Academy of Management Journal* 16(1): 73-94.
- Wang, G., and R. G. Netemyer. 2002. "The Effects of Job Autonomy, Customer Demandingness, and Trait Competitiveness on Salesperson Learning, Self-Efficacy, and Performance." Journal of the Academy of Marketing Science 30(3): 217-228.
- Weeralingam, K., and P. Illangasekera. 2011. Insurance Sector Update. Colombo: Ram Rating Lanka Ltd.

CHAPTER FOURTEEN

CONSUMER WILLINGNESS TO PAY FOR ORGANIC FOOD IN COLOMBO MUNICIPAL COUNCIL: EVIDENCE FROM CONJOINT ANALYSIS

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Abstract

The environmental impacts of intensive agricultural practices, and the health risks associated with pesticide residues, have increased immensely all around the world. In this context, organic farming is gaining recognition as an environmentally friendly production system, and it attracts researchers interested in analysing consumer preferences in purchasing organic products. This study has the broad objective to identify consumer willingness to pay (WTP) for organic food. The specific objectives are: (i) to determine consumer awareness levels; (ii) to determine the level of WTP; and (iii) to determine the most preferred attribute which affects higher WTP. One hundred and twenty-four completed questionnaires were received, and 109 respondents were involved in a choice-card experiment in this study. The survey included questions on demographic characteristics, knowledge about organic products, and attitudes towards health hazards and environmental degradation due to agrochemical application. Three different product attrib-

utes (cultivation method, availability of certification, and prime price percentage), and their levels, were used for the development of 13 choice-cards, according to an orthogonal factorial design. The results indicate that \$1% of respondents have an awareness of the organic food concept. In average, respondents had negative attitudes towards non-organic food. The results suggest \$5% of the respondents prefer to consume organic food, and on average, they were willing to pay 34% more for organic products. The average importance percentages indicate that the most important features are those indicating certification (44.5%), cultivation method (34%), and prime price (21.3%). According to the three models (Maximum Utility, Bradley-Terry-Luce, and Logit), the most suitable product was organically-grown fresh produce, with international certification and 30% prime price in the Colombo Municipal Council (CMC). The finding of the study will be helpful to producers and sellers in assessing the market potential for organic food in the CMC.

Keywords: willingness-to-pay; consumer awareness; organic food; conjoint analysis.

Introduction

Public concern over environmental quality and health problems has steadily grown in recent years, with an increased focus on agriculture as the primary source of environmental and health problems in Sri Lanka and around the world. Production of organic food products is a remedy for the prevention of numerous health hazards caused by conventionally produced food products. The global market has experienced an increased growth in organic foods (Sahota 2015).

Organic farming is faced with the potential for expansion to satisfy growing environmental and health concerns. One interesting feature of organic products is the 'prime price' they command in the market (Aryal et al. 2009, Govindasamy et al. 2001, Govindasamy et al. 1999). Various consumer studies have identified some of the key factors associated with consumer buying of organic products. These include income, education, health, nutrition concerns, food safety concerns, environmental friendliness, and so on (Haghiri et al. 2009). Consumers create their own perceptions or expectations about products and their qualities, and make purchasing decisions accordingly. Thus, it is important to understand how consumers perceive the quality of a product. Organic products must have some perceived benefits for those who are willing to pay higher prices. Consumers who do not buy organic products either have different perceptions, or their perceived

benefit from organic is not worth the price premium (Cooper and Loomis 1992). So, there should be closer attention to, and research on, consumer demand for organic products. This study's broad objective is therefore to identify the consumer WTP for organic food. The specific objectives are: (i) to determine the consumer awareness level; (ii) to determine the level of WTP; and (iii) to determine the most preferred attribute of higher WTP.

This paper is organized as follows. The first section presents the introduction to the study. The next section provides the essence of the literature related to the research, followed by the research method adopted in the next section. The statistical analyses of the primary data are discussed in the fourth section. Finally, conclusions about the research are discussed.

Literature Review

●rganic agriculture is a holistic approach to sustainable production, implementing environmental protection measures, and considering social standards (Rigby and Cáceres 2001). ●rganic agriculture has been defined by the International Federation of ●rganic Agriculture Movement as:

"a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity, and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation, and science, to benefit the shared environment, and promote fair relationships and a good quality of life for all involved" (FOAM 2016).

The US Department of Agriculture (USDA) defines organic farming thus: "Organic agriculture produces products using methods that preserve the environment and avoid most synthetic materials, such as pesticides and antibiotics" (USDA 2016).

The domestic market for organic agriculture products mainly consists of the urban and educated communities, and it is a growing market (NOCU 2015). Supermarkets are the most dominant market distribution method for organic products. All four main supermarket chains in Sri Lanka are in favour of promoting organic food. Two chains have already started their operation with organic foods (NOCU 2015). SriCert is the major organisation promoting local production and processing among the supermarket chains, and was established in 2007 to certify organic products and processes.

Willingness to Pay for Organic Food

Organic produce is often characterized by a lack of proper retail venues, supply shortages, inconsistency in product certification, poor quality product, and so on. Food availability and seasonality have also influenced marketing activities, and make it difficult to establish appropriate retail outlets. On the production side, high costs, especially labour costs, and the difficulty of shifting from conventional to organic farming are also limiting factors (Green 2010).

Though consumers search for more diverse, higher quality, and healthier food products, organic products face problems related to consumer product acceptability, new product uncertainty, high prices, and deficiencies in distribution channels (Alphonce and Alfnes 2012). In the literature, one can find a large body of research regarding consumers' WTP for organic food (Owusu and Anifori 2013, Aryal et al. 2009, Batte et al. 2007, Krystallis and Chryssohoidis 2005, Govindasamy and Italia 1999), regarding environmental friendly food production (Ogbeide et al. 2014, Royne et al. 2011, Highiri et al. 2009, Vanit and Schmidt 2004), and high quality or safety in food production (Alphonce et al. 2014, Owusu et al. 2014, Alphonce and Alfnes 2012, Xu and Wu 2010, Batte et al. 2007, Shin et al. 1992).

The Contingent Valuation Method (CVM) is the most appropriate method to assess consumers WTP (Cooper and Loomis 1992; Cameron 1991). CVM is primarily used for the evaluation of consumer preference for non-market goods (un-priced natural resources), it is also useful because the organic food market is a hypothetical market in the study area.

The Conjoint Choice Method

Conjoint Analysis (CA) is a multivariate method used to find the preferences of respondents for certain products and services (Hair et al. 1999), and it is important to businesses that are evaluating new product or service attributes (Green and Srinivasan 1978). CA is consistent with Lancaster's theory of utility maximization, where consumers demand attributes from a given product (Lancaster 1971, Lusk and Hudson 2004). The CA method is based on the idea that consumers assess the value of a product by combining the different amounts of value provided by each attribute. Thus, it is possible to elicit consumer preferences regarding the attributes of modified food characteristics, in this case organic products, among others. The ranking elicitation technique (respondents rank alternative bundles from least favourite to most favourite), was used in this study. Ranking the responses

provides more information than a single choice elicitation technique. A rating scale requires respondents to make judgments about the level of utility associated with each profile, and assumes that this judgment directly transfers utility to the rating scale (Champ et al. 2003). One limitation of a rating scale is that it does not provide information about choice. CA makes the assumptions that the choice behavior of consumers is governed by the maximization of utility (Jaeger et al. 2001). To determine the total utility, the additive model (Green and Srinivasan 1978, Steenkamp 1987) is commonly used.

Research Method

This research was carried out in the Colombo Municipal Council (CMC) area. A deductive approach with a survey strategy was used. Surveys are efficient because many variables can be measured without substantially increasing the time or cost. Interviewer-administrated questionnaires and 13 choice-cards were developed for the study. Closed questions and short answer open-ended questions were included.

For choice-card development, three attributes were selected, these were the cultivation method, the availability of certification, and the prime price percentage (how much you are willing to pay). In addition, we provide levels for each attribute. The 'cultivation method' attribute features two levels; cultivated organically or non-organically (Qingbin et al. 2010). The 'availability of certification' attribute features three levels; no certification, domestic certification, and international certification. Many researchers (Hirogaki 2013, Onozaka and McFadden 2011, Qingbin et al. 2010, Krystallis and Ness 2005) tested this attribute according to their country's regulations. Some of them used country of origin certification, or ISO certification and HACCP certification (Krystallis and Ness 2005). Others used international certification (USDA Organic), certified fair trade, or carbon footprint (Onozaka and McFadden 2011).

In the Sri Lankan market, there are no organic products to buy for respondents. So, we selected prime price percentage. The 'prime price' attribute levels denote product prime price; **0%** prime price, 15% prime price, and **30%** prime price (Hirogaki **2013**). That means how much, in percentage terms, a respondent is willing to pay in addition to the original price for the product. If the product price is Rs.100 and the consumer preference goes to **30%** prime price, he/she is willing to pay Rs.130 for that product. A respondent typically received 13 choice sets, depending on the number of factors and levels in the design. Each respondent ranked the product, referring to the most-preferred buying profile and the least-preferred buying profile.

Respondents were also questioned about their lifestyle, habits, demographic information, and attitudes, regarding functional food and food choices. Table 14.1 provides a sample of the results from this discrete choice experiment.

Attribute Level Description Organically Cultivated organically Cultivation Cultivated non-organimethod Non-organically cally There is no certification No certification shown to producer There is domestic certifi-Availability of Domestic certification certification cation for product International certifica-There is international certification for product

Same as ordinary price

Additional 15% paid

Additional 30% paid

Table 14.1 Attribute and Level for Conjoint Analysis

0% prime price

15% prime price

30% prime price

Prime price per-

centage

In total, 150 individuals were approached, and 124 questionnaires were completed, yielding a response rate of \$2.6%. For the choice-card ranking section, 109 respondents agreed to complete the task. The choice-card response rate was 72.6%. Respondents were selected randomly, by going to their houses and involving them according to their willingness to answer the questionnaire. The survey roughly approximated a simple random sampling, and approximately 20 respondents were contacted in each administrative district in Colombo.

Empirical Analysis for Conjoint Analysis

Using the random utility framework, we constructed the following consumer behavior model for choice base conjoint experiments (Mitsunori 2013):

 $V_i = \beta_0 + \beta_1 Cultivation method + \beta_2 Certification + \beta_3 Prime price$

In this model: V_i is the dependent variable that represents a consumer's utility function when purchasing product I; Cultivation method,

Certification, and Prime price represent attributes that affect a consumer's utility; and β_1 , β_2 and β_3 denote the coefficient estimates for each attribute. Cultivation method denotes the cultivated product as organic. Therefore, each dependent variable affects a consumer's utility in purchasing the functional food products. A logit model was estimated (Mitsunori 2013, Qingbin et al. 2010).

Results and Discussion

Consumer Awareness Levels on Organic Food

The result of the survey showed that respondents had an awareness of the organic food concept, but only \$1% were familiar with it. Around 73.4% of the participants had received awareness about organic food from the media. To check this, a ranked based quotient (RBQ) method was employed. The RBQ score of \$5.9 went to television, and thus television was ranked first, followed by social media or the internet (66.9).

Prime Price Percentage Willing to Pay for Organic Food

About 85% of respondents preferred to consume organic food. Around 82.3% said they like to pay slightly more for organic food. According to this, the respondents' mean prime price percentage was 34.25%. This means that if the inorganic food price is Rs.100, if that food was organic, respondents would pay Rs.134.25. Their maximum prime price percentage is 100%, and their minimum prime price percentage is 10%.

Purchase Behavior of Organic Food: Conjoint analysis

Goodness of fit is indicated by Pearson's R and Kendall's Tau statistics (Table 14.2), based upon the correlation of actual and predicted preference scores. The holdout profiles (four in this study) were rated by the subjects, but not used by the conjoint procedure for estimating utilities. Both significance statistics indicate a null hypothesis, that when the correlation is not significant it is rejected (p<0.001).

Table 14.2 Conjoint analysis correlations

	Value	Sig.
Pearson's R	●.976	0.000
Kendall's tau	€.944	0.000
Kendall's tau for 4 Holdouts	1.000	●.●21

The part-worth scores ('utilities') indicate the influence of each factor level on respondents' preference for a particular combination. Higher utility values indicate greater preferences (Table 14.3). Average importance percentages indicate that the most important features are those indicating certification (44.5%); cultivation method (34%) and prime price (21.3%) are of lesser importance. When people are going to buy fresh products they mostly look at certification. After that, they look at how products are cultivated, and finally look at prime price. The average importance of each factor is known as an importance score, or value. The values are computed by taking the utility range for each factor separately and dividing by the sum of the utility ranges for all factors. The values thus represent percentages, and have the property that they sum to 100. The range of the utility values (highest to lowest) for each factor provides a measure of how important the factor was to overall preference. Factors with greater utility ranges play a more significant role than those with smaller ranges.

Table 14.3 Conjoint Analysis Results

Factor	Average importance %	Levels	Util- ity	Std. Error
Cultivation Method	34.093	●rganic	1.472	●.232
(DIS- CRETE)	34.00	Nenerganic	-1.472	●.232
Certification (LINEAR	44.514	N● Certificati•n	1.875	●.267
MORE)	44.51	Demestic Certification	3.749	●.535
		International Certification	5.624	0.802
Prime price (LINEAR	21 205	•% Prime Price	-0.882	●.267
LESS)	21.397	15% Prime Price		●.535
		30% Prime Price	-2.647	0.802
Constant			2.524	●.791

This table shows the utility (part-worth) scores and their standard errors for each factor level. Higher utility values indicate greater preference. For cultivation method, we used the keyword DISCRETE, and this is used when the factor levels are categorical, and no assumption is made about the relationship between the cultivation method and the data. We had expected direction for the relationship for certification and prime price. Certification used the LINEAR MORE relationship, and it describes higher preference

for high standard certification. The presence of a certification or international certification corresponds to a higher utility, as anticipated. Prime price used the LINEAR LESS relationship, which describes higher preferences for lower prices. As expected, there is an inverse relationship between prime prices and utility, with higher prices corresponding to lower utility. Larger negative values mean lower utility.

When specifying LINEAR models for prime price and certification we chose an expected direction (LESS or M®RE) for the linear relationship between the value of the variable and the preference for that value. The conjoint procedure keeps track of the number of subjects (respondents) whose preference shows the opposite (reversal) of the expected relationship for prime price and certification. For certification there are no reversals. But prime price has seven reversals. That means seven respondents out of 109 prefer higher prime prices.

According to the random utility framework, we constructed the following consumer behaviour model for choice base conjoint experiments (Mitsunori 2013):

$$V_i = \beta_o + \beta_1 Cultivation\ method + \beta_2 Certification + \beta_3\ Prime\ price$$
 Maximum utility = 2.524 + 1.472 + 5.624 - 2.647 = 6.973

Using this model, we calculated predicted preferences for each choice cards (Table 14.4).

Tah	P 1	144	Predi	cted	Pref	erences

Rank	Profile number and description	Predicted preferences
1	4: ●rganic, International certification, 0% prime price	8.738***
2	3: Organic, International certification, 15% prime price	6.973***
3	6: Organic, Domestic certification, 15% prime price	5.980**
4	9: Organic, Domestic certification, 30% prime price	5.098**
5	8: Nonorganic, Domestic certification, 6% prime price	4.106*
6	7: Nonorganic, International certification, 30% prime price	4.●29*
7	5: Nonorganic, Domestic certification, 6% prime price	3.919*
8	1: ●rganic, Ne certification, 30% prime price	2.647*
9	2: Nonorganic, No certification, 15% prime price	1.162*

^{***} most preferred, ** indifferent, *least preferred.

The aggregate model provides for the identification of the most preferred or 'ideal' product, and gives the relative importance of the attributes. The ideal brand is one that is organically produced with international certification and 0% prime price product. But that product cannot easily exist in the market. In this situation, simulation cases are most important in conjoint analysis. In the present study, three different product categories have been tested: first, organically growing fresh product, no certification about cultivation method, and 0% prime price; second, organically growing fresh product, domestic certification, and 15% prime price; and third, organically growing fresh product, international certification, and 30% prime price.

The market share simulation used the simulation sub-procedure within conjoint procedure in SPSS. The maximum utility model determines the probability as the number of respondents predicted to choose the profile, divided by the total number of respondents. For each respondent, the predicted choice is simply the profile with the largest total utility.

Table 14.5 Preference Probabilities of the Simulations

Card Number	D	Maximum Utility	Bradley-Terry- Luce	Logit	Score
1 (first)	1	19.9%	27.7%	19.1%	4.989
2 (second)	2	1.5%	33.3%	19.0%	5.982
3 (third)	3	78.6%	38.9%	62.0%	6.974

Predictions of the expected market shares were made with the probabilistic (Bradley-Terry-Luce and logit) models (Table 14.5), which are best suited to repetitive purchasing situations, since purchases may be more tied to usage situations over time. Figure 14.1 presents the analyses of market share (BTL method) change, due to variations in the level of three quality schemes, on the assumption that the levels of the remaining attributes were unchanged. These analyses were undertaken for those product categories where the relevant quality scheme had the highest and lowest importance. The logit model is similar to the BTL but uses the natural log of the utilities instead of the utilities. According to the three models, the most suitable card was the third card. In the Colombo Municipal Council, the most suitable product among three products was organically growing fresh produce with international certification and 30% prime price.



Figure 14.1 Most Suitable Choice Card

Conclusions and Recommendations

The objective of this study was the identification of consumer willingness to pay for organic food in the Colombo Municipal Council area of Sri Lanka. The results suggest that more than three quarters (81%) of the population have an awareness of organic food. Most of the respondents (85%) prefer to consume organic food, and 82% prefer to pay slightly more for organic food. The mean prime price percentage was 34%, and minimum and maximum percentages were 10% and 100%. The most preferred attribute for consumers was certification (44%), and its level was international certification. In the CMC, the higher market share comes under organically grown, international certification, with 30% prime price products.

From the findings, a profile of the household most likely to purchase organically grown produce can be constructed. This enables marketing efforts to focus on target consumers, or those consumers matching this profile. Supermarkets are more likely to be successful in selling organic food. A strategy for organic food producers would be to market their products to supermarkets. Furthermore, in development of the domestic organic market, governing bodies should increase the opportunities to get international certification to the producers.

References

Alphonce, R., and F. Alfnes. 2012. "Consumer willingness to pay for food safety in Tanzania: an incentive-aligned conjoint analysis." *International Journal of Consumer Studies* 36(4): 394-400.

Alphonce, R., F. Alfnes, and A. Sharma. 2014. Consumer vs. citizen willingness to pay for restaurant food safety. *Food Policy* 49:160-166.

Aryal, K. P. P., C. S. Pandit, and G. Sharma. 2009. "Consumers' Willingness to Pay for Organic Products: A Case from Kathmandu Valley." The

- *Journal of Agriculture and Environment* 10:12-22.
- Batte, M., N. Hooker, T. Haab, and J. Beaverson. 2007. "Putting their money where their mouths are: Consumer willingness to pay for multi-ingredient, processed organic food products." Food Policy 32(2): 145-159.
- Cameron, T. 1991. "Interval Estimates of Non-Market Resource Values from Referendum Contingent Valuation Surveys." Land Economics 67(4): 413.
- Champ, P., K. Boyle, and T. Brown. eds. 2003. A primer on nonmarket valuation. The economics of non-market goods and resources. Dordrecht: Kluwer Academic Publisher.
- Cooper, J., and J. Loomis. 1992. "Sensitivity of Willingness-to-Pay Estimates to Bid Design in Dichotomous Choice Contingent Valuation Models." *Land Economics* 68(2): 211.
- Govindasamy, R., and J. Italia. 1999. "Predicting willingness-to-pay a premium for organically grown fresh produce." *Journal of Food Distribution Research* 30(2): 44-53.
- Govindasamy, R., Italia, J. and A. Adelaja. (2001). "Predicting willingness-to-pay a premium for integrated pest management produce: A logistic approach." *Agricultural and Resource Economics 20 Review* 30(2): 151-59.
- Green, D. 2010. "Sustainable Food Supply Chains." Journal of Aquatic Food Product Technology 19(2): 55-56.
- Green, P., and V. Srinivasan. 1978. "Conjoint analysis in consumer research: issues and outlook." *Journal of Consumer Research* 5: 103-123.
- Haghiri, M., J. Hobbs, and M. McNamara. 2009. "Assessing Consumer Preferences for Organically Grown Fresh Fruit and Vegetables in Eastern New Brunswick." *International Food and Agribusiness Management Review* 12(4): 81-100.
- Hair, J., R. Anderson, R. Tathan, and W. Black. 1999. Análisis Multivariante. Quinta Edición. Madrid: Prentice Hall.
- Hirogaki, M. 2013. "Estimating consumers' willingness to pay for health food claims: A conjoint analysis." *International Journal of Innovation, Management and Technology* 4(6): 541-546.
- IFOAM. 2016. IFOAM Basic Standards for Organic Production and Processing. Germany: FOAM.
- Jaeger, S., D. Hedderley, and H. Mactie. 2001. "Methodological issues in conjoint analysis: A case study." *European Journal of Marketing* 35: 11-12.
- Krystallis, A., and M. Ness. 2005. "Consumer preferences for quality foods from a south European perspective: A conjoint analysis implementation

- on Greek olive oil." International Food and Agribusiness Management Review 8(2): 62–91.
- Krystallis, A., and G. Chryssohoidis. 2005. "Consumers' willingness to pay for organic food: factors that affect it and variation per organic product type." *British Food Journal* 107(4/5): 320-343.
- Lancaster, K. 1971. Consumer Demand: A new Approach. New York: Columbia University Press.
- Lee, C-K., and J. Mjelde. 2007. "Valuation of ecotourism resources using a contingent valuation method: The case of the Korean DMZ." *Ecological Economics* 63: 511-520.
- Lusk J. and D. Hudson. 2004. "Willingness-to-pay estimates and their relevance to agribusiness decision making." *Review of Agricultural Economics* 26: 152–169.
- NOCU. 2015. Progress Report of the National Organic Certification Unit (2015). Colombo: Sri Lanka Export Development Board.
- ●gbeide, ●., C. Ford, and R. Stringer. 2014. "The Environmental Benefits of Organic Wine: Exploring Consumer Willingness-to-Pay Premiums?" Journal of Food Products Marketing 21(5): 482-502.
- •nozaka, Y., and D. T. McFadden. 2011. "Does local labelling complement or compete with other sustainable labels? A conjoint analysis of direct and joint values for fresh produce claim." American Journal of Agricultural Economics 93(3): 689-702.
- •wusu, S. E., V. •wusu, and H. Jordaan. 2014. "Consumer preferences and willingness to pay for beef food safety assurance labels in the Kumasi Metropolis and Sunyani Municipality of Ghana." Food Control 46: 152-159.
- •wusu, V., and M. ●. Anifori. 2•13. "Consumer willingness to pay a premium for organic fruit and vegetable in Ghana." International Food and Agribusiness Management Review 16(1): 67–86.
- Qingbin, W., S. Junjie, and P. Robert. 2010. "Consumer Preferences and Willingness to Pay for Locally Grown ●rganic Apples: Evidence from a Conjoint Study." Hortscience 45(3): 376-381.
- Rigby, D. and D. Cáceres. 2001. "Organic farming and the sustainability of agricultural systems." *Agricultural Systems* 68(1): 21-40.
- Royne, M., M. Levy, and J. Martinez. 2011. "The Public Health Implications of Consumers' Environmental Concern and their Willingness to Pay for an Eco-Friendly Product." *Journal of Consumer Affairs* 45(2): 329-343.
- Sahota, A. 2015. The Global Market for ●rganic Food & Drink. https://www.fibl.org/fileadmin/documents/shop/1663-organic-world-2015.pdf.

- Shin, S., J. Kliebenstein, D. Hayes, and J. Shogren. 1992. "Consumer willingness to pay for safer food products." *Journal of Food Safety* 13(1): 51-59.
- Steenkamp, J. 1987. "Conjoint measurement in ham quality evaluation." Journal of Agricultural Economics 38: 473-480.
- USDA. 2016. Agricultural Marketing Service. https://www.ams.usda.gov/?dDocName=STELPRDC5090064 (accessed 6 March).
- Vanit-Anunchai, C., and E. Schmidt. 2004. "Consumer willingness to pay for environmentally friendly produced vegetables in Thailand." *Acta Horticulturae (ISHS)* 655:107-113.
- Xu, L., and L. Wu. 2010. "Food safety and consumer willingness to pay for certified traceable food in China." *Journal of the Science of Food and Agriculture* 90(8): 1368-1373.

CHAPTER FIFTEEN

A STUDY OF THE CINNAMON VALUE CHAIN IN THE GALLE DISTRICT OF SRI LANKA

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Abstract

Although Sri Lanka is the main supplier of true cinnamon for the world market, it receives low level of returns due to the poor value added. The aim of this research was to study the value adding activities of the main role players in the cinnamon value chain in the Galle district of the country. Therefore, the three main role players in the cinnamon value chain; cultivators/farmers, middlemen, and consumers, were selected as the target groups. Three samples of 50 cinnamon cultivators, 50 middlemen (including collectors, wholesalers, retailers, processors, and exporters), and 50 consumers were contacted for the study. Data collection was done using three surveys, during the period from January to April 2016. Descriptive data analysis, chi square tests and the ranked based quotient were used in data analysis. The findings highlight that farmers' impact on value adding varies, according to their occupation, gender, civil status, educational level, and household income. Other than the production of raw cinnamon, most of the cinnamon cultivators do not significantly contribute to value addition, due to several issues and challenges. However, when considering the income from cinnamon, a significant number of cinnamon cultivators (12%) were highly satisfied about their income from cinnamon, while the majority (56%) were moderately satisfied. Moreover, considering the middlemen, only the exporters have contributed in any significant way to a considerable level of value addition. However, the cultivators and the middlemen have positive attitudes towards value adding practices. When focusing on consumers, cinnamon quill was their first preference. When considering other preferences for cinnamon-based products, cinnamon flavoured food, cinnamon flour, and cinnamon oil took second, third and fourth places respectively. Therefore, the motivation of cultivators and middlemen towards value adding practices in the cinnamon trade will lead them to have better returns.

Keywords: Cinnamon, value chain, cultivators, middlemen, consumers.

Introduction

Cinnamon is the dried bark of the perennial tree Cinnamonumverum (also named Cinnamonum zeylanicum) of the Lauraceae family. True cinnamon is native to Sri Lanka. Cinnamon originally grew wild in the central hill country of Sri Lanka (Export Development Board 2017). Ceylon cinnamon, referred to as both sweet cinnamon and true cinnamon, is considered superior to the variety known as Cassia, a cheaper and inferior product (Export Development Board 2016). Sri Lanka is the world's largest producer and exporter of pure cinnamon, claiming 90% of the global market. Cinnamon grown and produced in Sri Lanka has had a long-standing reputation in the international market, due to its unique quality, colour, flavour and aroma.

The cinnamon farming lands are found in Kandy, Matale, Belihuloya, Haputale, Horton Plains, the Sinharaja forest range, and along the coastal belt from Negombo to Matara. They feature extensive cinnamon cultivation, and they help to generate higher income for farmers and intermediaries. The unique method of processing and curing cinnamon in Sri Lanka helps to give the product a distinctive flavour. Cinnamon quills with standard lengths and diameters are made from the cinnamon grown solely in Sri Lanka. Furthermore, value added cinnamon products, such as cinnamon oil, powder and tablets, are also produced and exported to several foreign countries.

The Present Status of the Cinnamon Value Chain in Sri Lanka

Ceylonese cinnamon has a long history in Sri Lanka as being the prime spice of the country. Even today, cinnamon is the fourth most important export agricultural crop, and the predominant export spice in terms of foreign exchange earnings. The cultivation of cinnamon is still carried out mainly by smallholders. There are an estimated 25,294ha of cinnamon lands

distributed across the country. The industry provides livelihoods for approximately 350,000 families in the districts of Galle, Matara, Hambantota, Ratnapura, Uva and Kalutara (UNDO and The Spice Council of Sri Lanka 2016). About 93,767 families, with around 150,000 labour units, are actively involved in cinnamon cultivation (Thanthirige 2014).

The Sri Lankan government emphasises the development of the industry by providing much support, such as the provision of cash grants, extension and research inputs, and assistance for cinnamon-based value-added products (Thanthirige 2014). Further, Thanthirige (2014) has stated that the Sri Lankan cinnamon industry is operating at the traditional level, and it seems that the 21st century value of the entire industry has not been properly understood by most of the stakeholders, even in a knowledge-intensive era. Also, Jayathilaka (2015), in her study, noted that, regardless of the unique benefits associated with true cinnamon, currently there are limited value added cinnamon products in Sri Lanka. Hence cinnamon manufacturers receive less return from the industry. According to the study carried out by Thanthirige (2014), the inability of Sri Lanka to provide value added cinnamon products, meeting global market conditions, is the main problem in penetrating more international markets.

Jayathilaka (2015) has also stated that, although the demand for value added cinnamon products, such as cinnamon leaf oil, bark oil, crushed cinnamon, and ground cinnamon for confectionery and other food-related industries, has increased in the world, Sri Lanka ranks well down in value adding to its cinnamon exports to the world market. Other competitor countries make huge profits by adding value to cinnamon exported from Sri Lanka, while Sri Lanka is losing profits due to exporting mainly raw cinnamon. Furthemore, she reveals that value addition is positively and significantly influenced by attitude, technology, labour, credit access, and cost of production. Therefore, she recommends that cinnamon manufacturers should be informed of the benefits of adding value to their agricultural commodities before marketing, and government and private agencies which intend to encourage rural entrepreneurship should provide marketing facilities and micro-finance linkages, in order that beneficiaries adhere to appropriate agribusiness practices.

According to Thanthirige (2014), the lack of strategies to prioritize and explore new market segments for cinnamon value adding has become the main challenge. As better strategies to increase cinnamon value through the value chain, new technological applications, such as attractive packaging, the use of novel methods for distribution systems, and so on, should be introduced, and inbuilt within the marketing process. Evidently, the importers are making higher margins through the same raw products imported without

any value added. Sometimes, the only value addition incorporated by Sri Lanka is the addition of attractive packaging.

Also, technological issues are associated with the value chain players, along with the marketing problems in the industry. According to Thanthirige (2014), the prime concern is now to improve the productivity through all three main processes identified in the value chain (planting and maintaining, harvesting and processing, and marketing and sales), to get a competitive edge. The value chain players are stated as; cinnamon cultivators, peelers, oil producers (both leaf oil and bark oil), cinnamon fruit oil producers, cinnamon flower processors, and diversified value-added product manufacturers and intermediates at various levels.

When focusing on the cinnamon value chain in Sri Lanka, we do not have clear information on how the products flow within it, or what the activities carried out by different role players are, and so on. Studies need to be done to understand how this chain continues from farm to fork. Studying the facts and figures along the value chain is called value chain mapping. Thus, if research is going to be done over an unknown value chain, mapping can be, in fact, supportive. Value chain analysis is also useful in understanding the policy environment that provides for the efficient allocation of resources within the domestic economy, understanding its primary applications, and understanding the way firms and countries participate in the development of these value chains (Kaplinsky and Morris 2002). In this study, the main players and their roles in the cinnamon value chain were analysed.

Justification for the Study

Although agriculture plays a vital role in the Sri Lankan economy, through tea, coconut, and rubber main export crops, cinnamon has a higher potential to generate more foreign currency than most products at present (Lankage 2015). The cinnamon trade is not only Sri Lanka's oldest trade, but also the only trade in which Sri Lanka holds a virtual monopoly in the world market for true cinnamon, due to its high quality. However, the country's cinnamon exports to the world market, especially the European and North American markets, are gradually diminishing. The enterprises engaged in the cinnamon industry believe that the main reasons for this loss are the price (cassia is used as a cheaper substitute), and their inability to supply demanded scales due to the cinnamon not meeting the necessary buyer product specifications, or their hygiene standards. Several other factors, like human resource unavailability, lack of applied skills, training infrastructure, and so on, are also affecting, and straining, the value chain (Anon 2017).

The identification of the cinnamon value chain, and its income functions in Sri Lanka, is important for the value chain role players and the stakeholders alike. The nature of the value chain varies from country to country, as well as from crop to crop. So, the specialities of the present research are in drawing the structure of the cinnamon value chain, identifying the stages of value chain, and the roles of the players in it, finding out the functions and importance of the role players in the cinnamon value chain, recognizing the current income flow of the cinnamon value chain, and determining the involvement factors in value creation and income generation in the cinnamon value chain.

The Research Problem

Sri Lanka is the world's largest producer and exporter of pure cinnamon to the world. Cinnamon grown and produced in Sri Lanka has acquired a long-standing reputation in the international market, due to its unique quality, colour, flavour and aroma. Though the cinnamon industry contributes to the GDP in Sri Lanka, the nature of income generation and distribution along the cinnamon value chain has not been recognised and identified in detail. Furthermore, the main role players in the cinnamon value chain and their roles have not been properly recognized to date.

Research questions

- Who are the main players in the cinnamon value chain?
- What are the factors affecting value adding in this industry?
- How should the value chain map of the cinnamon value chain be illustrated?
- What are the activities of role players in every stage of the cinnamon value chain?
- What is the relationship between socio-economic factors and willingness of value chain factors to add value to their cinnamon products?
- What is the consumer behaviour towards cinnamon products?

Research Objectives

To study the main role players and important aspects related to the cinnamon value chain.

Specific Objectives

- To find out the socio-economic factors of the main role players (cultivators, middlemen, and consumers);
- To map the cinnamon value chain, creating a relationship map and an
 activity map (to identify the main role players in the cinnamon value
 chain and their main activities); and
- To find out the association between the socio-economic factors of cultivators, middlemen, and consumers, and value adding in cinnamon.

Methodology

Study Area and Data Collection

Galle District was selected for this study, as it is one of the major cinnamon cultivating districts in Sri Lanka. Three surveys were conducted to collect data from the three different target groups. Fifty cultivators/farmers, 50 middlemen and 50 consumers were selected as samples. The first survey was done to collect data from the cultivators. The second survey was conducted to collect data from middlemen, and the third survey was done to collect data from consumers, to assess cinnamon consumption at household level. Data were collected from January to April 2016, using a pre-tested, researcher-administered questionnaire. Additional relevant information was collected through electronic documents, websites, research publications, reports, and newspaper articles.

Data Processing

Descriptive statistics were used to analysis the socio-economic factors of the three target groups. A Chi square test was used to find associations between the socio-economic status of cultivators and middlemen, and the process of adding value to their products, and rank-based quotient (RB•) values were analysed, to study the preferences relating to cinnamon products that are consumed in households. These data were analysed through SPSS software.

Results and Discussion

The Socio-economic Status of the Cultivators

According to the findings, most of the cultivators are male (80%), with a mean age of 51 years. Furthermore, most of the cultivators (44%) had more than a primary level of education. Very few cultivators (8%) had a diploma level qualification. Their occupation was farming, but 8% were retired government officers. Most of them (65%) had cultivation experience of more than 15 years, while a significant percentage (68%) were not doing any value adding to their cinnamon products, selling these only as raw products, to middlemen or collectors in urban areas.

Table 15.1 Cinnamon Cultivated Land Areas

Cinnamon cultivated land area (Ac)	No. of farmers (%)
●.25	12
0.50	24
●.75	4
1.00	24
1.50	4
2.00	12
3.00	8
4.00	8
5.00	4

However, 74% of the farmers were willing to cultivate cinnamon in future, and they were also willing to add value to their production as well. Regarding the land size of most of the cultivators, (24%) had land of one acre, and very few cultivators had more than two acres (Table 15.1). Moreover, when we consider their income level, the majority (54%) received less than LKR 30,000 per month. (Table 15.2).

Table 15.2 Annual Income from Cinnamon for the Cultivators

Monthly income (LKR)	No. of cultivators (%)
<5,000	5
5,001-10,000	14
10001-20,000	26
20,001-30,000	9
90001-10000	8
10,0001-200,000	16
>20,0001	23

The Association Between Socio-economic Status of Cultivators and Factors Affecting Value Adding in Cinnamon

Table 15.3 Chi Square Test Results for Factors Affecting Value Adding to Cinnamon Crops

	Age					
	P	P	P	P	P	P
	Value	Value	Value	Value	Value	Value
1) Lack •f	●.36●	0.036*	0.002*	0.002*	0.019*	0.059
knowledge						
2) Lack of capi-	0.011*	●.277	0.000*	0.003*	0.058	0.013*
tal						
3) Low encour-	0.030	0.454	●.821	0.000*	●.141	●.247
agement from						
family and						
friends						
4) Low encour-	0.047*	0.000*	0.000*	0.003*	0.000*	●.366
agement by						
government						
5) Lack of ex-	●.188	0.244	0.000*	0.000*	0.001*	0.024*
tension services						
6) Satisfaction	0.001*	0.025*	€.●98	0.003*	●.541	0.000*
with present in-						
c∙me						

^{*} Significant at 95 confidence interval.

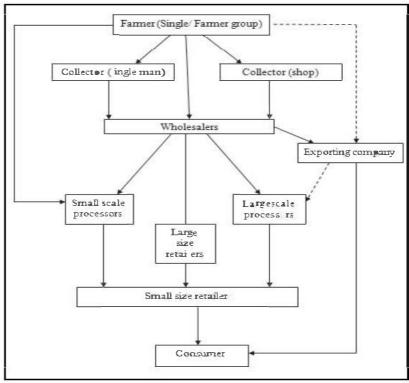
The relevant factors were assessed using the chi-square test, and the findings are presented in Table 15.3. The factors having significant values (p values less than **0.05**) have an association between socio-economic status

and value adding activities by the cultivators. According to the results, the factors affecting value adding may vary, according to the socio-economic status of the cultivators. Factors such as capital, encouragement from family/friends, encouragement of government, and satisfaction about present income, vary with occupation. Factors affecting value adding, such as lack of knowledge, less encouragement from government, and satisfaction about present income, can vary with gender, since those factors show an association with gender.

Factors affecting value addition, such as lack of knowledge, lack of capital, low encouragement from government, and lack of extension services, can vary with civil status, since those factors show an association with civil status. Age had associations with all the factors affecting value adding activities by cultivators, hence factors affecting cinnamon value addition can vary by gender. Factors affecting value adding, such as lack of knowledge, lack of encouragement from government, and lack of extension services, can vary with educational level. Finally, factors such as lack of capital, lack of extension services, and dissatisfaction about present income, can vary with the household income of farmers.

Mapping the Cinnamon Value Chain: The Relationship Map

Figure 15.1 illustrates the different relationships available in the cinnamon value chain. It demonstrates how cinnamon flows through different actors and finally comes to the consumer. When we consider the nature of those relationships, value chain members had more persistent relationships for transactions with their succeeding chain members. The export market relationship can be seen when some export company directly contacts farmers, however they usually contacted farmer groups, and these can be large or small. This happens when exporting companies have specified objectives, like expecting organic cinnamon. Another export market relationship is seen between large-scale processors and exporting companies. Also, small amounts of cinnamon are sold to reputed processors in Sri Lanka by some cinnamon exporting companies.



Persistent market relationship -> Spot market relationship

Figure 15.1 Relationship Map of the Cinnamon Value Chain

Cinnamon Value Chain: The Activity Map

According to Porter (1985), the value chain consists of a set of activities that are performed to design, produce, market, deliver, and support a product. Figure 15.2 illustrates how these activities change from one actor to the next, along the cinnamon value chain. In general, cultivators don't value add to their products. However, when some cultivators work as farmer groups, like SOFA (Small Organic Farming Association) or MOPA (Marginalized Organic Producers Association), under the concept of 'organic cinnamon', they do add some value. The total production of these producers is sold to the cinnamon experting companies, due to the high demand for this spice. Some associations totally depend on those companies. Experting companies are also caming foreign currency through experting value added

cinnamen forms, such as chips, powder, baling of different cuttings, and bark oil cuttings using C5 and C4.

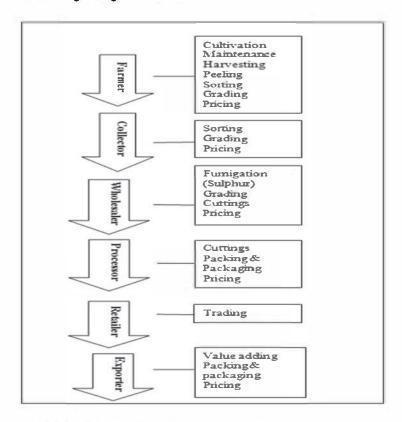


Figure 15.2 Activity Map of the Cinnamon Value Chain

It is a mandatory requirement for producers to register with the Sri Lanka Export Development Board. Also, when exporting organic cinnamon, a certificate from a recognized institute, according to the buyer's specifications, is obligatory. Few exporters maintain other certificates, like Fairtrade, Bio Suisse (a Swiss organic concept), JAS (Japanese Agricultural Society), or other quality and standard certificates (HACCP, ISO, GMP). It was observed that a more detailed level of knowledge is required for the better functioning of the cinnamon value chain, but that any knowledge there is, is well disseminated through the relevant role players in the cinnamon value chain.

A few entrepreneurs who are adding value by targeting foreign tourists were also observed. They use natural cinnamon fragrance for producing soaps, shampoo, and hand wash for spas island-wide, that have the highest price margins. Some companies produce cinnamon-flavoured tea, through targeting premium tourist hotels. Here, this activity is mainly focused on the prices of the C4 and C5 grades of cinnamon. So those grades are the more highly exchanged grades of cinnamon in the value chain. The prices of cinnamon fluctuate, according to the demand in the season. In some occasions, cultivators could take more than LKR 1500 for one kg of C4 or C5 cinnamon.

A problem is that, in peak demand seasons, the cinnamon production of the country is not enough to cover total demand. For organic cinnamon, there is high demand. This can be supplied directly to the exporting companies by farmer groups, and thus revenue is also high. When farmers bear the transportation cost, more income can be earned other than selling to collectors. So, direct selling is preferred by farmers when they consider income generation. From June to November, there is a good demand from foreign countries, especially Germany, Japan, United States, France, Netherland, United Kingdom, Canada, and Sweden, as the main buyers of Sri Lankan cinnamon products. There are two cinnamon harvesting seasons per year, but harvesting is limited, due to the high cost of labour.

The Information of the Middlemen

The Socio-economic Status of Middlemen

According to the findings relating to the second target group, most of the middlemen were male (88%), with a mean age of 43 years. Many of these (44%) had • level qualifications, but very few of them (22%) had studied up to degree level. All the middlemen were businessmen. As for income level, 32% reported an income higher than LKR100,000 per month. Middlemen thus had higher incomes than the cultivators.

Nature of the Middlemen in the Sample

Middlemen in this research study consisted of several kinds. Many of them were collectors (single man collectors 20%, shop collectors 20%), and wholesalers (18%), 10% were export companies, 16% were processors, and 16% were retailers. 30% of middlemen had 11-35 years of experience, and 28% of them had 6-10 years of experience in cinnamon trading.

Association Between the Socio-economic Status of Middlemen, and the Factors Affecting Value Adding in Cinnamon

The relevant factors were assessed using chi-square tests, and the findings are presented in Table 15.4. The factors having significant values have associations with the factors affecting value adding in cinnamon products. The factors having significant values (p values less than **0.0**5) show associations between socio-economic factors and value adding activities by middlemen.

Table 15.4 Chi-square Tests of the Association Between Socio-economic Status of Middlemen and Value Adding for Cinnamon Products

	Educational level			Ī		
	P Value	P Value	P Value	P Value	P Value	P Value
1) Lack of knowledge about value adding	0.035*	0.006*	0.006*	0.026*	0.000*	0.000*
2) Lack of capital	●.711	0.001*	0.001*	0.003*	0.000*	0.000*
3) Low encouragement from family and friends	0.025*	0.039*	0.039*	0.029*	0.001*	0.019*
4) Low encouragement from government	●.723	●.378	●.378	0.000*	0.000*	0.001*
5) Lack of extension services	●.514	●.682	●.682	0.014*	0.000*	0.000*
6.) Satisfaction with present income	0.308	●.●52	●.●52	0.003*	0.000*	0.001*

^{*} Significant at the 95% confidence interval.

According to the results, factors such as lack of knowledge about value adding, and encouragement from family/friends, can vary with the gender of the middlemen, as those factors show an association with the gender of the middlemen. Factors such as lack of knowledge about value addition, lack of capital for initiation, and encouragement from family/friends, can vary with both the civil status and the trading experience of the middlemen, since they have shown associations with these. Age, educational level, and the position in the value chain have associations with all the factors affecting value adding.

Information About Consumers

Consumers' Socio-economic Status

According to the findings on the third target group, the majority of the consumers (60%) were female, with a mean age of 48 years. Many consumers (24%) had an education to A' level. Also, the majority were aware of the food that they consumed, so they have a certain level of awareness about cinnamon. Their income level showed that (32%) came into the range of LKR 40,000-50,000 per month, while the next highest (30%) level was LKR70,000-80,000. Thus, consumers too had an income level lower than the middlemen.

Annual Household Expense for Cinnamon

The findings show that 44% of consumers spend LKR200-300 on buying cinnamon products annually, while another 20% spend LKR300-400 annually. However, 16% of them spend more than LKR500 annually on cinnamon products, and 10% of spend LKR 600-700 annually. Only 10% of them spend less than LKR100 annually to buy cinnamon products.

The Association Between Socio-economic Status and Factors Affecting the Purchase of Cinnamon

The relevant factors were assessed using chi-square tests, and the findings are presented in Table 15.5. The factors that were significant identify the associations between socio-economic status and the factors affecting the purchase of cinnamon-based products. As an example, gender and medicine value have such an association, as their correlation value was **0.038**. The rest of the values can be interpreted in a similar marmer.

Table 15.5 Chi-square Tests Value Between Socio-economic Status of Consumers and the Factors Affecting the Purchase of Cinnamon-based Products

	Age					
	P Value	P Value	P Value	P Value	P Value	P Value
1. Spice	●.123	€.2€6	0.000*	€.17€	0.060	0.318
2. Flavour	€.486	●.166	0.006*	●.517	●.111	0.005*
3. Medicine	●.215	0.038*	●.697	0.653	0.000*	0.506
4. Family influence	●.●7●	●.528	●.●95	●.6●1	0.012*	●.●7●
5. Friends influence	0.025*	●.644	0.035*	• .734	0.200	0.085
6. Social and cultural influence	0.006*	€.€66	●.●69	0.304	0.021*	●.221
7. Price	0.038*	0.574	0.503	0.748	●.187	0.483
8. Availabil- ity	●.647	●.97●	●.114	●.644	0.408	●.467
9. Media	€.€93	€.9€6	€.126	●.373	0.003*	0.408

^{*} Significant at the 95% confidence interval.

The Purchasing Pattern of Cinnamon Products

When considering the purchasing pattern of cinnamon products, most customers buy them only when they are needed. Therefore, frequencies for need-only, weekly, or monthly were 92%, 20% and 52% respectively. •f the consumers, 56% prefer to buy cinnamon quill at the normal market price. They never expect to buy it at higher prices. •ther cinnamon products are also like that. However, a few consumers expect that they will buy cinnamon oil and cinnamon flour even at higher prices (12% and 8%, respectively). So, most consumers are only willing to buy cinnamon bark oil and cinnamon flour at the normal price.

Ranking Cinnamon Products According to Consumption Frequency

According to the RBQ value (rank-based quotient) listed in Table 15.6, based on household consumption, cinnamon quills are the most consumed versions of cinnamon products. Cinnamon flavoured food and cinnamon flour and oil are in second, third, and fourth places.

Table 15.6 Rankings of Cinnamon-Based Products

Product name	RBQ Value	Ranking
Q uill	9.060403	1
Cinnamen flavoured food	20.13423	2
Fleur	22.65101	3
●il	32.04698	4

Conclusions

According to the findings of this research study, most of the cultivators are middle-aged, male farmers with low levels of education. But, since they have basic education and long-term experience in cinnamon cultivation, they can probably do this in a better way. Moreover, although their present level of value adding is at a lower level, they are willing to undertake these activities if shown how to. However, many of them have very small plots of land. This is a major problem for the cultivators. So, while they earn a significant level of monthly income through cinnamon, they will not be easily persuaded to undertake value addition using specific knowledge or techniques, but they will use grading and cuttings to upgrade their basic products.

Furthermore, we observed links between the socio-economic status of farmers and factors affecting the value adding of cinnamon crops. These were lack or availability of capital, encouragement from family/friends, and encouragement of government. But we also noticed satisfaction with present income. Moreover, the factors affecting value addition may vary according to the gender of the cultivator, where the associated factors were lack of knowledge, encouragement of government, and satisfaction about present income. According to civil status, the associated factors were lack of knowledge, lack of capital, and low encouragement of government and lack of extension services. According to age, all the factors affected value addition. According to educational level, lack of knowledge, lack of encouragement from government, and lack of extension services for farmers were the associated factors, and according to the household income of farmers, the associated factors were lack of capital, lack of extension services, and satisfaction about present income. Thus, the socio-economic status of cultivators/farmers has an association with the factors affecting value addition to cinnamon products. Therefore, it can be concluded that the factors which affect value addition may vary according to occupation, gender, civil status, educational level, and household income.

The relationship map of the cinnamon value chain demonstrates how cinnamon flows through the hands of different actors, and finally comes to the consumer. Farmers/cultivators, collectors, wholesalers, processors, retailers, and exporters, are the main role players in the cinnamon value chain. This finding clearly explains the different relationships available among the various role players in the Sri Lankan context. It shows that cinnamon is going through lots of middlemen, making it more expensive.

The activity map of the cinnamon value chain is important when trying to understand the various activities carried out at different stages. Farmers/cultivators, collectors, wholesalers, processors, exports, and retailers are the main actors doing various value adding practices in the cinnamon value chain. However, along the whole length of the value chain, value adding activities are low.

In focusing on the middlemen in the cinnamon value chain, we found that most of them are middle-aged males, with a certain level of education, and a significant level of income from cinnamon trading. One third of the middlemen had 11-35 years of experience, and about one fourth had 6-10 years of experience in cinnamon trading. The main value adding activities of collectors (the first category of middlemen) were cleaning, sorting, and grading. Some of the collectors also store cinnamon for a short period of time. However, they usually do not have proper storage facilities, and this can cause a reduction in the quality of cinnamon. Wholesalers and retailers (the other categories of middlemen) also did packaging or bundling of cinnamon into small quantities such as 100g, 250g, and 500g for the convenience of buyers. However, processors (another category of middlemen) do some different value additions, such as sulphur fumigation, cuttings, baling of different grades, and so on. Exporters (the final category of middlemen) also did cleaning, sulphur fumigation, cuttings, baling of different grades, and packaging and labelling. But, advanced value additions are not being done by middlemen to date.

In focusing on cinnamon consumers, we found that most of the consumers of cinnamon are middle-aged females who have significant levels of education and comparatively high monthly incomes. Also, they have a certain level of knowledge about the benefits of cinnamon products. Most of them spend about LKR200 – 300 annually, and the frequency of buying cinnamon products is once a month. According to the RB \bigcirc value, cinnamon quills occupied first place in household consumption.

Recommendations

Since cultivators are willing to undertake possible value adding activities, the provision of necessary education and training programs on new technology, quality control, standardization, technical skills, and/or equipment, will motivate them to do this. Moreover, obtaining land and financial facilities to cultivate more cinnamon is also timely and important. Education and training help farmers to add value, as it is very important for them to get additional income, rather than only selling raw cinnamon. Assistance should be given to farmers to procure small processing equipment and enhance their marketing to get better returns.

According to the relationship map, cinnamon goes through lots of middlemen, making it more expensive. Therefore, government could usefully become involved in cinnamon marketing by establishing collecting centres in the main cities. After processing, the government can export the products, thus reducing the unnecessary number of middlemen. Promoting collective marketing, encouraging farmers to organize themselves as a group, and the improvement of relationships between farmers and middlemen are the other main aspects of strengthening the cinnamon supply chain.

The activity map of the cinnamon value chain shows that poor levels of value adding activities are taking place. So, the main players in the activity map should be given good awareness programs about possible value adding activities, and the necessary facilities to start new value adding activities. The main reasons behind the poor value adding of cinnamon by middlemen (collectors, wholesalers, retailers, processors, exporters) are lack of knowledge, low levels of technology, and poor facilities for value addition. Therefore, it is better to provide them with relevant training and education programs, to carry out these activities properly by maintaining the required quality standards.

It was also observed that the knowledge of consumers about the importance of cinnamon products is at a low level. So, a good awareness program for consumers about the benefits of cinnamon would be a timely and important endeavour. Also, the prices of some cinnamon products in the local market are high, so government should pay attention to increasing the facilities to produce good quality cinnamon products, so that reasonable prices can be maintained in the local market.

If these activities can be implemented, value adding for cinnamon will be enhanced. This will lead to better marketing of cinnamon products in the local and international markets. Thus, the country will be able to gain a higher amount of foreign income, and distribute this in a fair manner among the role players in the cinnamon value chain.

References

- Anon. 2017. Cinnamon Facts, Information, Pictures. Encyclopedia.Com. http://www.encyclopedia.com/plants-and-animals/plants/plants/ cinnamon (accessed 23 March 2017).
- Export Development Board. 2016. Annual Report. Colombo: Department of Export Agriculture. http://exportagridept.gov.lk (accessed 23 March 2017).
- Jayathilaka, W. S. P. 2015. Determinants of value added production in the cinnamon industry. Unpublished PhD Thesis, UvaWellassa University of Sri Lanka.
- Kaplinsky, Raphal., and Mike Morris, eds. 2002. A Handbook for Value Chain Research, 3-4. International Development Research Centre. Montreal: DRC.
- Lankage, J. 2015. "Ceylon cinnamon to receive due recognition." *Daily Mirror*. http://www.dailymirror.lk/98679/ceylon-cinnamon-to-receive-due-recognition (accessed 23 March 2017).
- Porter, Michael E. 1985. Competitive Advantage. New York: The Free Press.
- Thanthirige, J. B. 2014. Technology and Marketing Issues in the Cinnamon Industry in Sri Lanka. Unpublished Master's Thesis, University of Moratuwa.
- UNDO and the Spice Council of Sri Lanka. 2016. Enhancing the compliance and productive capacities and competitiveness of the cinnamon value chain in Sri Lanka. http://
 - www.standardsfacility.org/PG-343 (accessed 27 April 2017).

PART IV:

FINANCIAL MANAGEMENT

CHAPTER SIXTEEN

THE EFFECT OF FINANCIAL DEVELOPMENT ON ECONOMIC GROWTH: EVIDENCE FROM SOUTH ASIA

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Abstract

A growing line of research emphasizes the requirement of a well-functioning financial system for a sustained economic growth. Meanwhile, a good financial system is characterized by its continued growth. This encourages hypothesizing about the significant economic growth effects of financial development. This study investigates the short-run and long-run relationships between financial development and economic growth in South Asian countries. However, due to data constraints, only India, Nepal, Pakistan, and Sri Lanka are considered, over the period 1995 to 2012. Broad money supply to GDP and bank deposits to GDP are taken as proxies for financial depth and banking sector development, respectively. Long-panel estimation techniques of mean group, pool mean group, and dynamic fixed effect models are used in obtaining the results. The findings of the study indicate that development in the banking sector depicts positively significant long-run growth effects, while growth effects are not significant through financial depth. As expected, growth effects are faster through sector development, since its speed of adjustment to the long-run is relatively high. However, development in financial depth means faster growth effects for India and Sri Lanka.

Keywords: Economic growth, financial development, long-panel models, South Asia.

Introduction

Given the presence of a positive relationship between financial development and economic growth, many economists consider financial development as a vital determinant of economic growth. Financial development is the vital factor for economic development of any country (Schumpeter 1912, Goldsmith 1969, Hicks 1969). However, other schools of research hold different opinions regarding the relationship between these two. Many of these provide evidence for a negative relationship, or no relationship, between financial development and economic growth. Lucas (1988), for example, asserts that economists badly overstress the importance of financial development factors in explaining economic growth. Furthermore, Demetriades and Hussein (1996) stated that financial development is not a good predictor of economic growth, while Deidda and Fattouh (2002) argue that in low income countries there is no significant relationship between financial development and economic growth. Also, Robinson (1952) confirmed that economic growth may lead to financial development, but not financial development to economic growth.

Even though there are, therefore, different views among researchers, the preponderance of theoretical reasoning and empirical evidence argues that there should be a positive effect from financial development on economic growth. Simply, financial development leads to better identification of investment opportunities, minimizes production costs, transfers savings into real assets, boosts innovation, enhances the efficiency of capital markets, and improves the risk-taking capacity of investors. These functions eventually mean the more efficient allocation of resources to different sectors of the economy, increases in savings, and efficient allocation of capital assets to productive investments, promote the rapid improvement of human and physical capital, mean faster technological progress, and the establishment of new ventures in the country, which in tum feeds economic growth. Therefore, it seems that there is a vague conclusion among researchers on the effect of financial development on economic growth.

Further, most of the previous studies used either cross-sectional data or time series data to identify the causal relationship between financial development and economic growth. Both have many drawbacks. Therefore, given these theoretical and methodological gaps, the empirical literature demands in-depth analysis. Hence there is an important econometric advantage in examining the relationship between financial development and

economic growth by using the long-panel estimation techniques of mean group, pool mean group, and dynamic fixed effect models.

Previous Studies

One line of research states that financial development encourages the proper allocation of financial resources, high capital productivity, and an efficient financial system. Theoretically, a well-developed financial system creates a well-functioning financial market that increases savings and the efficient allocation of capital assets to productive investments, which ultimately increases the rate of economic growth (Schumpeter 1912, Levine 1997, Creane, Goyal, Mushfiq, and Sab 2003, Greenwood and Smith 1992). Hence, financial development directs the efficient mobilization of production factors that contribute to economic growth, through converting financial resources into real investments (Jansen 1990, Jean and Varoudakis 1996, Beck et al. 2001, Pagano 1993, Neusser and Kugler 1998, Levine et al. 2000, Tsuru 2000, Waqabaca 2004, and Benhabib and Spiegel 2000). Therefore, empirical evidence asserts that there is a positive relationship between financial development indicators (financial depth and banking sector) and economic growth.

When the government of a country places restrictions on the banking system (such as interest rate ceilings and direct credits), it negatively effects the development of the financial sector, and adversely affects economic growth (McKinnon 1973, Shaw 1973, King and Levine 1993, Jayaratne and Strahan 1996, Levine and Zervos 1998, Seetanah 2008). Financial depth has a uni-directional causal relationship with economic growth, and there is a single equilibrium relationship between financial depth and economic growth (Christopoulos and Tsionas 2004). This confirms that financial development is robustly correlated with subsequent rates of growth, capital accumulation, and economic efficiency (King and Levine 1993a). Therefore, many prominent researchers argue that financial development is a good predictor of economic growth (Levine et al. 2000, Xu 2000).

At the same time, as we have seen, some researchers argue financial development is not a good predictor of economic growth. Singh (1997) explained that the inherent volatility and arbitrariness of the stock markets make it poor guide to efficient investment. But, Luintel and Khan (1999) argued there is a bi-directional causality relationship between financial development and economic growth. And, in the meantime, another set of researchers found mixed results (Seetanah 2008, Luintel and Khan 1999, Demetriades and Hussein 1996, Odedokun 1996). Thus, there is indeed a re-

quirement to complete an in-depth analysis to find out how financial development impacts on economic growth.

Methodology

This study investigates the short- and long-run relationship between financial development and economic growth with reference to South Asian countries. However, due to data constraints, only India, Nepal, Pakistan, and Sri Lanka are studied, over the period 1995 to 2012.

Development of the Model

To test the effect of financial development on economic growth, the following long-run growth function was developed, and includes several growth determinants as control variables. Financial development is represented by two variables - financial depth (proxied by broad money supply to GDP), and banking sector development (proxied by bank deposits to GDP).

$$\ln PGD_{t}P\beta_{t}FD_{t} + \alpha_{t}BSD_{t} + \gamma_{t}\ln GC_{t} + \gamma_{2}\ln PI_{t} + \gamma_{3}TT_{t} + \gamma_{4}HC_{t} + \varepsilon_{t}$$
(1)

Where: PGDP = per capita gross domestic production; FD = financial depth; BSD = banking sector development; GC = government consumption; PI = physical investment; TT = technology transfer; HC = human capital; $i = \text{respective number of the nations}; t = \text{respective number of the year}; \beta = \text{coefficient of FD}; \alpha = \text{coefficient of BSD}; \gamma = \text{coefficients of control variables used}.$

If these variables are I (1) and co-integrated, then the error term is $I(\bullet)$ for all i. Therefore, the ARDL dynamic panel specification of (1) is:

$$\ln PGD_{t}P = \beta_{1}FD_{t} + \beta_{2}FD_{t_{1}} + \alpha_{1}BSD_{t_{1}} + \alpha_{2}BSD_{t_{1}} + \gamma_{1}\ln GC_{t_{1}} + \gamma_{2}\ln GC_{t_{1}} + \gamma_{3}\ln PI_{t_{1}} + \gamma_{5}TT_{t_{1}} + \gamma_{6}TT_{t_{1}} + \gamma_{7}HC_{t_{1}} + \gamma_{3}HC_{t_{1}} + \lambda_{5}\ln PGD_{t_{1}}P_{t_{1}} + \varepsilon_{t_{2}}$$
(2)

The error correction parameterization of (2) is:

$$\begin{split} &\ln\Delta PGD_{t}P\phi_{t}(\ln PGD_{t}P-\theta_{s}-\theta_{s}FD_{t}-\theta_{s}BSD_{t}-\theta_{s}\ln GC_{t}-\theta_{s}\ln PI_{t}-\theta_{t}TI_{t}\\ &-\theta_{s}HC_{t})+\beta_{s}\Delta FD_{t}+\alpha_{s}\Delta BSD_{t}+\gamma_{s}\ln\Delta GC_{t}+\gamma_{s}\ln\Delta PI_{t}+\gamma_{s}\Delta TI_{t}+\gamma_{s}\Delta TI_{t}+\gamma_{s}\Delta HC_{t}+\varepsilon_{t} \end{split} \tag{3}$$

The long-run coefficients, θ_{1i} and θ_{2i} , and the error-correction speed of adjustment parameter, ϕ_i , are of primary interest of this study. With the inclusion of θ_{ii} , a nonzero mean of the co-integrating relationship is allowed.

Estimation Techniques

Long-panel estimation techniques of mean group and pool mean group models are first considered in obtaining the results. The mean group estimator is the least restrictive procedure and allows for heterogeneity of all the parameters (imposes no cross-country restriction). The pool mean group estimator allows the intercepts, short-run coefficients and error variances to differ freely across groups, but constrains the long-run coefficients to be similar across groups. If the parameters are in fact homogenous, the pool mean group estimates are more efficient than the mean group. Therefore, to select the better estimator, a Hausman test was used under the null hypothesis; the difference in the estimated coefficients between the mean group and pool mean group were found to be not significantly different, and therefore the pool mean group is more efficient. Finally, a dynamic fixed effect model was also used to make the long-run results robust. However, the dynamic fixed effect model restricts the speed of adjustment coefficient, and the short-run coefficients must be equal.

Discussion of Findings

Table 16.1 summarises the coefficients estimated for the pool mean group, mean group, and dynamic fixed effect models. The result for the Hausman test indicates that the pool mean group estimator is more efficient than the mean group estimator for both the proxies used for financial development. Therefore, the results for the pool mean group indicate that banking sector development positively and significantly influences economic growth in the long-run. In the other hand, financial depth showed a negative coefficient, but it is not statistically significant. Further, the dynamic fixed effect model also depicts a positive relationship between banking sector development and economic growth, and this is significant at the 90%

confidence level. Once again, financial depth shows a negatively insignificant coefficient.

Table 16.1 The Short and Long-run Effects of Financial Development

		PMG		MG		DFE	
Long-			(0.003		(0.004		(0.085
Run	BSD	4.8651		4.8062)	1.6289)
			(●.222		(0.032		(0.438
	Fdepth	-2.2721)	-2.4894)	-2.5471)
Short-			(●.●21		(0.547		(0.024
Run	BSD	-0.8762)	-0.1351)	-0.1992)
			(0.014		(0.680		(0.044
	Fdepth	●.3●35	3.	0.0943	3.	€.25€5):
	Speed of Adj-BSD	0.3558	144	0.1545	17.7	●.●728	
	Speed of Adj-						
	Fdepth	0.0543		0.0863		●.●287	
	Hausman test-BSD	(0.6148)					

Note: values in parenthesis are the p-values of the coefficients.

To compare the speed of adjustments of these two variables, Equation 3 is estimated separately for banking sector development and financial depth. The results indicate that that growth effects are faster through banking sector development, since its speed of adjustment to the long-run is relatively high.

Table 16.2 Speed of Adjustments for Individual Countries

India	Speed of Adj-BSD	0.1815	
	Speed of Adj-Fdepth	●.3876	
Sri Lanka	Speed of Adj-BSD	●.●27●	
	Speed of Adj-Fdepth	●.2723	
Nepal	Speed of Adj-BSD	€.4€91	
	Speed of Adj-Fdepth	●.2562	
Pakistan	Speed of Adj-BSD	●.2726	
	Speed of Adj-Fdepth	●.●371	

Table 16.2 depicts the speed of adjustment coefficients measured for individual countries, separately for banking sector development and financial

depth. Results indicate that growth effects are faster through banking sector development for Nepal and Pakistan. Meanwhile, the development of financial depth holds the possibility of faster growth effects for India and Sri Lanka

Conclusions

The study investigated the short-run and long-run relationships between financial development and economic growth of South Asian Countries, using data from 1995 to 2012. Broad money supply to GDP and bank deposits to GDP were taken as proxies for financial development. Because of a lack of a sound analytical technique, this study used the long-panel estimation techniques of mean group, pool mean group, and dynamic fixed effect models to obtain the results. Most of the previous studies have used either cross-sectional or time series, which have many drawbacks. When using cross-sectional data, there is the question of spurious correlations arising because of non-stationary considerations. Equally, when using time series data, this may cause unreliable results, due to the short time spans of typical data sets.

According to the results, even though the financial depth shows a negative coefficient, that is not statistically significant, so banking sector development has been able to contribute to the long-run economic growth of these countries, positively and significantly. These results are consistent with the conclusions of many studies (Goldsmith 1969, King and Levine 1993a, Ahmed and Ansari 1998, Ayadi et al. 2013). The findings also suggest that the speed of adjustment in banking sector development in the long-run is relatively higher than that relating to financial depth. But development in financial depth has a faster growth effect in India and Sri Lanka.

These findings make sense as policy implications for government. The government should focus more on developing the banking sector. This would include withdrawing unnecessary restrictions over the banking sector. In both India and Sri Lanka, the government should ensure there are clear and concise rules for broad money supply, and provide incentives to attract foreign investment through deregulation. This liberalization process should continue to create more competition in investments.

References

Ahmed, S. M., and M. L Ansari. 1998. "Financial Sector Development and Economic Growth: The South Asian Experience." *Journal of Asian Eco*nomics 9(3): 503-517.

- Ayadi, R. E. A., S. Naceur, and W. P. D. Groen. 2013. Financial Development, Bank Efficiency and Economic Growth Across the Mediterranean. MEDPR

 Technical Report, 30 March.
- Beck, T., and R. Levine. 2001. Stock markets, banks, and growth: correlation or causality? Policy Research Working Paper 2670. Washington DC: World Bank
- Benhabib, J., and M. M. Spiegel. 2000. "The role of financial development in growth and investment." *Journal of Economic Growth* 5: 341–360.
- Berthel emy, J-C., and Aristomene Varoudakis. 1996. Financial Development Policy and Growth. Development Centre Studies 96. Paris: ©ECD.
- Christopoulos, D. K., and Tsionas, E. G. 2004. "Financial development and economic growth: Evidence from panel unit root and cointegration tests." *Journal of Development Economics* 73: 55-74.
- Creane S., A. Goyal, M. Mushfiq, and R. Sab. 2003. Financial development and growth in the Middle East and North Africa. Washington, DC: IMF Working Paper.
- Deidda, Luca., and Bassman Fattouh. 2002. "Non-linearity between finance and growth." *Economics Letter* 74(2): 339-345.
- Demetriades, Panicos. •., and Khaled A. Hussein. 1996. "Does Financial Development cause economic growth? Time series evidence from 16 countries." *Journal of Development Economics* 51(2): 387-411.
- Goldsmith, R. 1969. Financial structure and development. New Haven: Yale University Press.
- Greenwood, J., and B. Smith. 1997. "Financial markets in development, and the development of financial markets." *Journal of Economic Dynamics and Control* 21: 141-81.
- Hicks, J. 1969. A Theory of Economic History. Oxford: Clarendon Press.
- Jansen, Karel. 1990. Finance, growth and stability. London: Gower Publishing Company limited.
- Jayaratne, J., and P. Strahan. 1996. "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation." *Quarterly Journal of Economics* 111(3): 639-70.
- King, R. G., and R. Levine. 1993. "Finance, Entrepreneurship and Growth: Theory and Evidence" *Journal of Monetary Economics* 32: 513-542.
- King, Robert. E., and R. Levine. 1993a. "Financial Intermediation and EconomicDevelopment." In *Financial Intermediation in the Construction of Europe*, edited by Colin Mayer and Xavier Vives, 156-89. London: Center for Economic Policy and Research.
- King, R., and R. Levine. 1993b. "Finance and Growth: Schumpeter Might Be Right." *Quarterly Journal of Economics* 108(3): 717-37.
- Levine R., N. Loayza, and T. Beck. 2000a. "Financial intermediation and

- growth: Causality and causes." Journal of Monetary Economics 46: 31-77.
- Levine R., N. Loayza, and T. Beck. 2000b. "Finance and the sources of growth. *Journal of Financial Economics* 58: 261-300.
- Levine, R. 1997. "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature* 35: 688-726.
- Levine R., and A. Zervos. 1998. "Stock Markets, Banks, and Economic Growth." *American Economic Review* 88(3): 537-58.
- Luintel, B., and M. Khan. 1999. "A Quantitative Reassessment of the Finance-Growth Nexus: Evidence from a Multivariate VAR." *Journal of Development Economics* 60: 381-405.
- McKinnon, R I. 1973. Money and Capital in Economic Development. Washington, DC: Brookings Institution.
- Neusser, K., and M. Kugler. 1998. "Manufacturing growth and financial development: evidence from ●ECD countries." *The Review of Economics and Statistics*: 638–646.
- •dedokun, M.1996. "Alternative Econometric Approaches for Analysing the Role of the Financial Sector in Economic Growth: Time Series Evidence from LDCs." Journal of Development Economics 50(1): 119-146.
- Pagano, M. 1993. "The flotation of companies on the stock market: a coordination failure model." European Economic Review 37: 1101-25.
- Robinson, Joan. 1952. The Generalization of the General Theory and Other Essays. London, The McMillan Press Ltd.
- Schumpeter, J. 1912. The Theory of Economic Development. •xford: •xford University Press.
- Shaw E. 1973. Financial deepening in economic development. New York: xford University Press
- Seetanah, B. 2008. "Financial development and economic growth in an ARDL approach." *Applied Economics Letter* 4(43): 43-50.
- Singh, A. 1997. "Financial liberalisation, stock markets and economic development." *Economic Journal* 107: 771-82.
- Tsuru, K. 2000. "Finance and Growth: Some theoretical considerations, and a review of the empirical literature." *Economics Department Working Papers* 228.
- Xu, Z. 2000. "Financial development, investment and growth." *Economic Inquiry* 38: 331-344.
- Waqabaca, Caroline. 2004. Financial Development and Economic Growth in Fiji. Suva: Economics Department, Reserve Bank of Fiji.

CHAPTER SEVENTEEN

FOREIGN DIRECT INVESTMENT AND ENDOGENOUS GROWTH: SOUTH ASIAN EVIDENCE

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Abstract

Positive spillover effects from foreign direct investment (FDI) are hypothesized to significantly influence growth-promoting factors identified by endogenous growth theory. However, empirical studies that concentrate on tracing the dynamic comparative advantages of FDI are limited. This study empirically investigates the effect of five theoretically chosen dynamic FDI charmels on economic growth, with reference to South Asian countries. Concentrating on the period 2003 to 2014, the channel effects of physical investment, human capital, technology transfer, macroeconomic policy credibility, and price distortion are analysed. A structural equation model (SEM) was developed to represent the dynamic relationship between these channel variables and economic growth. A three-stage least squares (3SLS) estimation technique was used to estimate the SEM. The results from the modelling indicate that the effect of FDI on each of the channel variables is statistically significant. Further, results are consistent when the estimation technique is made robust using the seemingly unrelated regression (SURE) technique. However, the economic growth effects of FDI are found to be statistically significant only through human capital, technology transfer, and macroeconomic policy credibility channels.

Keywords: FDI, economic growth, dynamic charmels, three-stage least squares, SURE.

Introduction

A review of the literature on the significance of attracting FDI indicates that the use of this source of development finance generates positive productivity effects for host countries. Because these positive productivity effects promote the growth determinants of endogenous growth theory, FDI plays a vital role in promoting economic growth in the contemporary world. Specifically, developing countries tend to encourage FDI as it leads to the development of human capital, improved technology, increased physical investment, improved macroeconomic policy credibility, and reductions in price distortions. Given the absence of intensive investigation in South Asian countries regarding how, and to what extent, these growth determinants do carry the growth effects of FDI, this study fills this gap by measuring their mediation effects using structural equation modelling techniques.

Theoretically, FDI leads to positive spillover effects from technology transfer for the host countries, mainly through horizontal and vertical processes. And, endogenous growth models confirm the potential of new technology in helping to shift a country to a long-run growth path (Barro and Sala-i-Martin 1997, Grossman and Helpman 1991). This encourages us to hypothesize that technology is a positive mediator of the growth effects of FDI. Accumulation of human capital is another charmel that links FDI and economic growth. Among other possible effects, if FDI encourages technology transmission, and if technology and labour skills are complementary, then FDI will improve human capital through improvements in technology. FDI may also lead to the enhancement of the human capital of host countries through increased competition, learning by doing, know-how transfer, and reverse engineering processes. On the other hand, economic growth models provide evidence that increases in human capital positively affect economic growth (Barro 1991, Levine and Renelt 1992). Hence, developments in human capital can be hypothesized as a dynamic effect of FDI that can increase the growth rates of host countries.

A growth effect through improvements in physical investment is also hypothesized for FDI. In the one hand, FDI may itself lead to increased physical investment in the host countries, while on the other, local firms may introduce more investment to successfully compete with multinational companies. In addition, FDI may affect economic growth through its influence on macroeconomic policy credibility as well. Because FDI tends to flow to the countries that have more stable economic environments, domestic policy makers are forced to boost the credibility of their policies. As re-

ported by Fischer (1993), government policy credibility may favourably affect economic growth by "reducing price uncertainty and moderating public deficit and debt levels, thereby reducing crowding out and the likelihood of future tax increases and furthering the ability of domestic firms to compete on global markets" (Wacziarg 2001). Thus, it is important to hypothesize positive mediation effects from macroeconomic policy credibility.

The presence of significant price distortions will, however, discourage FDI. Therefore, policy makers should maintain the price levels of internationally traded goods at a competitive level with world price levels. Alvarez and Braun (2006) indicate that price distortion is negatively associated with the degree of openness, and the volume of exports and imports, of a country. In addition, the extent of production reallocation is positively related to the relative price changes during liberalization periods. Easterly (1989, 1993) indicates that price distortions adversely affect both factor accumulation and growth, and thus, the potential of FDI to assist in lowering price distortion should be a significant dynamic channel of economic growth.

Literature Review

The above review of the relationship between economic growth and FDI suggests a growth-enhancing effect from inward FDI. However, empirical literature in this regard is still confusing; with the presence of evidence for both growth-enhancing and growth-retarding effects. Early studies supported the view that most of the benefits are transferred to the origin countries, and there is less for the host countries (Singer 1950, Prebisch 1968, Griffin 1970, Weisskopf 1972). Bacha (1974) examined the relationship between these two variables and concluded that there was a negative relationship. This result is further confirmed by Saltz (1992), who examined the effect of FDI on economic growth for 68 developing countries. Similarly, De Mello (1999) indicated that, "whether FDI can be deemed to be a catalyst for output growth, capital accumulation, and technological progress, seems to be a less controversial hypothesis in theory than in practice." Other studies include Carkovic and Levine (2002), who studied FDI in 72 developed and developing countries, and Mencinger (2003) who studied eight transition countries. These studies found that FDI has a negative impact on economic growth.

On the other hand, a growing line of research confirms the view that FDI can exert a positive impact on economic growth in emerging economies. Blomstrom et al. (1992), using 78 developing countries, found a positive influence of FDI inflows on economic growth. Borensztein et al. (1998) measured the influence of technological diffusion of FDI on economic

growth, using 69 developing countries. They also found evidence for positive economic growth effects. Meanwhile, among other studies, Marwah and Tavakoli (2004) using ASEAN-4 countries, Lumbila (2005) using 47 African countries, Aghion et al. (2006) covering 118 countries, and Lensink and Morrissey (2006) using 87 countries, showed that FDI have a positive impact on GDP growth.

Some empirical evidence from South Asian countries is also available. Alam (2000) examined the impact of FDI on the Bangladeshi and Indian economies, and concluded that the impact is unsatisfactory. Pradan (2002) also stressed a similar conclusion in his study conducted in India over the period 1969 to 1997. Both these studies concentrated on one or two countries of the region, but a recent study, An empirical investigation of foreign direct investment and economic growth in SAARC countries, by Sirinivasan et al. (2011), examined the causal nexus between FDI and all the SAARC countries over the period 1970 to 2007. The econometric tools of the Johansen cointegration (JC) test, vector error correction model (VECM), and impulse response function (IRF) were employed in attaining their results. The reported results of the JC test indicate a long-run relationship between FDI and GDP in Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka. VECM results confirm a strong bidirectional link between these two variables for the countries, except for India. However, a significant one-way causality is depicted from GDP to FDI for India.

Most of these previous studies examined the causal relationship between FDI and economic growth. However, some studies concentrated on the causal relationship between FDI and some specific growth determinants, thereby, attempting to explain the growth effects of FDI. However, studies that examine the dynamic efficiency of FDI, and in tum, its effect on economic growth, are very rare in the literature. Thus, our review has established the central gap in literature that this study aims to cover.

The Empirical Method

In this study, the dynamic efficiency of FDI in South Asian countries is measured. However, Bhutan is not considered due to data constraints. Five channel variables were identified in this study: Government policy credibility (GPC); price distortion (PD); physical investment (PI); technology transfer (TT); and human capital (HC). The channel effects of FDI on economic growth through the above channels were then estimated. Finally, a structural model was put together with the features of panel data and simultaneous equation modelling.

The Structural Model

The basic framework for the structural model consists of M (m = 1....6) structural relationships. This includes a cross-country growth equation, and another five channel equations for each of the channels discussed previously. The structural relationship was measured over T time period (from 2003 to 2014), for N (seven) countries (i = 1...N). Thus, a set of T*M equations can be identified for the most unrestricted form of the model:

$$\beta_{11}^{m} y_{i11} + \dots + \beta_{T1}^{m} y_{iT1} + \dots + \beta_{IM}^{m} y_{i1M} + \dots + \beta_{TM}^{m} y_{iTM} + \lambda_{11}^{m} x_{i11} + \dots + \lambda_{T}^{m} x_{iT1} + \dots + \lambda_{TL}^{m} x_{iTL} = \varepsilon_{i}^{tm}$$

$$(1)$$

Where all the superscripts indicate equations, and subscripts indicate variables.

However, as the above model is far too general, so, following Tavares and Wacziarg (2001), several restrictions were introduced. To ensure the model is not dynamic, the non-contemporary coefficients were made equal

to zero ($\beta_{sm}^{tm} = \lambda_{sm}^{tm} = 0$ for all s different from t). A cross-time parameter restriction was imposed to equalize coefficients across time, that is;

$$\beta_{tm}^{tm} = \beta_{tm}^{sm}$$
 and $\lambda_{tm}^{tm} = \lambda_{tm}^{sm}$. To specifically identify the mth variable as

the dependent variable for the mth equation, β_m^m was made equal to one. Thus, according to these restrictions, each set of T equations for one of the available M relationships would be:

$$y_{im} = \varepsilon_i^m - \beta_1^m y_{i1} - \dots - \beta_M^m y_{iM} - \lambda_1^m x_{i1} - \dots - \lambda_L^m x_{iL}$$
(2)

Where: y_{im} , x_{il} , and ε_i^m are the (T x 1) vectors that stack each endogenous variable m = 1....M; each exogenous variable l = 1...L; and each disturbance m = 1....M; over T time periods.

Equation (2) depicts the properties of the panel data model, where the data for each of the individual country have been stacked over time. However, the joint estimation of the above system of equations will generate a

large covariance matrix for the \mathcal{E}_{l}^{m} errors. This can be stacked into a vector

of \mathcal{E}_i where, $E(\mathcal{E}_i)=0$ and $E(\mathcal{E}_i\mathcal{E}_i')=\sum$, and the cross-period and cross-equation error co-variances of the system can be represented by the off-diagonal elements of \sum . Allowing these off-diagonal elements to differ from zero would ensure the efficiency of the estimates (Wacziarg 2001). Further, differentiating these cross-period error co-variances from zero is similar to allowing the error terms to represent country specific effects independent from the right-hand side variables (Tavares and Wacziarg 2001), and Wacziarg 2001). Thus, our system is an approach equivalent to the random effects model.

Estimation of the Structural Parameters

Possible parameter bias is a major concern in the above structural model, as several endogenous variables appear in the right-hand side of the equation. Therefore, these (T*M) equations are jointly estimated by using a three-stage least squares (3SLS) estimator, introduced by Zellner and Theil (1962). The 3SLS estimator combines the properties of two-stage least squares (2SLS) and seemingly unrelated regression (SUR) estimators. Thus, it is an instrumental variable-generalized least squares (IV-GLS) technique that guarantees consistency and efficiency through instrumenting and appropriate weighting. The robustness of the estimation method is tested by employing the SURE estimator, which is considered as less consistent but highly efficient. As a result, it may provide a good indication of the model's robustness.

Model Specifications

Following the cross-country growth literature (Barro 1991, Barro and Sala-i-Martin 1997, Wacziarg 2001, and Tavares and Wacziarg 2001), an augmented Solow model was developed as the growth equation, and this included the initial income, government consumption, and five charmel variables discussed above. Because all charmel variables appear jointly in the growth regression equation, any effect of FDI on growth will be reflected through these charmel variables:

$$Y_{it} = \beta_0^{y'} + \beta_1^{y'} H C_{tt} + \beta_2^{y'} T T_{tt} + \beta_3^{y'} P I_{tt} + \beta_4^{y'} M P C_{tt} + \beta_3^{y'} P D_{tt} + \beta_6^{y'} I I_{tt} + \beta_6^{y'} G C_{tt} + \varepsilon_{tt}$$
(3)

Where: Y = per capita growth; MPC = macroeconomic policy credibility; PD = price distortion; PI = physical investment; TT = technology transfer;

HC = human capital; II = initial income; and GC = government consumption.

The specifications for the five charmel equations are determined based on the empirical literature. Because several other charmel variables in the system may appear on the right-hand side of the channel equations, each of these equations suffer from endogeneity. Thus, to maintain the rank and order conditions of Greene (1993), several exogenous variables are introduced to the system as instrumental/control variables.

$$PI_{s} = \beta_{s}^{PI} + y_{1}^{PI} FDI_{s} + \sum_{i=1}^{3} \beta_{i}^{PI} CV_{ii}^{PI} + \varepsilon_{s}^{PI}$$

$$TT_{s} - \beta_{s}^{PI} + y_{1}^{PI} FDI_{s} + \sum_{i=1}^{3} \beta_{i}^{PI} CV_{s}^{PI} + \varepsilon_{s}^{PI}$$

$$HC_{s} = \beta_{s}^{PC} + y_{1}^{PC} FDI_{s} + \sum_{i=1}^{3} \beta_{i}^{PC} CV_{s}^{PC} + \varepsilon_{s}^{PC}$$

$$MPC_{s} = \beta_{s}^{PC} + y_{1}^{PC} FDI_{s} + \sum_{i=1}^{4} \beta_{i}^{PC} CV_{s}^{PC} + \varepsilon_{s}^{PC}$$

$$PD_{s} - \beta_{s}^{PD} + y_{1}^{PD} FDI_{s} + \sum_{i=1}^{4} \beta_{i}^{PC} CV_{s}^{PD} + \varepsilon_{s}^{PD}$$

$$(5)$$

Where: CV = control variables. The CVs in relation to equation (4) are: TT, II, GC, popover65, and popunder15. CVs to equation (5) are: PD, HC, II, terms of trade, and infrastructure. CVs to equation (6) are: II, GC, and infrastructure. CVs to equation (6) are: GC, terms of trade, democracy, log population. CVs to equation (6) are: GC, terms of trade, democracy, and population density.

Estimating the Channel Effect

To estimate the channel effect, a Sobel test procedure (Sobel 1982) was employed in this study. The parameters used were the ones that describe the effect of FDI on each of the channel variables (γ_1^{MPC} , γ_1^{PD} , γ_1^{PI} , γ_1^{TT} , and γ_1^{HC}), and the parameters that describe the effect of each channel variable on growth (β_2^T , β_3^T , β_4^T , β_5^T , and β_6^T). As a result, the product of the corresponding parameters on a specific channel path will provide the desired channel effect.

When testing for the statistical significance of the channel effects, the standard error of $\gamma_1^m \beta_m^{\gamma}$ (S_{ab}) can be obtained from the following equation (Aroian 1944, Baron and Kenny 1986, Sobel 1982):

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2}$$
(9)

Where: S_{ab} is the standard error of the $\gamma_1^m \beta_m^\gamma$; b indicates β_m^γ ; a indicates γ_1^m ; S_a^2 is the variance of the equation that describes the effect of FDI on a channel variable; and S_b^2 is the variance of the equation that describes the effect of a channel variable on growth.

Results and Discussion

The coefficient estimates for the structural model are summarized in Table 17.1. The reported results indicate that, out of the five growth determinants considered, only three significantly influence economic growth in the region. That is, in the growth equation for macroeconomic policy credibility, technology transfer and human capital are found to be statistically significant.

Table 17.1 Coefficient Estimates for Channel Effects

Channel	Effect of Channel on		Effect of FDI	Channel Ef-	
Variable	Growth			fect	
	3SLS	SURE	3SLS	SURE	3SLS
MPC	●.451	●.342	●.659	●.519	●.297
	(4.74)	(3.45)	(6.46)	(3.41)	(4.21)
PD	-3.331	-4.451	- ● .997	-2.17	3.321
	(-0.42)	(-3.43)	(-4.97)	(-3.44)	(0.84)
PI	●.●77 (1.29)	●.339 (0.75)	●.426 (7.57)	●.138 (9.01)	0.033 (0.97)
TT	●.7●5 (2.97)	●.439 (2.46)	●.444 (10.56)	0 .171 (2.13)	•.313 (4.46)
НС	●.781	●.335	●.426	●.162	●.333
	(4.59)	(3.97)	(6.37)	(3.72)	(3.65)

Note: Numbers in parentheses are t-statistics.

Price distortion and physical investment were the two theoretical growth determinants that were found to be not significant in the growth equation.

A negative coefficient was expected for price distortion, as it adversely affects both factor accumulation and growth and, though it is not significant, the expected adverse relationship is depicted in the results. However, while physical investment showed the expected positive relationship, this was not statistically significant, due to the lower levels of FDI that flow to the region.

The 3SLS estimation results indicate, however, that the effects of FDI are statistically significant on all five channel variables. The macroeconomic policy credibility equation depicts a positively significant coefficient, indicating its favourable influence on the stabilization of the region's macroeconomic policies. The FDI coefficient in the price distortion equation was negatively significant. This indicates that FDI has led to the reduction of price distortions within the countries studied. The effect of FDI on physical investment is positively significant however, and this means that FDI encourages more and more physical investment within the region. Technology transfer is also significantly influenced by FDI. Finally, the other dynamic effect tested was the influence of FDI on human capital development. Our results confirm a significant human capital development effect resulting from FDI. Similar results were found when these dynamic effects were made robust using our estimation technique. That is, results for the SURE model also emphasize the dynamic efficiency of FDI, as all five growth determinants are significantly influenced by FDI in the region.

The Sobel test results indicate that only macroeconomic policy credibility, technology transfer, and human capital are significantly positive economic growth effects of FDI. This indicates that the FDI that flows to the region boosts economic growth mainly through the horizontal and vertical processes of technology transfer. It thus enhances human capital through increased competition, learning by doing, know-how transfer, and reverse engineering processes. Furthermore, policy makers are seen to attempt to maintain a stable economic environment with the purpose of attracting more and more FDI to the region. The recent policy decisions to enhance the regional economic integration by introducing trade agreements like the South Asian Free Trade Area and the SAARC Agreement on Trade on Services may have supported this positive effect. Even though FDI encourages physical investment and reduces price distortions significantly, the channel effects of these variables are not statistically significant. That physical investment and price distortions are found as insignificant mediators may be mainly because they themselves do not significantly influence economic growth in the region. Relatively lower levels of FDI that flow to the region may have caused this result.

Conclusions

FDI in South Asian region countries leads to positive spillover effects from technology. Accumulation of human capital is also encouraged by FDI. Because FDI encourages technology transmission, and as technology and labour skills are complementary, FDI in the region has successfully enhanced the level of human capital available. In addition, it may also have generated positive impacts through the increased competition, learning by doing, know-how and reverse engineering processes associated with it. This study provides further evidence regarding the dynamic efficiency of FDI in promoting physical investment. On the one hand, the volume of FDI inflows may itself lead to increased physical investment, and on the other hand, local firms may introduce more funds to successfully compete with the multinational companies of ten involved in FDI.

The macroeconomic policy credibility of the region is also improved, as policy makers attempt to attract more and more FDI. Because price distortions discourage FDI inflows, policy makers have also managed to maintain price levels of internationally traded goods at a competitive level with world price levels. However, the economic growth effects present only through macroeconomic policy credibility, technology transfer and human capital improvement. Even though FDI in the region significantly promotes physical investment, and discourages price distortions, these factors are found as insignificant growth determinants for the region. Therefore, their mediation effects are also found to be statistically insignificant. All in all, the findings of this study highly emphasize the dynamic efficiency of FDI; thus, policy makers do have enough evidence to encourage FDI as an economic growth determinant for the region.

References

- Aghion, P., D. Comin, and P. Howitt. 2006. When does domestic saving matter for economic growth? NBER Working Paper 12275. Cambridge, MA: National Bureau of Economic Research.
- Alam, M. S. 2000. "FDI and economic growth of India and Bangladesh: a comparative study." *Indian Journal of Economics* 80(1): 1-15.
- Alvarez R., and Braun, M. 2006. Trade Liberalization, Price Distortions, and Resource Reallocation. Central Bank of Chile. Working Paper No. 374.
- Aroian, L. A. 1944. The probability function of the product of two normally distributed variables. *Annals of Mathematical Statistics* 18: 265-271.
- Bacha, E. L. 1974. "Foreign capital inflow and the output growth rate of the

- recipient country." Journal of Development Studies 1 € (3-4): 374-81.
- Baron, R. M., and Kenny, D. A. 1986. "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations." *Journal of Personality and Social Psychology* 51: 1173-1182.
- Barro, R. 1991. "Economic Growth in a Cross-Section of Countries." *Quarterly Journal of Economics* 106(2): 407-43.
- Barro, R. 1991. "Economic Growth in a Cross-Section of Countries." *Quarterly Journal of Economics* 106(2): 407-43.
- Barro, R., and X. Sala-i Martin. 1997. "Technological Diffusion, Convergence, and Growth." *Journal of Economic Growth* 2(1): 1–26.
- Blomstrom, M., R. Lipsey, and M. Zejan. 1992. What explains developing country growth? NBER Working Paper 4132. Cambridge, MA: National Bureau of Economic Research.
- Borensztein, E., J. De Gregorio, and J. W. Lee. 1998. "How does foreign direct investment affect economic growth?" *Journal of International Economics* 45(1): 115-35.
- Carkovic, M., and R. Levine. 2002. Does foreign direct investment accelerate economic growth? Working Paper 2, Department of Business Finance. Twin Cities, MN: University of Minnesota.
- De Mello, L. R. Jr. 1999. "Foreign direct investment in developing countries and growth: a selective survey." *The Journal of Development Studies* 34(1): 1-34.
- Easterly, W. 1993. "How Much do Distortions Affect Growth?" *Journal of Monetary Economics* 32(2): 187–212.
- Easterly, W. 1989. Policy Distortions, Size of Government, and Growth. NBER Working Paper 3214. Cambridge, MA: National Bureau of Economic Research.
- Fischer, S. 1993. "The Role of Macroeconomic Factors in Growth." *Journal of Monetary Economics* 32(3): 485–512.
- Greene, W. 1993. Econometrics. New York: McMillan Press.
- Griffin, K. B. 1970. "Foreign capital, domestic savings, and development." Oxford Bulletin of Economics and Statistics 32(2): 99-112.
- Grossman, G. M., and E. Helpman. 1991. Innovation and Growth in the Global Economy. Cambridge, MA: MIT Press.
- Lensink, R., and ●. Morrissey. 2006. "Foreign direct investment: flows, volatility, and the impact on growth." *Review of International Economics* 14(3): 478-93.
- Levine, R., and D. Renelt. 1992. "A Sensitivity Analysis of Cross-Country Growth Regressions." *American Economic Review* 82(4): 942–63.
- Lumbila, K. 2005. What makes FDI work? A panel analysis of the growth

- effect of FDI in Africa. Africa Region Working Paper Series 80. Washington DC: The World Bank.
- Marwah, K., and A. Tavakoli. 2004. "The effect of foreign capital and imports on economic growth: further evidence from four Asian countries (1970-1998)." *Journal of Asian Economics* 15(2): 399-413.
- Mencinger, J. 2003. "Does foreign direct investment always enhance economic growth?" *Kyklos* 56(4): 491-509.
- Pradhan, J. P. 2002. "Foreign direct investment and economic growth in India: a production function analysis." *Indian Journal of Economics* 82(327): 582-6.
- Prebisch, R. 1968. "Development problems of the peripheral countries and the terms of trade.", In *Economics of Trade and Development*, edited by J. D. Theberge. New York: Wiley.
- Saltz, S. 1992. "The negative correlation between foreign direct investment and economic growth in the Third World: theory and evidence." *Rivista Internazionale di Scienze Economiche e Commerciali* 39: 617-33.
- Singer, H. 1950. "The distributions of gains between investing and borrowing countries." *American Economic Review* 40(2): 473-85.
- Sirinivasan P., M. Kalaivani, and P. Ibrahim. 2011. "An empirical investigation of foreign direct investment and economic growth in SAARC countries." *Journal of Asia Business Studies* 5(2): 232-248.
- Sobel, M. E. 1982. "Asymptotic confidence intervals for indirect effects in structural equation models." In *Sociological Methodology 1982*, edited by S. Leinhart, 290-312. San Francisco: Jossey-Bass.
- Tavares, J., and R. Wacziarg. 2001. "How Democracy Affects Growth." European Economic Review 45(8): 1341-79.
- Wacziarg, R. 2001. "Measuring the dynamic gains from trade." *The World Bank Economic Review* 15(13): 393-429.
- Weisskopf, T. E. 1972. "The impact of foreign capital inflow on domestic savings in underdeveloped countries." *Journal of International Economics* 2(1): 25-38.
- Zellner A., and H. Theil. 1962. "Three-stage least squares: simultaneous estimation of simultaneous equations." *Econometrica* 30(1): 54–78.

CHAPTER EIGHTEEN

THE EFFECT OF INSTITUTIONAL EXCELLENCE ON STOCK MARKET DEVELOPMENT

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Abstract

Institutional environments with good governance should lead to higher stock market returns by reducing both transaction and agency costs. Meanwhile, superior institutional environments should ensure lower levels of uncertainty, resulting in lower returns on equity. To test these assertions, this study investigated the effect of institutional quality on the performance of global stock markets. Due to the persistent behaviour of stock market development (SMD), a dynamic econometric model was developed in this regard. SMD is proxied by market capitalization to GDP ratio. A proxy for institutional quality was obtained by the common component of governance indices which measure the effectiveness of government, regulatory quality, extent of corruption control, political stability, voice and accountability, and agents' confidence on the rules of the society. Several other empirically chosen variables were also included in the model to control other potential effects. A panel data set of 43 countries over the period 2005 to 2013 was measured using generalized method of moment (GMM) estimation techniques. The results depict a negatively significant relationship between SMD and institutional quality. The relationship continued to remain negative when the model was made robust for developing and developed countries. Interestingly, the risk-return spectrum is supported when the model is further made robust for countries with strong and weak institutional environments.

Keywords: Institutional quality, stock market development, risk-return spectrum, generalized method of moment.

Introduction

Following institutional theory, this study investigates how institutional excellence affects the development of global stock markets. According to Kraft, Micahel, and Furlong (2007), institutional theory concentrates on "policy-making that emphasizes the formal and legal aspects of government structures." Government or institutional structures consist of the social, economic and political factors in the environment within which firms operate. DiMaggio and Powell (1991) indicate that firms tend to adopt similar structures in the environment, due to coercive pressures, mimetic pressures, and normative pressures. Firms accept these similar structures to gain or maintain legitimacy in the institutional environment, which ensures organisational survival (Meyer and Rowen 1977). Therefore, institutional structure has important implications for the performance of firms, and in turn, the performance of global stock markets.

The potential of institutional excellence to control agency and transaction costs is considered as one significant avenue that influences the performance of stock markets. Agency costs that arise due to core problems, such as conflicts of interest between agents and shareholders, are minimized with the presence of better institutional environments. Better institutional environments would lead to well defined corporate governance rules that can help reduce the expected costs and their negative impact on firm value. La Porta et al. (1997) indicate that improvements in corporate governance rules would encourage companies to greater rely on equity financing. Further, they would constrain the amount of corporate resources diverted by managers, and allow shareholders to monitor managers at a lower cost. Coase (1960) provides an important link between institutions and transaction costs. That is, the neo-classical efficient market result is obtained with the assumption of zero transaction costs. Therefore, when it is costly to transact something, institutions come handy in attaining efficiency in the market. Transaction costs arise because information is costly, and asymmetrically held by the parties to an exchange. The presence of better institutional environments would reduce the asymmetric dissemination of information leading to lower transaction costs.

On the other hand, institutional environments with superior investor protection policies will result in lower returns on equity as they lead to an equity premium over internationally competitive financial markets (Hooper, Sim, and Uppal 2009). Meanwhile, relatively unstable institutional environments tend to change policies frequently. This results in higher investor uncertainty. Therefore, investors may go for either low risk investments or demand higher and immediate returns (Henisz 2000). Several previous studies

attempt to measure the effect of institutional environment on stock market performance; however, they had their own limitations. At times they are limited with the methodology adopted (Lambardo 2000), and most of the time they fail to provide an overall measure of institutional quality (Hooper et al. 2009). Therefore, given the absence of intensive investigation of these competing hypotheses, empirical knowledge about how institutional environments affect the development of stock markets, whether the effect differs with the development levels of the countries, and how different institutional levels affect the development of stock markets, is yet to reach a peak.

Literature Review

Lambardo and Pagano (2000) examined the correlation between quality of legal institutions and return on equity across developed and emerging stock markets. They used total return (risk adjusted) on national equity markets, accounting-based measures of return, and the degree of initial public under-priced offerings as the proxies of return on equity. The quality of legal institutions is proxied by the origin of judicial systems, respect for the law, lack of corruption among government officials, quality of accounting standards, and risk of contract repudiation. The findings of that study indicate a positive correlation between risk-adjusted return on equity and all measures of institutional quality. Further, accounting based measures of return confirm the above positive correlation. Hail and Leuz (2003) investigated the relationship between legal institutions and cost of capital of firms across 40 countries. Their findings depict a negatively significant relationship.

This suggests that, when countries have strong regulation policies over securities markets, the cost of capital of firms trading on those markets tends to be lower. Further, they confirm the lesser importance of country-specific factors, like legal institutions, in asset pricing, as markets become more internationally integrated. Lambardo (2000) measured the effect of institutional infrastructure on equity returns. In this regard, the effects of the impartiality of law, its fairness, and the extent to which it ensures contract enforceability, the effect of corruption among government officials, and government credibility in safeguarding investors' property rights, are considered. The findings of this study also provide evidence for the significant effects of institutional infrastructure on the propensity of investors to divert funds to the stock markets.

Hooper, Sim, and Uppal (2009) investigated the link between quality of government institutions and stock market performance. Showing that most of the previous studies concentrate on some limited features of institutional

quality, they used Kaufmann et al. (2003) governance indicators to represent the overall quality of institutional environment, rather than any specific component. They grouped these indicators into three clusters and evaluated the effect of each cluster. 'Voice and accountability', and 'political stability and absence of violence', comprised the first cluster. The second cluster included 'government effectiveness' and 'regulatory quality'. The third cluster contained 'rule of law' and 'control of corruption'. The effects of these clusters on stock market performance were measured using both time series and cross-sectional regression models. The results indicated a positive association between stock market performances and institutional quality. Even though Hooper, Sim, and Uppal (2009) used a wider range of indicators to represent overall institutional quality, by grouping them into three clusters, as mentioned above, they also failed to provide a single measure of impact on institutional quality. This establishes the central gap in literature which this study aimed to cover.

Methodology

This study measures the effect of institutional excellence on stock market development (SMD) using a panel data set of 43 countries over the period 2005 to 2013 (see Appendix 1). The countries were selected based on data availability. Of the 43, 27 are developing, and 16 are developed countries. Meanwhile, 21 were considered as countries having strong institutional environments, and 22 having weaker institutional environments. The rest of this section describes the econometric model and the estimation techniques used.

Development of the Model

Given the absence of direct variables covering SMD and institutional excellence, proxies recommended by previous studies were used. SMD is therefore proxied by total market capitalization to GDP ratio (Velariano, Garcia, and Liu 1999). The governance indicators estimated by Kaufmann, et al. (1999a) cover most of the features of institutional environments. They are: control of corruption, government effectiveness, political stability, and absence of violence/terrorism, regulatory quality, voice and accountability, and rule of law. According to Globerman and Shapiro (2002), these indicators are superior to others that have been used elsewhere, because they are estimated using 31 different qualitative indicators from 13 different reliable sources. Thus, these meta-indices encompass most of the other measures. However, these indices are highly correlated with each other. Therefore,

following Globerman and Shapiro (2002), an aggregate measure of these is obtained by estimating their first principal component, which efficiently represents the institutional excellence.

To isolate the effect of institutional excellence in the panel regression model, several other determinants of SMD were introduced. Following Velariano et al. (1999), real income, saving rate, financial intermediary development, and stock market liquidity, are used as control variables. Income level is considered as a significant determinant of SMD, because higher income usually guarantees higher savings, higher education, well defined property rights, and a better environment for businesses. Real GDP in US dollars is used to measure the income level. Savings rate is also a significant determinant of SMD. The higher the savings, the larger the funds which flow through the stock markets, because stock markets intermediate savings to various investment projects efficiently. Gross domestic savings to GDP ratio is used to denote the savings ratio (GDS/GDP). The financial literature shows that stock markets and other financial institutions are complements most of the time. Therefore, they grow simultaneously (Boyd and Smith 1996, Demirgue-Kunt and Levine 1996a). Domestic credit to the private sector divided by GDP is used to measure the development of financial intermediaries (DCP/GDP). Finally, market liquidity is taken as the other control variable in the model. Because liquid stock markets facilitate investors to change their investments quickly and cheaply, a larger amount of savings is channelled through stock markets (Velariano et al. 1999). Market liquidity is proxied by total share value traded to GDP (VT/GDP), and a positive relationship is expected between SMD and the four control variables used.

The model is further extended by introducing a lagged dependent variable. Because SMD is persistent, failure to capture that persistency would lead to inconsistent estimates. Therefore, the dynamic panel model developed to measure the effect of institutional excellence on SMD would take the following form:

$$SMD_{it} = \beta_1 SMD_{t-1} + \beta_2 IE_{it} + \sum_{i=3}^{6} \beta_i CV_{it} + \mu_i + u_{it}$$
(1)

Where: SMD_{it} is the SMD of country i in the year t; IE_{it} is the Institutional Excellence of country i in the year t; CV_{it} represents the four control variables used in this study, namely, real income, saving rate, financial intermediary development, and stock market liquidity; β_i represents coefficients of independent variables in the model; μ_i are the country specific factors; u_{it}

is the error term of the model.

Estimation Technique

The endogeneity in the right-hand side regressions, and the resulting estimate bias is a major issue that should be considered when selecting an appropriate estimation technique for Equation 1. Traditional panel estimation methods are biased and inconsistent, because the lagged effect of SMD is correlated with the error term. The first difference-GMM estimator with instrumental variables suggested by Arellano and Bond (1991) is an alternative estimation method in this. Under the assumptions that there is no serial correlation in the error term, and there are only weakly exogenous explanatory variables, the first difference-GMM estimator uses GMM-type moment conditions and standard moment conditions as instrumental variables to get rid of the endogeneity problem. Further, Arellano and Bond (1991) suggested transforming the model into first differences to eliminate the fixed effects, and estimate this with the two-step GMM estimator, which provides theoretically more efficient estimates.

However, Arellano and Bover (1995) and Blundell and Bond (1998) indicate that, when the autoregressive process is highly persistent, the lagged levels are weak instruments in a two-step GMM estimator. Hence, to overcome this issue Blundell and Bond (1998) introduced the system-GMM estimator which combines the moment conditions for the differenced model with those for the levels model. Therefore, the two-step system-GMM estimator was used as the estimation technique in this study. Post estimation tests of Sargan-test, and Arellano and Bond serial correlation tests were then applied to test the validity of instruments and the serial correlation of the disturbances, respectively.

Discussion of Findings

Table 18.1 depicts the two-step system-GMM results for Equation 1. Equation 1 is measured five times, depending on the countries selected for the model. First, all 43 countries are considered to have an overall measure of institutional excellence on SMD. Then the model was made robust among 16 developed and 27 developing counties. Finally, it was made robust for the institutional quality. That is, the model was re-estimated for the 21 countries that had strong institutional environments, and the 22 countries that had weaker institutional environments. Because the calculated p-values for the Sargan-test are greater than 0.05, this confirms the hypothesis that the identified instruments are valid for all five models. Meanwhile, the p-values

for the Arellano and Bond serial correlation tests indicate the presence of first order significant serial correlations, and the absence of second order serial correlations for all the models. Therefore, both the Sargan-test and the Arellano and Bond serial correlation test results provide evidence for the un-biased nature and consistency of the coefficients estimated for all five models.

The reported results indicate that the effect of institutional excellence on SMD is statistically significant, however the effect is negative. This indicates that superior institutional environments adversely affect the SMD. This adverse effect may be due to several reasons. On the one hand, institutional environments with superior investor protection policies will result in lower returns on equity, as they lead to an equity premium over internationally competitive financial markets (Hooper et al. 2009). On the other hand, government policy credibility is one of the significant features that determines the nature of institutional environments. Therefore, credibility in government policies (stable government policies) would lead to stable institutional environments. This would result in lower investor uncertainty. Therefore, according to the risk-return spectrum, institutional excellence should lead to lower returns, and in turn, adversely affect the SMD.

The result continued to be negatively significant, even when the model was made robust for both developed and developing countries. This indicates that the quality of institutional environment does not necessarily depend on the level of economic development. This is true, because every country attempts to establish an investor-friendly environment to boost their economies. The risk-return spectrum is further supported when the model is made robust for stronger and weaker institutional environments. The effect is, once again, negatively significant for the countries that depict stronger institutional environments. Meanwhile, it is positively significant for the countries that have weaker institutional environments. Therefore, the stronger the institutional environment, the lower is the stock market growth, and vice versa.

Table 18.1 Coefficient Estimates for Institutional Effects

	All coun- tries (43)	Developing countries (27)	Developed countries (16)	Strong in- stitutional environ- ments (21)	Weaker in- stitutional environ- ments (22)
SMD _{t-1}	-0.0898*	-•.1292*	●.1339*	-•.1649*	●.●322
IE	-0.0294*	-0.0707*	-0.0397*	-0.0614*	●.●497*
GDS/GDP	●.6797*	●.5787*	1.3843*	●.6157*	1.4568*
VT/GDP	●.2727*	●.2684*	●.1666*	●.2648*	●.1727*
DCP/GDP	●.2926*	●.3917*	-0.2958	●.3933	-•.2486
Real GDP	-0.0480*	-0.0556*	-0.0430*	-•.•591*	-•.•445*
Sargan- test	●.1634	●.8257	●.9985	●.97●2	●.9696
Order 1	0.0001	0.0002	0.0095	0.001	0.0037
Order 2	6 .1113	●.●727	●.1●94	€.1584	●.5891

(Note: * indicates statistical significance at the 95% confidence level).

Conclusions

In this study, the effect of institutional excellence on SMD was tested using two competing hypotheses. That is, the potentiality of agency and transaction cost reduction will lead to a positive relationship between institutional excellence and SMD. Instead, the systematic risk embedded in the institutional environments will lead to a negative relationship. The findings of the study depict a significant inverse relationship between institutional excellence and SMD. Therefore, we conclude that the effects that flow through the systematic risk embedded in the institutional environments dominate the other potential effects. Thus, the risk-return spectrum is further confirmed. The result contradicts some previous studies (Lambardo and Pagano 2000, Lambardo 2000, Hooper et al. 2009), as they indicated a positive relationship between institutional environments and stock returns. However, the concentration of this study deviates significantly from those previous studies in terms of scope and the methodology adopted. Further, the results obtained here are considered unbiased and consistent, as all the postestimation tests and the robust analysis confirm.

References

- Arellano, M., and O. Bover. 1995. "Another look at instrumental variables estimation of error-component models." *Journal of Econometrics* 68: 29-51.
- Arellano, M., and S. Bond. 1991. "Some tests of specification for panel data: Monte Carlo evidence and application to employment equations." *Review of Economic Studies* 58: 227–297.
- Blundell, R., and S. Bound. 1998. "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models." *Journal of Econometrics* 87: 115-143.
- Boyd, J., and B. Smith. 1996. "The Co-evolution of the Real and Financial Sectors in the Growth Process." The World Bank Economic Review 10(2).
- Coase, R. H. 1960. "The problem of social cost." *Journal of Law and Economics* 3: 1-44.
- Demirguc-Kunt, Asli., and R. Levine. 1996a. "Stock Markets, Corporate Finance and Economic Growth: An Overview." The World Bank Economic Review 10(2): 223-239.
- DiMaggio, P. J., and W. W. Powell. 1991. "Introduction." In *The New Institutionalism and organisational Analysis*, edited by P. J. DiMaggio and W. Powell, 1–38. Chicago: University of Chicago Press.
- Globerman, S., and D. M. Shapiro. 2002. "The Impact of Government Policies on Foreign Direct Investment: The Canadian Experience." *Journal of International Business Studies* 30(3): 513-532.
- Hail, L., and C. Leuz. 2003. International differences in the cost of equity capital: do legal institutions and securities regulation matter? Law Working Paper 15/2003. Brussels: ECGI.
- Henisz, W. J. 2000. "The institutional environment for economic growth." *Economics and Politics* 12(1): 954-985.
- Hooper, V., A. B. Sim, and A. Uppal. 2009. "Governance and stock market performance." *Economic Systems* 33: 93-116.
- Kaufmann, D., A. Kraay, and M. Mastruzzi. 2003. Governance matters III: governance indicators for 1996–2002. World Bank Policy Research Working Paper 3106. Washington, DC: World Bank.
- Kaufmarm, D., A. Kraay, and P. Zoido-Lobato. 1999. Aggregating Governance Indicators. World Bank Policy Research Working Paper 2195. Washington, DC: World Bank.
- Kraft, Micahel, E., and S. R. Furlong. 2007. *Public Policy: politics, analysis, and alternatives.* London: Eurospan [distributor], Washington, D.C.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1997. "Legal

- determinants of external finance." Journal of Finance 52: 1131-1150.
- Lombardo, D. 2000. Is there a cost to poor institutions? SIEPR Discussion Paper 00-019. Stanford, CA: SIEPR.
- Lombardo, D., and M. Pagano. 2000. Legal determinants of the return on equity. CSEF Discussion Paper 24. Naples: CSEF.
- Lombardo, D., and M. Pagano. 2002. Law and equity markets: a simple model. CSEF Discussion Paper 25. Naples: CSEF.
- Meyer, J. W., and B. Rowan. 1977. "Institutionalized organisations: Formal structure as myth and ceremony." *American Journal of Sociology* 83: 340–363.
- Velariano, F. Garcia., and Liu, L. 1999. "Macroeconomic determinants of stock market development." *Journal of Applied Economics* 2(1): 29-59.

Appendix 1: Country List

Australia	Heng Keng SAR, China	Malaysia	Peland
Austria	Hungary	Malta	Pertugal
Belgium	India	Mauritius	Singapore
Brazil	Indonesia	Mexico	South Africa
Chile	Iran, Islamic Republic	Netherlands	Spain
China	Ireland	Nigeria	Sri Lanka
Celembia	Israel	North America	Switzerland
Egypt, Arab Republic	Italy	●man	Thailand
France	Japan	Pakistan	Turkey
Germany	Kerea, Republic	Peru	United Arab Emirates
Greece	Luxembourg	Philippines	

CHAPTER NINETEEN

STOCK PRICE REACTION TO RIGHTS ISSUE ANNOUNCEMENTS AND INFORMATION EFFICIENCY IN THE COLOMBO STOCK EXCHANGE (CSE)

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Abstract

Recognizing the requirement for a comprehensive analysis of stock price reactions to be provided as publicly available information, this study investigates the effect of information content in rights issues on stock returns for listed companies. This provides a test of the information efficiency in the Colombo Stock Exchange (CSE) by using an event study approach. The sample consisted of 38 listed companies, which made 40 public announcements about rights issues on the CSE from 2005-2013. The mean adjusted model, the market adjusted model, and the market model, along with a proxy of the CSE All Share Price Index (ASPI), were used in this study to generate abnormal returns, in and around right issue announcements. Specifically, the market model was used by incorporating the volatility clustering and information asymmetric effects to get a strong result. Further, time series models such as AR, MA, ARMA, GARCH, TARCH and EGARCH were used in relation to the stylized facts in each company return within the sample, to minimize the use of bias of the CSE ASPI as a proxy in generating abnormal returns. The overall results of stock price reactions to rights issue armouncements based on each model show that prices react negatively to information AFTER the rights issue announcements in the CSE. In addition, the analysis shows that there are delayed reactions to information provided after a public announcement of this event. This confirms that the CSE is inconsistent with information

efficiency provided after the information content in the amouncement of rights issues. These findings are important to all parties interested in capital markets. Thus, the empirical findings of this study have practical implications for both investors and policy makers. Potential investors can exploit significant abnormal returns trading around information provided after the right issues of listed companies. In addition, the government can adopt an adequate regulatory framework that secures the transparency and the efficiency of the CSE.

Keywords: Capital markets, Colombo Stock Exchange, event study, information efficiency, rights issues.

Introduction

Publicly quoted companies frequently announce their material information in the capital market to make the public aware of them. This information is considered as precious for the investors to decide their investment portfolios. The investors' judgment on this information may change stock prices, and as a result, they may react positively or negatively in making trading decisions. There is a substantial literature that examines the market reaction to publicly available information such as dividend amouncements (Dharmarathna and Amarasekara 2016, Dasilas and Leventis 2011, Bandara and Perera 2011, Aharony and Swary 1980), stock splits (Aduda and Caroline 2010, Chandena and Kongahawattha 2011), information content of bonus issue announcements (Guneratine 2007, Raja and Sudhaha 2010, Campbell and Thuocha 2011), and market responses to the announcements of rights issues (Agrawal 2012, Marsden 2000, Tsangarakis 1996, Bandara 1997) in a variety of markets. However, many of these previous studies have presented mixed evidence, depending on the sample and the country/market. It is also evident that many of the studies are of developed stock markets, and there is a dearth of such studies in emerging capital markets.

In the Colombo Stock Exchange (CSE) example, few attempts have been made to test the relevance of corporate public armouncements in assessing stock prices, hence, an investigation of rights issue armouncements and information efficiency becomes relevant to the CSE. Therefore, recognizing the requirements of a comprehensive analysis of stock price responses to the publicly available information, this study investigates the effect of information content in rights issues on stock returns in the CSE. The methodology used in this research is the event study approach.

This study contributes to the existing body of literature in several ways. First, the initial literature review revealed that a comprehensive study on the information content of stock prices is novel in the Sri Lankan context. Second, the event study method has previously been mostly used in conjunction with the market model, the mean adjusted model, and the market-adjusted return model. This study enriches the event study method by incorporating the stock volatility clustering phenomenon and information asymmetric effects into the market model. Third, the event study method is further extended with the application of volatility time series techniques. The empirical findings of this study have practical implications for both investors and policy makers. In particular, potential investors can exploit significant abnormal returns, trading around information provided subsequent to the rights issues of listed companies. In addition, the government can adopt an adequate regulatory framework that secures the transparency and the efficiency of the CSE.

The chapter is organized as follows. Sections II and III describe the particular research problem and the objectives of the study respectively. The selected prior studies that are highly associated in this area of our work are discussed in Section IV. The conceptual framework of the study is outlined in Section V, and Section VI gives a detailed explanation of the methodology used. The analysis and discussion takes place in Section VII. Finally, the study ends with the conclusion and policy implications in Sections VIII and IX, respectively.

Research Problem

There is an abundant literature that examines the market reaction to publicly available information as mentioned earlier. However, most of the studies related to this phenomenon were conducted using the data from developed markets in the world, and their findings are consistent with infromation efficiency. However, the market responses are far different from markets in other settings. There are institutional, structural and cultural differences that exist between stock markets in developed and developing countries. Therefore, it is essential to extend, or to shift the examination from, developed markets, to emerging markets like Sri Lanka.

The CSE is the only capital market which facilitates the buying and selling of quoted company shares in Sri Lanka. Even though it has a long history, the CSE is still ranked as an emerging market among global stock markets, due to the fact it does not have the required characteristics to upgrade to developed market status. In Sri Lanka, few attempts have been made to test the relevance of corporate public announcements in assessing

stock prices and market efficiency, hence, an investigation of the different types of corporate public armouncements, and the market responses, becomes relevant to the CSE. Thus, this study attempts to examine:

"How stock prices react to the information in rights issue announcements provides a test of market efficiency in the CSE."

Objectives of the Study

The objective of this study was to examine how stock prices react as soon as the information about rights issues is amounced, and/or is published. This will provide a test of the semi-strong form efficiency of the CSE.

Previous Literature

Tsangarakis (1996) analyzed the stock price reaction surrounding the announcements of rights issues in Greece during the period 1981-1990, using the event study methodology. He employed a market model to calculate the subsequent abnormal returns surrounding these events. He documented positive, statistically significant, abnormal stock returns on the announcement day, which suggested that rights issues by Greek firms conveyed positive information about their prospects. Subsequently, Bigelli (1998) attempted to analyse the Italian market reaction to equity rights issues using an analysis of 428 Italian rights offerings in the 1980–1994 period. He also used a market model to calculate the subsequent abnormal returns surrounding these events. His findings showed that there was positive market reaction at the armouncement of European rights issues.

In a similar way, Salamudin et al. (1999) reported about a positive price reaction to a rights issue amouncement in the Malaysian market when economic conditions were favorable. In addition, Tan et al. (2002) reported that firms which undertake larger rights issues have higher abnormal returns in Singapore. However, Marsden (2000) examined security price reaction to the announcement of rights issues by New Zealand firms between 1976 and 1994. He also used a market model to calculate the subsequent abnormal returns. His findings showed that, over this period, price reactions to rights issue announcements in New Zealand were significantly negative. Here, the price reaction to the amouncement was more negative for underwritten, compared to non-underwritten, rights issues.

This finding is entirely different from the findings of Tsangarakis, (1996), Bigelli (1998), Salamudin et al. (1999), and Tan et al. (2002). In

another study, Rezaul and Peter (2002) examined the stock market announcement effect of rights issues. They used Dutch-listed industrial companies between January 1984 and December 1995, and identified 58 equity rights issues. They found that a statistically significant stock price decline takes place when companies announce rights issues. Further, stock price decline is observed during the subscription period. This finding is similar to Marsden (2000). In a similar way, Ching et al. (2006) has reported negative abnormal returns to rights issue announcements in Hong Kong.

Vijaya et al. (2008) examined the security price reaction to announcements of rights issues by listed Indian firms during the period 1997- 2005. They documented a positive but statistically insignificant price reaction to such announcements. In a recent study, Agrawal (2012) examined the stock price reactions to right issue announcements on the Indian Stock Market. The sample for this study consisted of 40 rights issues announced during the period 2008-2010. The results showed that there was a positive reaction to these announcements. However, the returns were not statistically significant on any of the days in the event window period. Further, he concluded that the positive reaction implies that the market interpreted the equity issue announcement as favorable information about the issuing firm, and that such announcements can be used to signal the firm's growth opportunities.

In the Sri Lankan context, Gunerathne (1997) examined stock price reactions to rights issue announcements using a standard event study methodology. The sample consisted of 18 Sri Lankan companies which had made rights issue announcements in 1994. He employed a market model to find the abnormal returns surrounding the events. The results of this study showed that there had been a negative reaction to the announcements. However, the returns were not statistically significant in the 21-day event window period. In addition, the results showed that the Sri Lankan capital market is not semi-strong form efficient. This finding is consistent with Marsden (2000) and Ching et al. (2006), as well as Vijaya et al. (2008), Tsangarakis (1996), Bigelli (1998), Salamudin et al. (1999), and Tan et al. (2002).

Conceptual Framework

Figure 19.1 shows conceptually how the efficient market theory aligns with the information of rights issue announcements.

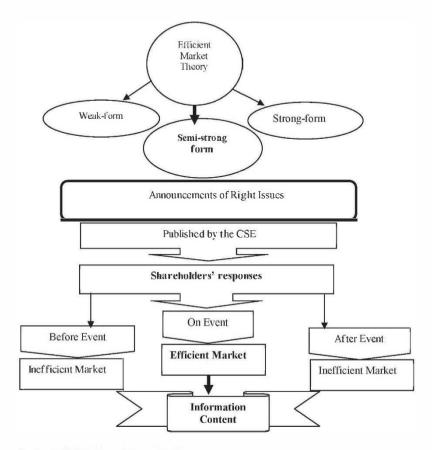


Figure 19.1 Conceptual Framework

Research Methodology

This study employed event study methodology. However, this study also enriches the event study method by incorporating the stock volatility clustering phenomenon, and information asymmetric effects into the market model. Also, the event study method is further extended with the application of volatility time series techniques instead of the market model, mean adjusted model, or mean adjusted models. The study selected 38 listed companies which made 40 public announcements of rights issues on the CSE between 2005-2013. The necessary data was collected through the daily market reports published by the CSE, and the computerized database

system of the the CSE. The sample was selected by logically assigning the applicable criteria. For example, there should not be another published announcement during the event window. It is assumed that the event impact is limited to 31 trading days. Thus, the total event period that is to be examined is those 31 trading days.

The event period starts with the day immediately before the event date and goes back 15 trading days. It closes with the day immediately after the event date and goes ahead 15 trading days. This period is divided into three windows, namely a pre-event window (-15 to -1), an event window (0-day) and a post-event window (+1 to +15). The event window represents immediate market reactions. Pre-event windows and post-event windows represent earlier and delayed market reactions, respectively. Early researchers used different criteria for the estimation period. For example, Brown and Warner (1985) selected 239 days prior to the event. Chew and Liang (1993) used 100 days prior to the event to estimate parameters for their study. Bandara (2001) used an estimation period of 200 days for the estimate window. Dharmarathne (2013) used 120 days prior to the event for his estimate window. As there are no well-defined criteria for the estimation period, this study used 120 days of past returns over the pre-identified estimation window to estimate the return-generating models.

The Model Used to Calculate Actual Returns

$$R_{i, t} = LN \left(\frac{P_t}{P_{t-1}} \right)$$

Where:

 $R_{i,t}$ = Rate of return of firm i on day t;

LN = Natural Logarithm;

 P_t = Closing share price on day t (current trading date);

 $P_{t,1}$ = Closing share price on day t-1 (previous trading date).

The Models Used to Calculate Expected Returns

1. Mean Adjusted Model (MADM)

$$R_{i,t} = \mu^i \tag{2}$$

Where:

 R_{it} = Expected return on company i on day t;

 μ^i = Average returns of 120 of past returns of company i

2. Market Adjusted Model (MKDM)

$$MAAR_{it} = R_{it} - R_{mt}$$
(3)

Where:

MAAR_{it} = Market-adjusted abnormal return for security i over time t, R_{it} = Time t returns on security i, calculated as LN (P_{it}/P_{it-l}), where, P_{it} is the market closing price of stock i on day t. P_{it-l} isthe market closing price of stock i on day t-l; R_{mt} = Time t returns on the CSE all-share price index or total return index calculated as LN (I_t/I_{t-l} .), and it I_{it} the market index on day t, and I_{t-l} is the market index on day t-l.

3. The Market Model (MKM)

$$R_{i,t} + \alpha_i + \beta_i R_{m,t} + \epsilon_{i,t}$$
Assumptions:
$$E(\epsilon_{i,t} = \mathbf{0}) \text{ and } VAR(\epsilon_{i,t}) = \sigma_{\epsilon_i}^2$$
(4)

Where:

R_{it}= Rate of return of security on day t;

 R_{mt} = Rate of return on a market portfolio of stocks on day t;

 α_i = Intercept term (alpha);

 β_i = Systematic risk of stock i(beta); and

 ε_{it} = Regression error term.

4. Volatility Time Series Models (Cable and Holland 1999) (VTSM)

I. Developing the Autoregressive (AR) Model

$$Y_t = \boldsymbol{\Phi}_0 + \boldsymbol{\Phi}_1 Y_{t-1} + \boldsymbol{\Phi}_2 Y_{t-2} + \dots + \boldsymbol{\Phi}_r Y_{t-r} + \varepsilon_t$$
 (5)

Where: Y_t = the expected returns for the period t, Φ_i = the autoregressive coefficients, and ε_t = the residual in the forecasting equation.

II. Developing the Moving Average (MA) Model

$$Y_t = \theta_0 + \varepsilon_t - \theta_1 \varepsilon_{t-1} - \theta_2 \varepsilon_{t-2} - \dots - \theta_s \varepsilon_{t-s}$$
 (6)

Where: Y_t = the expected returns for the period t, θ_i = the moving average coefficients, and ε_t = the residual in the forecasting equation.

III. Developing the Mixed ARMA Model

$$Y_{t} = \varepsilon_{t} + \sum_{i=1}^{r} \Phi_{i} Y_{t} r - \sum_{j=1}^{s} \theta_{j} \varepsilon_{t} s$$

(7)

IV. The GARCH (p, q) Model (Bollerslev 1986)

$$\begin{array}{l} \sigma_t^2 = \omega + \sum_{i=1}^q \alpha_i \epsilon_{t-i}^2 + \sum_{i=1}^p \beta_i \sigma_{t-i}^2 \\ (8) \end{array}$$

IV. The Exponential GARCH (EGARCH) Model (Nelson 1991)

$$Log(\sigma_t^2) = \omega + \sum_{j=1}^{q} \beta_j Log(\sigma_{t-j}^2) + \sum_{i=1}^{p} \alpha_i \left| \frac{\varepsilon_{t-i}}{\sigma_{t-i}} \right| + \sum_{k=1}^{n} \gamma_k \frac{\varepsilon_{t-k}}{\sigma_{t-k}}$$
(9)

V. The Threshold GARCH (TGARCH) Model (Zakoian 1994, Glosten et al. 1993, Engle and Ng 1993, Tsay 1998).

$$(\sigma_t^2) = \omega + \sum_{i=1}^q \beta_j \sigma_{t-i}^2 + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{k=1}^n \gamma_k \varepsilon_{t-k}^2 d_{t-k}$$
 (10)

5. Calculation of Abnormal Returns

$$AR_t = R_t - Y_t \tag{11}$$

Where:

 $AR_t = \text{Abnormal Return at time } t$;

 R_t = Actual Returns at time t;

 Y_t = Normal Returns at time t.

6. Calculation of Average Abnormal Returns (AARs)

$$AAR_{t} = \frac{1}{N} \sum_{i=1}^{N} AR_{it}$$
(12)

Where:

 $AAR_t = Average abnormal return for day t$;

N = Number of events in the sample.

7. Calculation of Cumulative Average Abnormal Returns (CAARs)

$$CAAR_{p} = \sum_{t=1}^{p} AAR_{t}$$
(13)

Testing Significance

Even though a researcher might find large abnormal returns, it must be proved that the results are not gained by coincidence, or by biased time series'. The assumption here, is that daily abnormal returns are distributed identically and independently. It is also assumed that, over a long time, stock prices have a tendency to approach their expectation value (mean value). This study used the t-test to examine these propositions. The variables AR, CAR, AAR and CAAR were used to measure the informational content of the selected armouncements, and the efficiency with which this information is folded into the share price. The null hypothesis is that AR, CAR, AAR and CAAR are drawn from a distribution with zero means; this shows that the armouncements of the events have a systematic effect on respective share prices at the particular event announcement date. The null hypothesis is rejected if the t-values obtained from the calculations are higher than the critical values.

1. Significance Testing (Parametric) for AAR

$$T(AAR) = \frac{AAR_t}{SE(AAR_t)}$$
 (14)

Where: Average Abnormal Return for company i for a day of the event window, and SE(AAR_{it}) = Standard Error of Average Abnormal Return of company i during the estimated period.

2. Significance Testing (Parametric) for CAARt

$$T(CAAR) = \frac{CAAR_t}{SE(CAAR_{it})}$$
(15)

Where:

CAR = Cumulative AAR for Company i for the selected event window; SE (CAR_{it}) = Standard Error of Cumulative AAR of a company i during the estimated period.

Measuring Market Responses

The first objective of this study was to investigate stock market reactions as soon as the selected information is published. The most appropriate way of reporting the results should be in a table and a graph, in order to facilitate their discussion. Each test result is provided daily for AAR and CAAR and their t-statistics, for the 31 days surrounding the particular announcement date (day •). As the final step, the relevant graphs are presented for each test event. As these graphs cover a lengthy event window, readers can easily identify anticipation effects and delayed responses. In the graphs, the X-axis indicates the event period from day -15 to +15 day, and the Y-axis indicates the CAAR. By using the facts presented in the above-mentioned way, the behaviour of CAAR can be discussed. If CAAR has increased during the event period, it can be stated that share price has positively responded to the announcement, and vice versa. Any CAAR increase prior to the announcement date having the same tendency is treated as anticipation.

••n the other hand, if CAAR shows a continuously increasing/decreasing pattern from the event date, with significant CAAR/AAR, this indicates that share prices are still adjusting to the new information. This is a delayed response.

Testing Market Efficiency

The market efficiency was tested using the framework of the Semi-Strong Form Efficient Market Hypothesis (see Malkiel and Fama 1970). If the market is semi-strong efficient, the adjustment of prices to the outcome of the particular event should occur in a very short period (event window), and there will be no trading strategies adopted to earn abnormal returns after that. As explained under significant testing, the significant changes of AAR or CAAR can exist only on event window day (0-day), if the market response to the new information is efficient. The existence of material anticipation or delayed response is evidence that the market is not information efficient.

Analysis and Discussion

The daily average abnormal returns (AAR) of 40 rights issue announcement stocks, over a window period starting from day -15 to day +15, relative to rights issue armouncement day (0-day) at overall portfolio level, are reported in Table 19.1. The data show that AAR generated from each model on 0-day is not statistically significant. This indicates that the investors do not gain significant abnormal returns for this event on the event

day itself. Further, they show that the AAR of each model during the preevent window is not statically significant. This indicates that the investors do not gain significant abnormal returns before publishing the particular event. However, during the post-window periods (day 1 to 15), AAR on days, 1, 2, 10, and 14 is statistically significant. This indicates that the market reacts a few days after the announcement of rights issue is made.

Table 19.1 AAR for Overall Portfolio Level

Date	MADM	MKAM	MKM	VTSM
-15	-0.003	-0.002	0.001	-0.001
-14	-0.004	-0.007	-0.008	-0.004
-13	-0.003	-0.002	0.001	-0.001
-12	0.001	-0.001	-0.002	0.002
-11	-0.003	-0.002	-0.003	-0.001
-10	0.001	0.000	-0.001	0.004
-9	-0.005	-0.008*	-0.005	-0.004
-8	-0.001	-0.001	-0.001	0.002
-7	-0.005	-0.005	-0.006	-0.003
-6	-0.002	-0.004	-0.003	-0.001
-5	-0.002	-0.001	-0.002	-0.001
-4	0.001	0.003	0.002	-0.001
-3	0.031	0.030	0.005	0.007
-2	0.001	0.001	-0.002	0.000
-1	-0.002	-0.001	0.000	0.003
0	-0.003	-0.001	0.001	0.003
1	-0.035*	-0.035*	-0.027*	-0.024*
2	-0.019*	-0.020*	-0.014*	-0.015*
3	-0.011*	-0.007	-0.001	-0.008*
4	-0.002	-0.001	-0.001	-0.004
5	-0.004	-0.005	-0.004	-0.003
6	0.000	-0.001	0.000	-0.002
7	0.000	0.001	0.001	0.001
8	0.000	0.003	0.002	0.002
9	0.003	0.006	0.001	-0.003
10	-0.011*	-0.010*	-0.010*	-0.011*
11	-0.010	-0.012	-0.009	-0.006
12	-0.004	-0.004	-0.006	-0.006
13	0.000	0.001	0.001	0.001
14	-0.012*	-0.012*	-0.009*	-0.011*
15	-0.008	-0.007	-0.007	-0.008

Note: Asterisks in the columns denote that the corresponding AAR are statistically significant. The asterisks * indicates the level of significance (based on the t values) at the 5% level.

Then, the overall results of the stock reaction to rights issue announcements generated from each model were plotted in Figure 19.2.

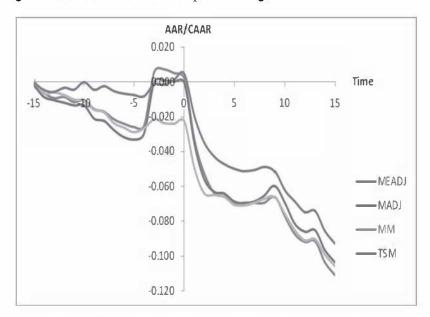


Figure 19.2 Overall Behavior of CAAR on Rights Issue Announcements

Figure 19.2 shows that stock prices react negatively to the information, subsequent to the rights issue announcements by the CSE. In addition, the analysis shows that there is a delayed reaction to the information subsequent to a public announcement of this event. It confirms that share price does not fully and instantaneously reflect the information contained in the announcement of rights issues.

Conclusions

Recognizing the limited academic research on the analysis of stock price reaction to publicly available information, this study investigated the effect of information content on right issues in stock returns by the CSE. Further, it provided a test of the market efficiency of the CSE. The empirical knowledge in this regard is limited, as most of the previous studies have concentrated on either very few events, or were circumscribed by the method implemented, that is the event study methodology. Previously, the event study method was commonly applied using a market model, a market-

adjusted return model, and/or a mean adjusted model. However, this study enriched the event study method by incorporating the stock volatility clustering phenomenon and information asymmetric effects to the market model. The model was further extended by incorporating the application of volatility time series modelling techniques. Different sample companies were selected for the study in relation to the particular information for the period from 2004-2013. The analyses were carried out at the overall portfolio level to identify an overall conclusion.

•verall, the results of the analysis show that the abnormal returns appear subsequent to the event. The abnormal returns appear only after the actual announcement of the information. This confirms that this amouncement has an important informational content. However, it is unfavorable news for investors. This finding agrees with Ching et al. (2006), Rezauland (2002), Marsden (2000), and Gunerathne (1997). However it disagrees with Agrawal (2012), Vijaya et al. (2008), Salamudin et al. (1999), Bigelli (1998), Tan et al. (2002), and Tsangarakis (1996). In addition, the analysis shows that there is a delay in reaction to information provided subsequent to a public armouncement of an event. It suggests that the market is inconsistent with the semi-strong form efficient market hypothesis in the announcement of rights issue announcements by the CSE.

Policy Implications

The policy implications of this analysis are that the CSE, as an emerging market, must be closely monitored for it to achieve an optimal maturity level. Investors must be aware that, in inefficient stock markets, heavy losses are just as likely as heavy gains. Furthermore, the Securities and Exchange Commission should take a leading role in regulating abnormal financial activities. In the meantime, an inefficient market could suffer over inflated stock prices, speculation, and insider trading, all potentially intensified by herding behavior. Several policy challenges need to be made to enhance the efficiency of the CSE. Further, market activity should be increased through reductions in transaction costs and increases in the membership of the CSE. A stock exchange news service should be established, which would be responsible for early, equal, and wide dissemination of price sensitive news such as financial statements and other information that is material to investors' decisions. This will ensure that the participants and investors have equal access to high quality and reliable information, and minimize institutional restrictions on trading of securities in the market. This will allow the market to flow as a deregulated market. Consequently, the CSE and the SEC also need to strengthen their regulatory

capacities, to enhance market discipline and investor confidence. This will involve training personnel to enforce financial regulations, perform market surveillance, and analytical and investigative assignments. Finally, they should improve the trading system, i.e. the CSE should adopt an advanced trading technology.

References

- Aduda, J. O., and S. C. Caroline. 2010. "Market Reaction to Stock Splits: Empirical Evidence from the Nairobi Stock Exchange." *African Journal of Business and Management (AJBUMA)* 1: 20.
- Agrawal, K. 2012. "Stock Price Reaction to Rights Issue Announcement: Evidence from the Indian Stock Market." In Proceedings of the European Business Research Conference 2012.
- Aharony, J., and I. Swary. 1980. "Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis." *The Journal of Finance* 35(1): 1-12.
- Ball, R., and P. Brown. 1968. "An empirical evaluation of accounting income numbers." *Journal of Accounting Research*: 159-178.
- Bandara, D. B. P. H., and K. D. I Perera. 2011. "The Impact of Dividend Amouncements: Reconciliation of Sri Lankan Evidence over the last two Decades." In Proceedings of the 8th International Conference on Business Management (ICBM).
- Bandara, D. B. P. H. 2001. Dividend Signaling, Market Response to Dividend Change and Capital Market Efficiency: An Empirical Analysis.

 Annual research session 2000/2001 February, Faculty of Management and Commerce, University of Sri Jayewardenepura, 23-51.
- Bandara, W M. 1997. "Price Reaction to Right Issue Announcements of Emerging Stock." Sri Lankan Journal of Management 12(4): 325-346.
- Bigelli, M. 1998. "The Quasi-Split Effect, Active Insiders and the Italian Market Reaction to Equity Rights Issues." *European Financial Management* 4: 185–206.
- Bollerslev, T. 1986. "Generalized autoregressive conditional heteroskedasticity." Journal of Econometrics 31(3): 307-327.
- Bollerslev, T., R. Y. Chou, and Kroner, K. F. 1992. "ARCH modeling in finance: A review of the theory and empirical evidence." *Journal of Econometrics* 52(1-2): 5-59.
- Brown, S. J., and J. B. Warner. 1985. "Using daily stock returns: The case of event studies." *Journal of Financial Economics* 14(1): 3-31.
- Brown, S. J., and J. B. Warner. 1980. "Measuring security price performance." *Journal of Financial Economics* 8(3): 205-258.

- Cable, J., and K. Holland. 1999. "Modelling normal returns in event studies: a model-selection approach and pilot study." *The European Journal of Finance* 5(4): 331-341.
- Campbell, K., and C. •huocha. 2•11. "The stock market reaction to stock dividends in Nigeria and their information content." *Managerial Finance* 37(3): 295-311.
- Chew, I. K., and Y. Liang. 1993. "Asymmetric market response to dividend changes." *Midwestern Journal of Business and Economics*: 17-28.
- Ching, K., M. Firth, and ●. Rui. 2006. "The information content of insider trading around seasoned equity offerings." Pacific-Basin Finance Journal, 14: 91-117.
- Dasilas, A., and S. Leventis. 2011. "Stock market reaction to dividend announcements: Evidence from the Greek stock market." *International Review of Economics and Finance* 20(2): 302-311.
- Desai, A. S., M. Nimalendran, and S. Venkataraman. 1998. "Changes in trading activity following stock splits and their effect on volatility and the adverse-information component of the bid-ask spread." *Journal of Financial Research* 21(2): 159-183.
- Dharmarathna, D. G., and Chandranath Amarasekara. 2016. "Stock Price Reaction to Interim Dividend Announcements and Information Efficiency in Sri Lankan Share Market." Innovation and Emerging Trends in Business Management and Information Technology 1. New Delhi-110002: Radha Publications.
- Dharmarathne, D. G. 2013. "Stock Price Reaction to Dividend Announcements and Information Efficiency in the Sri Lankan Share Market." *International Journal of Research in the Social Sciences* 3(2): 100-111.
- Engle, R. F., and V. K. Ng. 1993. "Measuring and testing the impact of news on volatility." *The Journal of Finance* 48(5): 1749-1778.
- Fama, E. F. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance* 25(2): 383-417.
- Glosten, L. R., R. Jagannathan, and D. E. Runkle. 1993. "On the relation between the expected value and the volatility of the nominal excess return on stocks." *The Journal of Finance* 48(5): 1779-1801.
- Gunathilaka, C., and S. Kongahawatte. 2011. "Stock Splits in Sri Lanka: Valuation Effects and Market Liquidity." In *Proceedings of the 8th International Conference on Business Management (ICBM)*, 90-94.
- MacKinlay, A. C. 1997. "Event studies in economics and finance." *Journal of Economic Literature* 35(1): 13-39.
- Malkiel, B. G., and E. F. Fama. 1970. "Efficient capital markets: A review of theory and empirical work." *The Journal of Finance* 25(2): 383-417.
- Marisetty, V. B., A. Marsden, and M. Veeraraghavan. 2008. "Price reaction

- to rights issues in the Indian capital market." Pacific-Basin Finance Journal 16(3): 316-340.
- Marsden, A. 2000. "Shareholder wealth effects of rights issues: Evidence from the New Zealand capital market." *Pacific-Basin Finance Journal* 8(3): 419-442.
- Nelson, D. B. (1991). Conditional heteroskedasticity in asset returns: A new approach. Econometrica: Journal of the Econometric Society, 347-370.
- Raja, M., and J. C. Sudhahar. 2010. "An empirical test of Indian stock market efficiency in respect of bonus atmouncement." Asia Pacific Journal of Finance and Banking Research 4(4): 1-14.
- Ramesh, S., and B. Nimalathasan. 2012. "Bonus issue amouncements and its impact on share prices of Colombo Stock Exchange." In *Proceedings* of the 8th International Conference on Business Management (ICBM).
- Rezaul, K., and R. Peter. 2002. "Can the stock market anticipate future operating performance? Evidence from equity rights issues", *Erasmus Research Institute of Management*.
- Salamudin, N., M. Ariff, and A. M. Nassir. 1999. "Economic influence on rights issue announcement behavior in Malaysia." *Pacific-Basin Finance Journal* 7(3): 405-427.
- Strong, N. 1992. "Modelling abnormal returns: a review article." *Journal of Business Finance and Accounting* 19(4): 533-553.
- Tan, R. S., P. L. Ching, and Y. H. Tong. 2002. "Private placements and rights issues in Singapore." *Pacific-Basin Finance Journal* 10(1): 29-54.
- Tsangarakis, N. V. 1996. "Shareholder wealth effects of equity issues in emerging markets: Evidence from rights offerings in Greece." Financial Management: 21-32.
- Tsay, R. S. 1998. "Testing and modeling multivariate threshold models." Journal of the American Statistical Association 93(443): 1188-1202.
- Vijaya, B., A. M. Marisetty, and M. Veeraraghavan. 2008. "Price reaction to rights issues in the Indian capital market." *Pacific-Basin Finance Journal* 16: 316-340.
- Zakoian, J. M. 1994. "Threshold heteroskedasticity models." *Journal of Economic Dynamics and Control* 18(5): 931-955.

PART V: TOURISM

CHAPTER TWENTY

THE INTERPRETATION QUALITY OF TOURIST GUIDES AND THEIR IMPACT ON TOURIST SATISFACTION

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Abstract

Tourist guides play a vital role in satisfying tourists visiting a country, and the quality of their interpretation is a major concern for tourists and travel agencies alike. Travel agencies receive frequent complaints about tour guides from overseas tour operators, regarding their poor knowledge of attractions, cheating behaviour, lack of fluency in language, and so on. This study focused on identifying the quality of interpretation by tourist guides and its impact on tourist satisfaction. The study was conducted as a questionnaire survey, using 192 foreign tourists who had experienced round tours with national or chauffeur guides, registered by reputed DMCs in Sri Lanka. The data were analysed using descriptive statistics, correlation and multiple regression analyses. The study shows that the interpretation quality of guides greatly influences tourist satisfaction. The factors related to interpretation quality, such as elaboration and relevancy of information, positively influenced tourist satisfaction, while the factors of empathy, and positive attitude towards nature, negatively influenced tourist satisfaction. The study offers both theoretical insights related to interpretation and tourist satisfaction, and practical implications for improving interpretive tour guiding in Sri Lanka.

Keywords: Interpretation quality, round tours, satisfaction, tourist guides.

Introduction

Sri Lanka, as a developing country, is becoming a popular tourist hot-spot, and witnessed the arrival of 1,527,153 tourists in 2016, an increase of 19.8% over the previous year. Tourism contributed US\$ 2,431.1 million in foreign exchange in 2014, and has become the third-largest foreign exchange earner for the country (SLTDA 2014). To cater to, and satisfy, that many international tourists, the quality and the quantity of tourist facilities should be increased. In the study reported on in this chapter, tourist satisfaction was conceptualized to include three aspects or layers; satisfaction with guiding services, satisfaction with tour services, and satisfaction with the overall tour experience (Huang, Hsu and Chan 2009). The performance of tourist guides was found to have a significant direct effect on tourist satisfaction with guiding services.

When concentrating on previous studies of interpretation by tourist guides, there are several areas that can be identified as being important, such as enhancing visitor experience through interpretation (Wearing, Edinborough, Hodgson, and Frew 2008), best practice in the interpretation for sustainable tourism (Wearing, Archer, Moscardo, and Schweinsberg 2007), interpreting our heritage (Tilden 1957), how tourist guides add value to an Eco-tour (Periera 2005), effects of interpretive guiding outcomes on tourist satisfaction and behavioural intention (Huang, Weiler, and Assaker 2014), environmental interpretation (Ham 1993), going mobile and the changing face of interpretation in the National Park service (Oppegaard and Shine 2008), and so on.

The following is the basic background that laid the foundation for the researchers to focus on in this study. Interpretation of the role of tourist guides is one of the most important factors in determining destination image (Chilembwe and Mweiwa 2014). In other words, the bad interpretation skills of tourist guides can be a reason for the dissatisfaction of tourists. In this regard, a survey of departing foreign tourists from Sri Lanka in 2013 suggested that the country should improve its tourist guide services, because some guides have either cheated tourists, or had little knowledge about tourist attractions. Indeed, the quality of interpretation by tourist guides is rather questionable without a proper knowledge of the main attraction points in Sri Lanka, becoming a reason for unprofessionalism of tourist guides, when guides are cheating tourists. Similarly, when reviews using tourist comments appeared on the TripAdvisor and VirtualTourist web pages, the researchers could see that the interpretation quality of tourist guides is in a questionable state.

According to Räikkönen (2014), there are three main types of failure of tour guides; employee response towards service delivery system failure, in other words misleading and inaccurate information; employee response to customer needs and requests; and unprompted and unsolicited employee actions. Therefore, the poor knowledge and unprofessional behavior of guides, even in leading destination management companies in Sri Lanka, is a question mark on the interpretation quality of tourist guides.

Sandaruwani (2014) found that only 5% of tourists are quite satisfied with the 'providing guidance and help for shopping' criteria, but 40% of them were quite dissatisfied. There are several comments from overseas tour operators like this scenario: Italian Operators mailed a leading travel agency about the "Sri Lanka Classico" tour, commenting that: "the guide was well prepared on cultural features, but he wasted lots of time at the shopping stop, and he pushed clients to buy only in his shops. They thus spent a lot of time in a spice garden and a wood factory. They did not see Kandy because they stayed three hours in a gem factory. The clients could only quickly see the tooth temple because they lost time in shopping, so they will ask for their money back".

Tours cover many cultural and natural heritage spots and commercial places around the country. Hence, the quality interpreter should allocate interpretation time, not only at commercial places, but also in every place covered by an itinerary. Therefore, commercial interpretation, which is more partial to the personal commercial benefits of tourists' guides, raises a question about the quality of the interpretation by tourist guides in Sri Lanka.

"More tourists can be attracted to Sri Lanka by replacing the old manual system of using tour guides with new kinds of innovative applications" (Silva and Author 2013). The authors believe that there is a red light against the role of tourist guides as information providers, due to the introduction of new technological devices and applications. With all these applications, the only strategy the tourist guides have is to provide a quality face-to-face live interpretation, which cannot be achieved through current digital technology. Therefore, the objectives of this study were first, to explore the quality of the interpretation services of tour guides, and second, to identify the level of satisfaction of tourists about the interpretation quality of Round Tours in Sri Lanka.

Literature Review and Hypothesis Development

Introduction

In Sri Lanka, there are four types of guides; National Tourist Guide Lecturers (NTGL), Chauffeur Tourist Guide Lecturers (CTGL), Area Guides, and Site Guides. As explained by Hu (as cited in Chilembwe and Mweiwa 2014), tourist guides are known by several names, such as tour leaders, tour managers, tour escorts, local guides, docents, or interpreters. According to Ham (as cited in Periera 2005), an interpretive guide is a person whose communication is, first and foremost, about illustrating the meaning and the connections that a place's natural and cultural environments encompass. They may or may not have formal education. Ham also stated that good interpretation can be learnt, by suggesting training rather than a formal education. These definitions help us to understand that a tour guide is responsible for directing and leading tourists on a tour or sightseeing trip. According to Calvo (as cited in Roca 2012), tourist guides have the capability to influence the destination image, provide information to clients, and mould tourist attitudes.

Cohen (1985) outlined four roles of tourist guides; the instrumental role, the social role, the interactional role, and the communicative role. The instrumental role includes giving direction, providing access, and having control of the group. The social role is basically for the social integration of the group. The interactional role includes organizing, and being the link between the tourist group, the host population, and the visited places. In the communication role, tourist guides are selecting the places of interest, providing information, and providing interpretation. In addition to that, Weiler and Davis (1993) introduced two additional roles; the motivator, and the environmental interpreter. Pereira and Mykletun (2012) recently mentioned the additional roles of tourist guides as promoters of local economies, and philanthropists. Similarly, Pereira and Mykletun (as cited in Roca 2012) believe that tourist guides can create repeat business and help to promote local authentic products.

Round Tours and Interpretation Quality

A package tour is typically viewed as a bundle of different services (Räikkönen 2014). It can be explained as a labour-intensive and synthetic multitude of components which contains both the 'soft' characteristics of services, such as seasonality, perishability, inseparability, intangibility, and so on, and tangible elements like hotel rooms and airplane fares (Bowie and

Chang 2005). According to Chen and Hsu and Wong and Lee (as cited in Räikkönen 2014), package tours have become distinctly common, even in Asia, since the growth of mass tourism. Bowie and Chang (2005) explain several elements of package tours, such as tour leadership, hotels, restaurants, coach, shopping, optional tours, tour guides, attractions, and so on. According to Komppula and Boksberg and Edvardsson (as cited in Räikkönen 2014), a package tour can also be explained as an experience product which includes a commodity and a service, or a combination of these.

Interpretation is a communication tool that is used to facilitate a way for visitors to engage with the places they visit (Wearing et al. 2008). As an obvious contributor to the literature on interpretation, Tilden (as cited in Wearing, Archer, Moscardo, and Schweinsberg 2007), has defined interpretation as an educational activity, which aims to reveal meanings and relationships using original objects, by first-hand experience and by illustrative media, rather than simply to communicate information. In other words, the main idea of interpretation is to communicate to the visitor, in a way understandable to an individual, an object or a site being visited (Periera 2005). Furthermore, interpretation is defined as an educational activity that seeks to develop intellectual and emotional connections between the visitor and the natural and cultural environment, by involving them, and by communicating feelings and relationships, as well as facts about objects, species, sites, and areas of significance (Armstrong et al. 2003). According to Ham (as cited in Periera 2005), interpretation is not about teaching visitors about a place, rather, it is about revealing why it matters. Therefore, the individual who is involved in interpretation can be identified as an interpreter.

However, the word 'interpretation' is sometimes difficult to use because it does not always adequately capture the full range of what an interpreter does. Interpreters provide orientation, information, and inspiration, in the right amounts, and at the right time, so that visitors will have more enjoyable, meaningful and complete experiences. An interpreter's knowledge of the resource, combined with their knowledge of the audience, can be shared through an appropriate technique, to provide an interpretive opportunity (Bacher et al. 2007). Tilden (1957) introduced six basic principles on interpretation: (1) any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile; (2) information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things, even though all interpretation includes information; (3) interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree

teachable; (4) the main aim of interpretation is not instruction, but provocation; (5) interpretation should aim to present a whole, rather than a part, and must address itself to the whole man rather than any phase; and (6) interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best, it will require a separate program. However, Tilden found by investigation that the interpreter was normally aware of no such principles, but was merely following his/her inspiration.

To offer a quality interpretation service, information should be transferred and defined by using an interpretive approach to communication. To become a quality interpreter, interpretation should be pleasurable, relevant, organized, and should have a theme (Ham 1993). There are two interpretation outcomes that affect tourist satisfaction, according to the hypothesized hierarchical model developed by (Huang, Weiler, and Assaker 2014). These outcomes are affective interpretation outcomes, and cognitive interpretation outcomes. Affective interpretation outcomes consist of empathy and positive attitudes. Cognitive interpretation outcomes consist of elaboration and relevancy. (Huang et al. (2014), conclude that interpretive guiding positively influences tourist satisfaction and behavioural intention, especially in heritage tourism. Thus, cognitive interpretation outcomes are more influential than affective interpretation outcomes.

Wheeler (as cited in Periera 2005), notes that only good interpretation can contribute to the visitor's learning and understanding of a site. Interpretation experience should be satisfied with various factors, that also include the amount of interaction available, and how the information was worded or explained, the assistance received from guides, and so on. Interpretation can come in many forms, and finally, will turn a holiday into a memorable experience (Wearing et al. 2008), and be critical in creating a destination image (Chilembwe and Mweiwa 2014).

Measures of the Quality of Guiding Interpretation

The literature suggests that there are several methods to measure the quality of guiding interpretation, other than the six principles of Tilden mentioned earlier. Moscardo (1996) revealed that providing interpretation to mindful visitors will be more effective than providing interpretation to mindless visitors. Here, the mindful visitor means those visitors who are highly interested in content, have a low level of information fatigue, and are traveling with an educational motive. Therefore, this model senses that guiding interpretation is more successful when the audience is mindful. Petty and Cacioppo (1986) introduced the Elaboration Likelihood Model, to measure

the degree of this thought, and found that being mindful ranges from high to low via interpretation. Wearing et al. (2008) note that this model has introduced the main ways to process thoughts as central route, and peripheral route.

Ham (1993) developed a model including four qualities that should be included in a quality interpretation. These are pleasurable or enjoyable, relevant, organized, and that the interpretation has a theme. Further, Ham and Weiler (2005) together introduced an interpretation evaluation tool kit with eleven indicators related to food and beverage, and heritage and nature interpretation, based on a mixed method. Many researchers have used this evaluation tool kit to measure the quality of guiding interpretation of tourist guides. Ham and Weiler (2005) developed this model to assess the effectiveness of face-to-face interpretation programs. This evaluation tool kit includes eleven indicators from indicators 'a' to 'k' for three major areas of interpretation; food and beverage, and heritage and nature. Those eleven indicators are: (a) impact on current world view, via empathy with historic period and people, or impact on appreciation of indigenous connections to nature; (b) elaboration which provokes visitors to thought; (c) positive attitudes toward heritage preservation and nature conservation; (d) global evaluation of interpretation; (e) desire to participate in additional interpretive activities; (f) desire to purchase a product, memento or souvenir related to the place or site story; (g) desire to stay longer; (h) desire to return for a repeat visit; (i) positive word-of-mouth advertising; (j) interpretation was relevant and meaningful to visitors' lives; and (k) visitors are provoked to interact with the presenter. All indicators can be measured quantitatively except the indictor 'k', which requires an observation form. Both 'a' and 'c' are effective interpretive outcomes, and both 'b' and 'j' are cognitive interpretive outcomes.

Tourist Satisfaction

A service delivery person can have a direct impact on the emotional reaction to a service. There is a direct relationship between perceived quality and user satisfaction, when quality performance is included in the model (Johnson and Zinkham 1991, Crosby and Cowles 1986, Anderson and Sullivan 1993, Anderson, Fornell and Lehmann 1994, Baker and Crompton 2000). Baker and Crompton (2000) identified a relationship between quality of service, satisfaction, and behavioral intention. They explained these three variables as antecedents.

According to Shoemaker and Lewis (1999), favourable behavioural intentions frequently represent a customer's conative loyalty. Calculating loyalty can therefore provide a better idea of customer retention. Retaining remaining customers often has a much lower related cost than gaining new customers. Further, loyal customers are more likely to recommend friends, relatives or other potential customers to a product/service by acting as free word-of-mouth advertising agents (as cited in Chen and Chen 2010). Williams and Soutar (2009) put forward the following propositions:

- Each value dimension will have a direct, positive, and significant association with customer satisfaction:
- The socio-psychological dimensions of value (emotional value, social value, epistemic value) will have a greater influence on customer satisfaction than the cognitive dimensions of value (function value, value-for money);
- Customer satisfaction will have a direct, positive, and significant association with behavioural intentions; and
- Customer satisfaction will completely mediate the relationship between customer value and behavioural intentions, and customer value will only indirectly influence behavioural intentions.

However, tourist satisfaction and behavioural intentions can also be measured by the Interpretation Evaluation Tool Kit, developed by Ham and Weiler (2005) in its indicators of 'd', 'e', 'g', 'h' and 'I', respectively. Further, interpretation quality is measured by 'a', 'b', 'c', and 'd', as per the conceptual framework developed by the researchers, based on the literature (Figure 20.1).

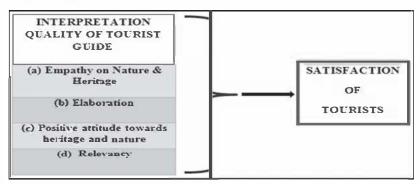


Figure 20.1 Conceptual Framework (Source: Developed Based on Huang et al. (2014), and Ham and Weiler (2005)).

Hypotheses

The researchers developed several hypotheses, based on the reviewed literature as follows:

H_{1a}: there is a relationship between tourist satisfaction and empathy on heritage and nature;

H_{1b}: there is a relationship between tourist satisfaction and the elaboration of interpretation;

H_{1c:} there is a relationship between tourist satisfaction and positive attitude towards nature and heritage; and

H_{1d}: there is a relationship between tourist satisfaction and the relevance of interpretation.

Methodology

The purpose of this study was to identify the interpretation quality of tourist guides, using quantitative data collected from tourists. Tourists who had round tours in Sri Lanka with national or chauffeur guides, were considered as the population. A non-probabilistic convenience sampling method was utilized to select 225 tourists, and questionnaires were distributed along with the guidelines given by Ham and Weiler (2005). The questionnaire was developed from the Interpretation Evaluation Tool Kit by Ham and Weiler (2005) and already used by several authors such as Huang et al. (2014). However, the original 7-point response scale was reduced to a five-point response scale by the researchers. 225 questionnaires were distributed among the respondents, and 192 fully complete questionnaires returned.

Results and Discussion

Table 20.1: Analysis of the Data

Cronbach' alpha value	No of Items	Mean Value	Standard Deviation	VIF values	Coefficient	Pvalue
-	-	-	-		0.880	0.006
0.841	6	3.8924	0.93615	5.642	0.019	0.801
0.863	5	4.3396	0.74363	5.056	0.192	0.035
0.596	6	4.6615	0.46859	1.660	0.192	0.021
0.712	4	4.0508	0.86623	3.723	0.447	0.000
0.774	4	4.4948	0.71170	-	-	-
	alpha value - 0.841 0.863 0.596	alpha value	alpha value Items Value - - - 0.841 6 3.8924 0.863 5 4.3396 0.596 6 4.6615 0.712 4 4.0508	alpha value Items Value Deviation - - - - 0.841 6 3.8924 0.93615 0.863 5 4.3396 0.74363 0.596 6 4.6615 0.46859 0.712 4 4.0508 0.86623	alpha value Items Value Deviation values - - - - - - 0.841 6 3.8924 0.93615 5.642 0.863 5 4.3396 0.74363 5.056 0.596 6 4.6615 0.46859 1.660 0.712 4 4.0508 0.86623 3.723	alpha value Items Value Deviation values - - - - 0.880 0.841 6 3.8924 0.93615 5.642 0.019 0.863 5 4.3396 0.74363 5.056 0.192 0.596 6 4.6615 0.46859 1.660 0.192 0.712 4 4.0508 0.86623 3.723 0.447

Validity and Reliability: The value of the KMO Bartlett test in this study was 0.760 which shows that the sample size is adequate and generalisable. Cronbach's alpha values for each variable shows the reliability of all selected variables. Overall the Cronbach's alpha value for all independent variables is 0.938, as it is required to be more than 0.7. Therefore, the reliability of this study is assured.

Descriptive Statistics: Five independent and dependent responses were derived. The highest mean value is taken by the positive attitude towards heritage preservation and nature conservation at 4.6615, which means that tourists think that their guide has interpreted enough for them to have an attitude towards heritage preservation and natural conservation. Elaboration and relevancy had the next highest mean values respectively. Empathy had a mean value of 3.8924 (neutral level). All standard deviation values were less than one, which also proves that all the independent and dependent variables of this study are reliable.

Correlation Coefficient Matrix: As per the above correlation analysis, results show that the dependent variable (tourist satisfaction) correlates with all independent variables (Table 20.2).

	Satisfaction	Empathy	Elaboration	Positive attitude	Relevancy
Empathy	0.735			1	
P value	0.000				
Elaboration	0.743	0.878			
P value	0.000	0.000			
Positive attitude	0.545	0.601	0.617		
P value	0.000	0.000	0.000		
Relevancy	0.793	0.840	0.813	0.514	
P value	0.000	0.000	0.000	0.000	1

Table 20.2: The Correlation Coefficient Matrix

The Pearson correlation coefficient between tourist satisfaction and empathy on nature and heritage, elaboration, and relevancy, showed a strong positive relationship, as its coefficient values were 0.735, 0.743 and 0.793 respectively. However, there was only a moderate positive relationship between tourist satisfaction and positive attitude as its Pearson correlation coefficient was 0.545.

Multiple Regression Analysis: The R square (66.8%) and adjusted R Square (66.1%) values in this study indicate the fitness of the model (Table 20.3). The multiple regression equation was developed as follows: TS represents tourist satisfaction, E represents empathy, EL represents elaboration, AT represents positive attitude, and RE represents relevancy, respectively.

Table 20.3: Model Summary

_			model Summary	144	
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.818ª	.668	.661	.41422	1.681

Model Summand

TS = 0.880 + 0.019 E + 0.192 EL + 0.192 AT + 0.447 RE

There is a positive relationship between tourist satisfaction and elaboration, as this type of interpretation makes tourists curious, makes them think, makes them want to talk about what they heard, makes them want to know more, and makes them intrigued. There is a positive relationship between tourist satisfaction and relevancy, which suggests that guiding interpretation is meaningful, relevant to visitors, connected to the things tourists care about, and connected to the things they know about.

There is also a positive relationship between tourist satisfaction and empathy for nature and heritage, which shows that guiding interpretation is relevant to the visitors' view of today's society, how they see things in today's' world, their appreciation of the values indigenous people attach to land, appreciation of the indigenous view of the land or wildlife, and appreciation of the historic relationship that indigenous people have with the land. There is again a positive relationship between tourist satisfaction and positive attitude towards nature and heritage, as tourists are agreeably satisfied with interpretation given by guides when illustrating the fact that protecting heritage or nature seems more important. This makes tourists value heritage preservation and nature conservation more highly, and makes protecting nature and heritage more justifiable.

Hypothesis Testing: The p values in Figure 1 show that three of the four hypotheses were supported. There are relationships between tourist satisfaction and elaboration (0.035<0.05), relevancy (0.000<0.05), and positive attitude (0.021<0.05), but empathy towards nature and heritage (0.801>0.05) was unsupported.

Conclusion

This study developed a theoretical model or conceptual framework (see Figure 20.1) using variables of interpretation quality which included empathy for nature and heritage, elaboration, positive attitudes towards heritage, and nature and relevancy. Those variables have links with tourist satisfaction, and this was tested within the setting of tourists who speak English or Italian, who were accompanied by national or chauffeur guides in Sri Lanka.

The results show that the mean values of these relationships are at an agreeable level, except for empathy, which showed at a neutral level. The correlation coefficient matrix showed a strong positive relationship between tourist satisfaction and empathy for nature and heritage, and elaboration and relevancy. However, positive attitude had only a moderate relationship with tourist satisfaction. Thus, there are positive relationships between tourist satisfaction with elaboration, relevancy, and word of mouth, as seen in the

multiple regression analysis. Both independent indicators (affective indicators) related to heritage and nature showed negative relationships with tourist satisfaction. This supports previous studies (Huang et al. 2014) that showed that there is more influence from cognitive outcomes of interpretation than affective outcomes of interpretation on tourist satisfaction.

A significant recommendation arises from this analysis. And this is to enhance guides' interpretation of the importance of heritage and nature preservation and conservation, by making the visitors more curious in a 'cognitive marmer', as cognitive factors have a greater effect on satisfaction than affective factors. This study has shed a theoretical light through a model including cognitive and affective factors of guiding interpretation, showing a relationship with tourist satisfaction. The interpretative ability of area guides in world heritage sites, and the impact of online interpretation web sites on the job roles of tourist guides, were identified as new research areas, as identified by this study. Further, the question, "why was empathy not empirically supported in the relationships identified by this study?" has opened a door to the further development of this study. It is also better to collect more data from more sites by using several authorized collectors, as the researchers were not able to collect the marginal number of questionnaires per day by themselves.

References

- Armstrong, E. K., and B. Weiler. 2003. Improving the Tourist Experience. Evaluation of Interpretation Components of Guided Tours in National Parks. Brisbane: CRC for Sustainable Tourism.
- Bacher, K., A. Baltrus, B. Barrie, K. Bliss, D. Cardea, L. Chandler, and B. Lacome. 2007. Foundational Competencies for All NPS Interpreters, 1—24.
- Baker, D. A., and J. L. Crompton. 2000. "Quality, satisfaction and behavioural intentions." *Annals of Tourism Research* 27(3): 785–804.
- Bowie, D., and J. C. Chang. 2005. "Tourist satisfaction: A view from a mixed international guided package tour." *Journal of Vacation Marketing*, 11(4): 303-322.
- Chen, C. F., and F. S. Chen. 2010. "Experience quality, perceived value, satisfaction and behavioural intentions for heritage tourists." *Tourism Management* 31(1): 29-35.
- Chilembwe, J. M., and V. Mweiwa. 2014. "Tour Guides: Are they Tourism Promoters and Developers? A Case Study of Malawi." IMPACT 2(9): 29-46.

- Ham, B. S. H., and B. Weiler. 2005. *Interpretation Evaluation Tool Kit*. Brisbane: CRC Sustainable Tourism.
- Ham, S. H. 1993. "Environmental interpretation: A practical guide for people with big ideas and small budgets." *Environment International* 19.
- Huang, S., B. Weiler, and G. Assaker. 2014. "Effects of interpretive guiding outcomes on tourist satisfaction and behavioural intention." *Journal of Travel Research* 3: 344-358.
- Moscardo, G. 1996. "Mindful visitors: Heritage and Tourism." Annals of Tourism Research 23(2): 376–397.
- •ppegaard, B., and G. P. Shine. 2008. "Going Mobile: Changing the Face of Interpretation in the National Park Service." *Prospects*: 11–25.
- Periera, E. 2005. "How Do Tourist Guides Add Value to An Ecotour? Interpreting Interpretation in the State of Amazonas, Brazil." *Hospitality Review* 23(2): 1-8.
- Räikkönen, J. 2014. Enabling experiences the role of tour operators and tour leaders in creating and managing package tourism experiences. Publications of Turku School of Economics. Series A Suomen.
- Roca, G. R. 2012. In *Quest of Tourist Guide Work Improvements*. Unpublished Master Thesis, Norwegian School of Hotel Management June.
- Sandaruwani, J. A. R. C. 2014. "Problems and Countermeasures of Chauffeur Guide Services (A Case Study on Royal Holidays Pvt. Ltd.)." *Uma ética Para Quantos?* XXXIII(2):81-87.
- Silva, D. De., and C. Author. 2013. "Interactive mobile based tour guide." SAITM Research Symposium on Engineering Advancement: 53–56.
- Sri Lanka Tourism Development Authority 2014. Annual Statistical Report of Sri Lanka Tourism. Colombo: Sri Lanka Tourism Development Authority.
- Survey of Departing Foreign Tourists from Sri Lanka. 2013. Research and International Relations Division, Sri Lanka Tourism Development Authority.
- Tilden, F. 1957. Interpreting our heritage. New York: Chapel Hill Books.
- Wearing, S., D. Archer, G. Moscardo, and S. Schweinsberg. 2007. Best Practice Interpretation Research for Sustainable Tourism Framework for a New Research Agenda, 1–30.
 - http://doi.org/ISBN 9781920965310
- Wearing, S., P. Edinborough, L. Hodgson, and E. Frew. 2008. Enhancing Visitor Experience through Interpretation: An Examination of Influencing Factors. Brisbane: Sustainable Tourism CRC Tech Report.
- Williams, P., and G. N. Soutar. 2009. "Value, Satisfaction and Behavioral Intentions in an Adventure Tourism Context." *Annals of Tourism Research* 36(3): 413-438.

CHAPTER TWENTY-ONE

THE BEHAVIORAL CHARACTERISTICS OF FEMALE SOLO TRAVELLERS IN SRI LANKA

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Abstract

•ver the last decade the participation of female solo travellers in tourism has increased significantly. A female solo traveller is a free and independent woman who does not accompany anyone as a travel partner; in this they have the desire or enjoyment of travelling alone. The main objective of this study was to identify the behavioural characteristics and travel motivations of female solo travellers in Sri Lanka. In addition, the study discovers the relationship between female solo travellers' perception and satisfaction, related to their holiday stay in Sri Lanka. The study was carried out using a mixed methodological approach. A structured questionnaire was administered to 50 female solo travellers, and structured interviews conducted with four accommodation providers and six travel service providers. Correlation and regression analyses were employed to analyse the primary data. The findings highlight that female solo travellers are self-motivated young travellers who wish to use normal destination facilities. Most solo females expect only budget facilities in the destination, and their behaviours are the same as backpackers. Solo females are highly motivated to 'visit a place that they have not visited before', and 'experience new and different lifestyles or traditions'. Statistical results indicate that the factors such as attractions and facilities, and supportive services, have significantly impacted on female solo travellers' satisfaction. Other factors, such as accommodation and food, infrastructure, and the behaviour of the community, do not

significantly impact on their satisfaction. However, all destination attributes should be improved to meet the requirements of this niche travel segment. The study provides useful guidance and strategic information to establish a friendly environment to promote female solo travel market in Sri Lanka.

Keywords: Behavioural characteristics, perception and satisfaction, female solo travellers, travel motivation.

Introduction

Women appear to be slightly more numerous among travellers across the world in recent decades (Khan 2011). Presently, many countries market their tourism product specifically among females who travel solo. Therefore, this market segment is on the rise, and the travel industry is finally catching onto this segment sharply. According to Khan (2011), the increased participation of females in leisure travel has been influenced by factors such as, the changing and progressive attitude of society towards female education, better jobs, elevated status, the growth of the independent working women segment, late marriages, the changing nature of the 'ethic of care', and joint sharing of familial responsibilities between spouses.

Sri Lanka is considered as one of the finest destinations for female solo travellers. It offers most of the destination characteristics expected by this group. But with the high competition among solo travel destinations worldwide, the image held by solo travellers about a specific tourist destination is highly influenced by the ability to select alternative tourist destinations. According to Mohammad and Som (2010), tourist motivation is closely associated with a destination's competitive advantage and image. Therefore, Sri Lankan tourism marketers need to concentrate on solo travellers' image about the country.

Although this niche market segment is a novel concept for Sri Lanka, female solo travellers will soon be more familiar in the market. This trend towards specialization in the travel market will be linked to the growing demands of special interest tourism, where tourists seek to satisfy specific travel needs and motivations. Meanwhile, tourism marketers and authorities emphasize the importance of having a deeper knowledge of travel behaviours and motivations, to allow them to respond to the specific travel needs and wants of the solo traveller.

Based on the growing academic literature, the travel needs and requirements of solo travellers can be further investigated. Many research studies have been conducted to identify the behaviour and traveller motivations of female solo travellers in the Western context. However, less attention has

been given to identify these dimensions in the Sri Lankan context. Accordingly, there is no specific methodology that has been addressed relating to important travel behaviours, demography and motivations of female solo travellers. Hence, the relevant authorities have no adequate updates or accurate statistics about the industry's behaviour and visitor patterns. It cannot eliminate this valuable segment however, and must calculate in the anecdotal and research evidence while establishing a solo-traveller-friendly environment in Sri Lanka. This research, therefore, is designed to help fill this gap in the literature and contribute to providing the needed information for tourism experts to develop the female solo travel segment in the country. Therefore, the main objective of this study was to identify the behavioural characteristics and travel motivations of female solo travellers in Sri Lanka. In addition, the study examined the relationship between female solo traveller perceptions and their satisfaction with their holiday stay in Sri Lanka.

Literature Review

According to the growing body of academic literature on free and independent travellers, women are opting to travel alone both domestically and internationally (Wilson and Little 2008). Therefore, a market segment has been created, the solo traveller. Wellie (2015) defines solo travel as going on an organized tour by oneself, doing a private itinerary arranged by a local expert, forging an own itinerary while staying in hostels and joining day tours, renting a local apartment and using a guidebook or internet research to see, do, and eat, and arriving in a destination alone, but finding long-term travel-mates on the road. Also, the BootsnAll (2011) organisation defines solo travellers as people embarking on a trip with no specific requirements as to time or place, by themselves, with the option of continuing solo for the duration of the journey.

Many studies have argued that women are more deeply constrained than their male counterparts when it comes to independent travel and seeking access to tourism activities (Wilson and Little 2008). But in terms of travel for pleasure, research shows that women are more prominent than men in their participation in adventure travel and ecotourism. In the US, the North American Adventure Travelers Association found that in 1996, 63% of its clients taking trips overseas were women. Similarly, in 1996, a leading Australian adventure travel company said that 74% of their clients were women, and that most of these women were choosing to travel alone (Henderson 1991).

Female Solo Travellers

Female solo travellers are women who travel to a destination by themselves. Women travellers are now recognised as a growing force within the tourism industry (Henderson 1991). Due to recent social, cultural, and economic changes, women now make up a much higher proportion of business travellers than they did a decade ago. Westwood (as cited in McNamara and Prideaux 2007) suggests that in the first years of the new millennium, it is likely that half of all business travellers will be female. Such trends have seen hotels, airlines, and other tourism ventures seeking ways to tap the potential of this 'new' market of corporate travellers. Ward, Williams, Ott, and Nath (2013) conducted an online survey among 1,000 travellers and revealed that 82% of the women had travelled alone. Most female solo travellers are adventurous. The freedom, a sense of adventure, and a desire to learn about themselves, were cited by respondents as the top reasons for travelling solo.

Behavioural Characteristics of Female Solo Travellers

Leiper (1995), pointed out that tourism can be better defined according to the behavioural manifestations of tourists, who hold ideas and opinions about why they go on trips, where they go and what they do. Ward, Williams, Ott, and Nath (2013) conducted a survey among 1,000 women respondents, and suggested that female solo travellers are concerned about safety, and tend to change their behaviour when travelling solo. Many respondents revealed that they project a more confident attitude when they travel solo, so they are not seen as targets. Further study identifies female solo traveller behaviour as including 'limiting alcohol consumption when travelling alone', 'going home earlier at night', and 'dressing more conservatively while travelling solo', and also, that the duration of the solo trip is a month or longer. The travel preferences of the sample were respectively, freedom, sense of adventure, to meet new people, learn about them, boost their own confidence, and learn about culture.

McNamara and Prideaux (2007) found that the average length of stay of solo travellers to tropical North Queensland was 13 nights. Almost half of the solo women travellers were making their first visit to the region. For those on a repeat stay in the region, the average number of previous visits was just over 6. A large proportion of the sample stayed in a backpackers' hostel, with friends or relatives, or at a hotel or motel. Solo women visitors travelled to the region predominately by air, followed by a bus or coach, or private vehicle, but were returning by air. The main information sources

used by solo women travellers to plan their holiday to the region were friends and relatives, guidebooks, their knowledge of having been before, and the internet. Chhabra (2004) conducted a survey in Sacramento (California) using 700 respondents, and suggested that solo travellers used travel agents or tour operators, and stayed longer in a destination.

The Motivations of Female Solo Travellers

The travel motive is the starting point of any holiday decision-making process, and it will influence two major decisions; whether to go, and where to go (Zhao and Gnanapala 2011, Gnanapala 2012). According to Devesa et al. (as cited by Gnanapala 2015), motivation is a meta-concept that persuades travel behaviour and determines different aspects of that behaviour i.e. first, the reason for traveling or why; secondly, the selection of a specific destination, or where; and finally, the outcomes, or the overall satisfaction during the holiday.

Dann (1977), and Uyasal and Hagan (1993) described motivation as psychological or biological needs and wants, including integral forces that arouse, direct and integrate a person's behaviour and activity. Since the paradigm of tourism is always related to human beings, and to human nature, it is a complex proposition to investigate why people travel, and what they want to enjoy. Many disciplines have been utilized to explain phenomena and characteristics related to motivation. In psychology and sociology, the definition of motivation is directed toward emotional and cognitive motives (Ajzen and Fishbein 1977), or internal and external motives (Gnoth 1997). From an anthropological point of view, tourists are motivated to escape the routine of everyday life, seeking authentic experiences. From the socio-psychological point of view, motivation is classified into seeking and avoidance dimensions.

According to Dann (1977), the motivation concept can be classified into two forces, which indicates that people travel because they are pushed and pulled to do so by 'some forces' or factors. Understanding travel motives shows why people travel, or why people choose a destination.

Tourist Satisfaction

Kozak and Rimmington (2000) note that tourist satisfaction is considered one of the prime variables to sustain competitive business in the tourism industry, because it affects the choice of destination, and the consumption of products and services. Oliver (1980) states that satisfaction is an at-

titude or evaluation that is formed by the customer comparing their pre-purchase expectations of what they would receive from the product, to their subjective perceptions of the performance they actually received. Yi (1990) defines customer satisfaction as the collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service.

Gursoy, McCleary, and Lepsito (2003) suggest that destination image, perceived quality, and perceived value and satisfaction, are the most frequent factors that have been used to explain tourist motivation, or intention to visit, and revisit, a tourist destination. Customer satisfaction is one of the most frequently examined topics in the hospitality and tourism field, because it plays an important role in the survival and future of any tourism product or service. According to Chon and Olsen (as cited in Lee 2003), it is important to measure consumer satisfaction with all the attributes of the destination, because consumer dis/satisfaction with any one of the attributes leads to dis/satisfaction with the overall destination. Furthermore, they explained that the relative importance of each attribute to the overall impression should be investigated, because dis/satisfaction can be the result of evaluating various positive and negative experiences.

Methodology

This study employed a mixed methodology to collect both quantitative and qualitative data. According to Bulsara (2003), mixed methods research is a methodology for conducting research that involves collecting, analyzing, and integrating quantitative and qualitative research, in a single study, or a longitudinal program of inquiry.

The population of this research was the set of female solo travellers who visit Sri Lanka. It is difficult to decide the total population because of the lack of adequate updates and accurate statistics, so the required sample size was, at best, tentative. To achieve the objectives of this study then, a questionnaire survey was conducted using 50 female solo travellers who were visiting Sri Lanka. In addition to this group, personal interviews were conducted with four accommodation providers and six travel service providers (three travel agents and three national tourist guides). A convenience sampling technique was used to extract the sample from the population, since the total population was unknown. The Statistical Package for the Social Sciences (SPSS) was used to analyse the data, employing descriptive statistics, correlation, and regression analyses.

The Model for the Study

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Y_{cs} = a + b_1 x_{Arraction \ and \ Facilities} + b_1 x_{Accommodation \ and \ Food} + b_1 x_{Infrastructure \ facilities} + b_1 x_{Supportive \ services} + b_1 x_{Behaviour \ of \ community} + et
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Where: y = satisfaction of the female solo travellers; a = constant; x = dimensions of attitudes and perception; and et = error term.

Results and Discussion

Behavioural Characteristics of Female Solo Travellers

The female solo traveller segment consists of a small, but significant, part of the country's overall visitor market. The female solo travellers in Sri Lanka are predominately from European countries, such as France, Germany, the UK, and Italy. Also, there are few arrivals from Asian countries, such as China and Japan, showing that solo travel is expanding all over the world. Most female solo travellers were young, single, and aged between 30-39 years. Solo travellers are educated segments, and the majority had at least a university degree. Also, a high portion of the sample was professionals, earning an income ranging between US\$ 30,000 and US\$ 50,000 per annum.

The results highlight that the female solo segment is a lucrative one, and the average duration of stay is more than 15 nights; higher than the average duration of stay in the country of any group. The study showed that most participants were visiting Sri Lanka for the first time, and that Sri Lanka was the main destination on their tour. These travellers obtained information about Sri Lanka through their friends and relatives, and used non-package tours to visit the country. Solo females visit Sri Lanka to experience sun and beach, historical sites, cultural events, adventure and wildlife, and so on. This reveals that the main purpose of their visit is similar to that of mainstream tourists. The respondents mainly use budget accommodation and transportation for their solo tour. Most prominent accommodation options are guest houses, rest houses, budget hotels, home-stays and accommodation with their friends and relatives. Female solo travellers are not much concerned about luxury accommodation facilities, even though they are on an individual tour. This shows that solo females are a budget travel segment as much as backpackers. Most of the respondents planned their solo trips to last between one month and three months. Williams et al. (2013), also found that female solo travellers particularly seek accommodation in hostels,

guesthouses and B&B inns. Also, the most popular transportation modes among these individual travellers are public buses, trains, and three-wheelers.

A considerable number of solo tourists arrange accommodation and flight bookings through the internet. They do not make pre-bookings for ground transport, visiting places, or for other activities. The solo tourists spend around US\$ 1000 to US\$ 1500 during their stay in Sri Lanka, and a large portion of this goes to the local communities in the country. Sigiriya is one of the main places visited by solo females, and it was revealed that other popular attractions are the Elephants, Horton Plains, and Dambulla.

The Travel Motivations of Female Solo Travellers

Through the literature review, twenty motivational factors have been identified, especially in the work of Mohammad and Som (2010), and categorized under five dimensions, such as sightseeing variety, enhancing relation, fulfilling spiritual needs, seeking relaxation, and fulfilling prestige. The studies involved revealed that the factors, 'visiting a place that I have not visited before' and 'experiencing new and different lifestyles or traditions' are the prominent motivational factors for female solo travellers to visit Sri Lanka. This reveals that solo females are curious about unseen places, and keen on different lifestyles and traditions. Other significant motives are to 'see how people of different cultures live, appreciate natural resources, gather knowledge, escape from the daily routine and relax physically'. The least-influenced motives for the trip are to 'visit a place that my friends have been to'. The travel motives of the female solo travellers are presented in Table 21.1. Similarly, Mohammad and Som (2010) found that highest motivation for foreign tourists to visit Jordan was 'to visit a place that I have not visited before', and the lowest was 'to visit friends and relatives'.

Table 21.1 Travel Motives of Female Solo Travellers

Dimension	Motives	Mean value by motive factor	Mean value by dimension		
Sightseeing variety	Visit a place that I have not visited before	4.60	4.20		
	Appreciate natural resources	4.22			
	Participate in new activities	3.74			
	Gather knowledge	4.22			
Enhancing relation	Experience new and different lifestyles or traditions	4.60	4.21		
	See how people of different cultures live	4.50			
	Enhance communication with local community	3.88]		
	Meet new people	3.84			
Fulfilling spiritual	Have confidence on myself	3.40	3.57		
needs	Fulfil my dream of visiting a foreign land/country by single	3.84			
	Relax spiritually	3.56	ľ		
	Seek along in a foreign land	3.46			
Seeking relaxation	Escape from the daily routine	4.08	3.92		
	Relax physically	4.06			
	Find thrills and excitement	3.56	1		
	Do new things	3.96			
Fulfilling prestige	Satisfy the desire to be somewhere else	3.82	2.57		
- ^ -	Increase my social status	2.20			
	Visit a place that my friends have been to	2.10			
	Visit a destination that would impress my friends and family	2.14			

Perception and Satisfaction of Female Solo Travellers in Sri Lanka

Table 21.2 presents the results of the correlation analysis, and indicates the dimensions related to the female solo tourists' attitudes and perceptions, such as attractions and facilities, accommodation and food, supportive services, and behaviour of the community. The result says that there is a significant relationship with female solo travellers' satisfaction and supportive services (r = 0.692, p = 0.000) and destination attractions (r = 0.559, p = 0.000).

The regression analysis presented in Table 21.3 indicates that the factors, attraction, and facilities of the destination, and supportive services, are the most-influenced perceptual dimensions that impact on female solo travellers' satisfaction. The factors accommodation and food, infrastructure facilities, and behaviour of the community, are not supported for solo females' satisfaction. However, those factors are highly important for the future growth and development of this market segment.

Table 21.2 Correlation Table

		Satisfaction	Attraction & facilities	Accom & food	Infrastructure facilities	Support services	Behaviour of community
Satisfaction	Pearson	1	.559**	.299*	.167	.692**	.285*
	Correlation						
	Sig. (2-tailed)		.000	.035	.246	.000	.045

Table 21.3 Coefficient Table

		Unstandare cients	lized Coeffi-	Standardized Coeffi- cients			
Model		В	Std. Error	Beta	T	Sig.	
1	(Constant)	1.459	.53●		2.753	.009	
	Attraction and facilities	.401	.169	.399	2.37●	.022	
	Accommodation and food	132	.094	186	-1.403	.168	
	Infrastructure facilities	100	.106	118	937	.354	
	Supportive services	.587	.110	.625	5.336	.000	
	Behaviour of community	.018	.133	.•19	.137	.892	

Female solo travellers are dissatisfied about certain destination-related factors. During the survey, the tourists stated that a dirty environment, pollution, and transportation problems, are the worst things they experienced in Sri Lanka. They also revealed that they have faced problems like poor wi-fi connection, lack of sanitary facilities, dirtiness of streets, high entrance fees, high accommodation charges, high prices, no standards in the cheapest accommodation, the influence of beach boys, hawkers and touts, and price discrimination aimed at foreign tourists.

Even though female solo travellers have encountered some issues and problems while spending their holidays in Sri Lanka, the study found that a high percentage of travellers were fully satisfied with their overall visit to Sri Lanka. Around 82% of respondents said that they had an intention to visit Sri Lanka again. Also, 92% of the respondents will recommend Sri Lanka to other female solo travellers. This reveals that the overall satisfaction levels of female solo travellers are very high.

The safety of the accommodation facilities and their quality should be developed, especially the small and budget accommodation. The industry needs to develop new themes of accommodation, such as hostels for females, and similar resorts which employ only female employees. Also, the facilities should be improved and modified to match solo travellers' requirements. Facilities like private pools, beauty centers, information and contact details of shopping/salon/jewellery shops in an area, allocation of specific time for ladies in fitness centres and swimming pools, and so on. Also, there is a need to change the atmosphere of hotels to motivate and attract female solo travellers. According to respondents, the behaviour and attitudes of some locals should change. Respondents revealed that the mentality of the local people is still not positive towards this segment of travellers. The contribution of the locals for the development of the solo travel industry is thus very low. Hence, the industry needs to make locals aware of the importance of solo travellers to the economy, and the growing popularity of this segment.

Conclusions

This study concentrated on the behavioural characteristics of the female solo travellers who visit Sri Lanka. The female solo market makes up a small but significant part of the country's overall visitor market. Our findings show that female solo travellers in Sri Lanka are predominately from European countries, with the majority unmarried and highly educated.

The main travel motives of solo females were to visit a place that they had not been to before, and to experience new and different lifestyles, or

traditions, of the visited countries. The tourists are satisfied about observed factors, such as the attraction and facilities, and the supportive services of the destination. However, they are dissatisfied with factors such as accommodation and food, infrastructure facilities, and the behaviour of the community. The findings also revealed that the segment is growing gradually. However, Sri Lanka, as a tourist destination, is still not ready to attract this travel segment to the country. Hence, all the required facilities should be developed, to create a conducive travel environment to motivate and attract the female solo traveller.

References

- Ajzen, I., and M. Fishbein. 1977. "Attitude-Behavior relations: A theoretical analysis and review of empirical research." *Psychological Bulletin* 84: 888-918.
- BootsnAll, 2011. What is solo travel? http://toolkit.bootsnall.com/solo-travel-guide/what-is-solo-travel.html (accessed 25 April 2015).
- Chhabra, D. 2004. "Determining Spending Behavior Variations and Market Attractiveness of Solo and Non-Solo Travelers." *E-Review of Tourism Research* 25: 103-107.
- Dann, G. 1977. "Anomie, Ego-enhancement and Tourism." Annals of Tourism Research 4: 184-194.
- Gnanapala, W.K.A.C. 2012. "Travel Motivations and Destination Selection: A Critique." *International Journal of Research in Computer Application and Management* 21: 49-53.
- Gnanapala, W.K.A.C. 2015. Travel Motives, Perception and Satisfaction. Germany: Scholars Press.
- Gnoth, J. 1997. "Tourism motivation and expectation formation." Annals of Tourism Research 242: 283-304.
- Gursoy, D., K. W. McCleary, and L. R. Lepsito. 2003. "Segmenting dissatisfied restaurant customers based on their complaining response styles." Journal of Food Service Business Research 61: 25-44.
- Henderson, K. A. 1991. "The contribution of feminism to an understanding of leisure constraints." *Journal of Leisure Research* 23(4): 363-377.
- Khan, S. 2011. "Gendered Leisure: Are Women more constrained in travel for leisure." *Himachal Pradesh University* 61: 105-121.
- Kozak, M., and M. Rimmington. 2000. "Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination." *Journal of Travel Research* 383: 260-269.

- Lee, T. H. 2003. "A Structural Model to examine how Destination Image, Attitude, and Motivation affect the Future Behavior of Tourists." *Leisure Sciences: An Interdisciplinary Journal* 31(3): 215-236.
- Leiper, N. 1995. *Tourism Management*. Collingwood, Victoria: TAFE Publication.
- McNamara, K., and B. Prideaux. 2007. "Exploring the Motivations and Behaviours of Solo Women Travellers in Tropical North Queensland." *International Journal of Tourism Research* 12: 253–264.
- Mohammad, A. H., and P. M. Som. 2010. "An Analysis of Push and Pull Travel Motivations of Foreign Tourists to Jordan." *International Journal of Business and Management* 51(2): 41-50.
- Oliver, R. L. 1980. "Cognitive, Affective and attribute bases of the Satisfaction Response." *Journal of Consumer Research* 183: 77-85.
- Uysal, M., and L. A. R. Hagan. 1993. "Motivation of pleasure travel and tourism." *Encyclopaedia of Hospitality and Tourism*: 798-810.
- Ward, M., A. Williams, S. ●tt, and S. Nath. 2•13. Survey: Solo travel or nothing, say women today. http://www.thealternative.in/lifestyle/survey-solo-travel-or-nothing-it-is-say-women/(Accessed 2 May 2•15).
- Wellie, R. 2015. Why Solo Travel Doesn't Define Me. www.redwelliegirl.com:http://www.redwelliegirl.com/2015/03/15/why-solo-travel-doesnt-define-me/ (accessed 17 May 17, 2015).
- Wilson, E., and D. E. Little. 2008. "The solo female travel experience: Exploring the 'Geography of women's fear'." Current Issues in Tourism 11(2): 167-186.
- Yi, Y. 1990. "A Critical Review of Consumer Satisfaction." Review of Marketing" 58-66.
- Zhao, B., and W.K.A.C. Gnanapala. 2011. *Tourist Motivation: Push and Pull Towards' Sri Lanka*. In Proceedings of the 8th International Conference on Business Management, 743 750. Sri Lanka: University of Sri Jayewardenapura.

CHAPTER TWENTY-TWO

COMMUNITY PARTICIPATION IN THE TOURISM DECISION MAKING PROCESS: A CASE STUDY OF ARUGAMBAY, SRI LANKA

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Abstract

This study focuses on local community participation in the development of Arugam Bay in Sri Lanka as a popular tourist surfing destination. Participation in the decision-making process is a crucial determinant in ensuring that the benefits accrued by local communities from tourism are guaranteed. The study utilized a case-study approach, which offered exploration at community level to analyze the issue from grass roots. The participation of diverse stakeholders (local government, NGOs, tourism entrepreneurs, members of the community, and tourism professionals), and the use of a mixed methodology, using multiple data collection techniques such as household questionnaire surveys, stakeholder interviews, and personal observations, has improved the validity and reliability of the results, and answered the main research question effectively. This study concluded that there is an induced participation of local communities in the tourism decision-making process in Sri Lanka. Under induced community participation, the host community is normally involved at a moderate level in the decision-making process, and they haven't any power to make sure that their thoughts are considered during implementation. The paper contributes to the wider scientific discussion on community participation in the tourism industry, and reveals vital insights for tourism plarmers, policy makers, and decision makers.

Keywords: Community participation, tourism decision making, tourism development.

Introduction

Tourism is the world's largest emerging industry worldwide (UNCTAD) 2007). Indeed, tourism is becoming a major industry in many countries, including Sri Lanka, often with the highest future growth potential. Tourism is also considered the world's largest employer, and a major source of substantial foreign exchange earnings for any country (Blank 1991, Richards 2003). According to Beeton (2006), tourism is one of the major means which help the development of local communities. Honeck (2008) revealed that the tourism industry has been proven to have continued and strong growth in most developing countries which are characterized by a high level of widespread poverty. He further emphasised that tourism has become a major contributor to the gross domestic product (GDP) in many of these countries. Beeton (2006) pointed out that, as a result, tourism is now seen as a major agent of transformation in every tourist destination. However, according to Scheyvens (2002), many communities in developing countries are uninformed about the costs and complexities associated with this speedy transformation of development.

One approach to improve community development via tourism is to gain the active involvement of local communities, and make sure that their role is tapped and sustained through genuine participation in the industry (Beeton 2006). Active involvement and participation of local communities in the tourism industry has therefore been considered as a positive force for transformation, and a passport to development. It is vital to mention that involvement of the local community is crucial for sustainable development of the tourism industry, not only because tourism has been maintaining a close bond with the local communities as hosts, but also because the destinations of tourists are communities, and it is in the community that tourism happens (Blank 1989). However, even though it is easy to conceptualize local participation and involvement in tourism, it is far more complex to practice in any context.

As noted earlier, only a limited number of research studies have been carried out concerning this matter, which makes this study all the more relevant. Sri Lanka is a promising tourism destination with vast unexplored potential. After Sri Lanka established peace in 2009, tourism began to grow quite spontaneously, and arrivals increased at a fantastic rate. Now, as an emerging tourist destination, the whole country has a challenge to uphold its existing simple lifestyles and traditions, in the face of speedy tourism growth, globalization, and modernity.

Problem Statement

According to Sooriyagoda (2011), the active involvement of local communities in the decision-making process ensures that locals will have access to the tourism development process in Sri Lanka. As per the Tourism development strategy document (2011), one of the major objectives of Sri Lanka tourism is to "Distribute the economic benefits of tourism to a larger cross section of the society and integrate tourism into the real economy." This implies that the government of Sri Lanka has an intention to develop and promote tourism within the country, by ensuring the maximum participation of host communities in tourism development, via their active participation in the tourism decision-making process. Even though the government promotes tourism with the above intention, there is no single research that has been carried out in the Sri Lankan context, to find out whether the country is developing tourism by getting this form of participation and involvement from local communities. So, this lack of related studies motived the researchers to conduct this study, to find out the level of local community participation in the tourism decision-making process in Sri Lanka. Finally, the case study approach was employed to achieve this objective.

Literature Review

As Baral and Heinen (2007) note, community participation and involvement have become general components in many development initiatives, such as community-based projects, and has been promoted by prestige organisations, such as the World Bank, to concentrate on the inefficiency of highly centralized development approaches, especially in developing countries. According to Ribot (2004), development initiatives now seek contributions and active participation from all stakeholders, at the appropriate level. This active participation is expected, not only for the sake of efficiency and fair play of the programs, or the influence of donors and demands of frontline communities, but also for the sustainability of these initiatives (Ribot 2004). Havel (1996) and Songorwa (1999), revealed that the real impact of soliciting active community involvement and participation is to create an enabling environment required by different stakeholders, particularly frontline communities who have been exposed to the negative impacts of tourism, for them to have an actual stake in development activities.

Local participation is inevitable, and essential for tourism development, because most tourism attractions are located within local communities, or in their vicinity, and most co-exist, side-by-side, with their local communities. Further, tourism takes place in local communities, they are the people

who frequently bear the negative impacts of tourism and darnage, and most times, they form part of the tourism products and experiences that tourists seek (Havel 1996, Wolfensohn 1996, Tosun 2000, Scheyvens 2002, Kibicho 2003, Li 2005, Beeton 2006). As Tosun (2000) further explained, community participation and involvement in the tourism sector ensures the safety of these tourism products and related services, via effective and collaborative management of the industry, centered towards a more community-led and community-driven planning process that ensures strong community support and participation for successful tourism development.

A critical review of related literature reveals that local community participation in tourism development can be observed from two different angles; participation of the local community in the decision-making process, and local community participation for tourism benefit sharing (Havel 1996, Timothy 1999, Tosun 2000, Li 2005, Chok and Macbeth 2007, Zhao and Ritchie 2007, Nault and Stapleton 2011, Marzuki et al. 2012).

Local Community Participation in the Tourism Decision-Making Process

According to Wilkinson (1991), decision-making is a process of defining certain problems, and choosing a course of action through generated alternatives. Normally, decisions are made after collecting and using information. The key advantages of decision-making with the support of different stake-holders are the use of more information, experience, knowledge, and greater acceptance and legitimacy of the decisions made (Kaufman 1959, Wilkinson 1991). Muhanna (2007), and Niezgoda and Czernek (2008) explained that, to attain sustainable development in tourism projects, local communities are required to participate and contribute in the decision-making process. Further, local people in tourism regions can participate in identifying and encouraging tourism resources and tourist attractions that create the foundation of community tourism development. To get long lasting results, local communities are required to be active participants, rather than passive observers.

Table 22.1 Normative Typologies of Community Participation

7.Self m•bili-		8. Citizen	Degree of		Spontaneous
zation		centrel	citizen		Bettem-up; active
		7. Delegation	power	l N	participation; direct
	KΞ	power	, and the second		participation; par. In
6.Interactive	N	6. Partner-		ľ	decision making; au-
participation		ship			thentic participation;
^ ^		^			self-planning.
5. Functional		5. Placation	Degree of		Induced
participation			tekenism		Top-down; passive;
4. Participation		4. Consulta-			formal; mostly di-
for material in-		tien		۸ــــــا	rect; degree of token-
centives	<u> </u>				ism; manipulation;
3. Participation	X	3. Informing		ľ	participation in im-
by consultation					plementation and
					sharing benefits;
					choice between pro-
					posed alternative and
					feedback.
2. Passive par-		2.Therapy	N•n- par-		Coercive
ticipation			ticipation		Top-down; passive;
1. Manipula-		1.Manipula-			mostly indirect; for-
tive participa-		ti∙n			mal; participation in
tien				8	implementation; but
	1	4		Ш,	not necessarily shar-
	\sim	4		Щ,	ing benefits; choice
	N. W.			<i>"</i>	between proposed
					limited alternative or
					no choice; paternal-
					ism; non- participa-
					tion; high degree of
Day 44 cv 2 c	A .				tokenism, etc.
Pretty's	Ai	Arnstein's (1971) typology of com- munity participation		Tosun's (1999) ty-	
(1995) typol-		munity par	пстрацоп		pology of commu-
ogy of com-					nity participation
munity partic-					
ipation	ļ.				

There are different types of ways in which local people and host communities can engage in the tourism decision-making process, ranging from passive to active participation, from participating to a non-participative approach, and from being represented to holding a referendum. Nevertheless, it is important to highlight that the difference between each of these participation methods is decided by varying the degree of incorporation in the

decision-making process to be practiced by local communities (Timothy 1999, Tosun 1999, Li 2009).

Different scholars have investigated and developed constructive models that conceptualize community participation and involvement in the context of development studies in general, but not directly with a specific economic sector (Pretty 1995, Tosun 1999). Further, Tosun (2006) revealed that most of these studies have focused on participatory development approaches in development studies, and they propose an important set of tools for more genuine and interactive community participation (Table 22.1). Pretty (1995) used seven levels of community involvement, starting from the situation where local communities have no power or, at maximum, engage in passive participation. On the other hand, 'self-mobilization' is where local people participate by taking initiatives, which are independent of external institutions (Table 22.1).

According to Amstein (1971), community participation depicts the authority-sharing relationship between local communities and decision makers. He further argued that there are different degrees of power and authority available to local communities. Arnstein (1971) introduced a ladder describing the degrees of local people's participation, offering a framework to aid determination of how a local community involves with the decision-making process. According to Arnstein (1971), the downside of the ladder represents 'manipulation' and 'therapy'; these two levels explain the levels of 'non-participation' in the community for the decision-making process. Here, the actual intention is not to facilitate a community's people taking part in planning or conducting projects, but to permit them to 'educate' or 'cure' the participants. As Amstein (1971) further explained, the middle segment of the ladder represents the level of 'tokenism' that permits a community to 'not hear', and to have a voice for the ongoing projects. Under 'tokenism', community people are proffered by relevant authorities as the total extent of participation; local people may certainly hear and be heard, but in this case, they do not have the power to ensure that their thoughts and views will be considered by the power holders. The top parts of the ladder are levels of local people's power and authority, with increasing levels of decision-making influence. Here, community people can engage in 'partnerships' that allow them to discuss, negotiate and be involved in trade-offs with traditional power holders. The level of the topmost rungs, 'delegated power' and 'citizen control', have community people gaining the greater part of power, or decision-making, or full managerial power.

According to Tosun (1999), spontaneous community participation emphasises giving full managerial power and responsibility to the host com-

munity, recommending an ideal mode of local people's participation in tourism development. Induced community participation for tourism, gives the local people the voice regarding the tourism development process, through a chance to hear and to be heard (Tosun 1999). Under induced participation, the host community is normally involved at a moderate level with the decision-making process, and they haven't any power to make sure that their thoughts are considered for implementation. Tosun (1999), further explained that the passive and indirect mode of local people's participation. mostly found in developing countries, is where local communities only contribute, and may take part in the implementation of tourism development decisions taken for them, rather than by them. Coercive participation is explained by different scholars as a substitute for authentic participation, and the way to enable power holders to promote tourism initiatives which meet the need of decision-makers, tourists, and relevant tourism operators. Further, this mode is like the 'passive' and 'manipulative' mode in Pretty's model, and 'manipulation' and 'therapy' in Arnstein's model.

Methodology

This study utilized the mixed method by using qualitative and quantitative data. As Mikkelsen (2005) explained, the mixed method research design normally possesses many advantages; the major one is that it gives the chance of triangulation. This study employed the following methods for data gathering; interviews, questionnaires, and participant observation in the selected region, Arugambay. By staying locally, observations of the host community, and their involvement and participation in tourism activities, could be made. However, the researchers did not consider this observation as an official method for data gathering, although minor references to observations were incorporated.

Even though this study has its roots in the wide range of previous scholars' works, it is a more thorough and complex study, and further, tries to inspect the process empirically. Due to the complexity of the study, it was designed to utilize a combination of multiple methods for data gathering to address the major research question successfully. A mean-ranking technique was employed to analyse the quantitative data, while content analysis was utilised for the qualitative data.

To gain a better understanding of the central theme and the research question, the study also employed a case study approach. This approach was selected due to its ability to explore and create a holistic, in-depth investigation and thorough knowledge about a certain community (Saunders et al. 2000). Further, the case study approach enables researchers to gather in-

depth information about a community, and gain a solid understanding about that specific community within the research context.

Data Analysis, Results and Discussion

This study set its first objective as: "To identify the level of community participation in the tourism decision making process", and it has examined the level of local participation and involvement in the tourism development process. To accomplish that task, the researcher gathered data from the local community in Arugambay by using a self-administered questionnaire.

Table 22.2 gives the quantitative findings of the twelve statements that measure the level of community participation in the tourism decision-making process. The results of each of these statements were ranked according to the mean ranking technique. According to the results, the overall mean score of seven out of twelve statements examined was over 3, and this implies that respondents' level of agreement with those statements was overall above average. The overall mean score of the other remaining five statements examined were below 3, and this implies that the respondents' levels of agreement with these statements are below average. Simply, this means that the ideas of these statements were not supported by the respondents.

As the table below shows, the highest mean rank (mean 4.54, SD 0.670) was achieved by "Participation is limited to provide information to questionnaires and surveys". It confirmed that the majority of respondents have agreed that their participation is limited to answering survey questions and filling out questionnaire forms. This show that, even though relevant authorities are inspecting the opinions and thoughts of local people, they haven't taken another step forward to get local people's active participation in the tourism decision-making process. This is further proven by the statement in fourth place of the mean ranking (mean 4.41, SD 0.656), which is "Responses are not taken as concerns". This also implies that community responses have not been of concern when making decisions about tourism development.

Table 22.2 The Mean Ranking of Statements Which Represent Community Participation in the Decision-Making Process

	N	Mean	SD
Participation is limited to provide information	162	4.54	.670
to questionnaires and surveys			
Participate by working as employees in tour-	162	4.53	.501
ism establishments		1.00	
Participating by giving materials such as veg-	162	4.51	.537
etables, fruits, fishand so on			
Responses are not taken as concerns	162	4.41	.656
Findings are not circulated and shared	162	4.41	.606
Information is not circulated	162	4.38	.661
People are consulted but final decisions are	162	4.35	.492
made by formal bodies			
Participate in tourism decision making as com-	162	1.99	.856
munity group			
Have control over local decision-making and	162	1.83	.662
resource allocation			
People have a voice in tourism decision mak-	162	1.81	.823
ıng			
Keep contacts with external parties for advices	162	1.69	.662
and resources, but retain the control			
Participate in tourism decision-making by tak-	162	1.64	.657
ing initiations independently			
Valid N (listwise)	162		

This was noted by interviewees who represented the local community:

"It is disgusting to answer this type of face-to-face interviews, because in my life I have personally faced a large number of interviews, and have filled in hundreds of questionnaires on different occasions, but we can't see any single action has been taken by any authority as per our suggestions" (pers.com. villager 11).

Anyway, regarding the respondents' thoughts, decision makers should respond to tourism interviews and surveys as a suitable way for local people to participate in the tourism development process. Some respondents said that, even though their opinions are not considered, answering questionnaires and responding to surveys is a great opportunity for them to express their ideas and views about certain developments. Moreover, some respondents

also believed that their participation in tourism surveys and questionnaires gives them an extra opportunity to forward their opinions and to be heard by another party.

The statement "Participate by working as employees in tourism establishments" gained the second highest mean rank (mean 4.53, SD 0.501). This shows that local people are participating in tourism development in their region by giving their working contributions to the tourism establishments. It implies that local people are not directly involved with the tourism decision-making process". The table shows that the third highest mean rank was occupied by "Participating by giving materials such as vegetables, fruits and fish...etc". This statement has a close bond with the previous statement. It again justifies that local people's participation in tourism development and decision-making is limited to the supply of materials needed by tourism establishments. One community member also commented:

"Actually, we don't have the required capacity to take part in the tourism decision-making and tourism development process. We, as local people, can offer needed ingredients to the tourist hotels and restaurants. That has been performed by local people for a long time, and even our people have been rending their service to the different tourism establishments as employees" (pers.com. villager 8).

In the fifth position in the mean ranking (mean 4.41, SD 0.606) was "Findings are not circulated and shared", while the sixth position (mean 4.38, SD 0.661) went to the "Information is not circulated" statement. Both these statements have justified the idea that local people believe that they are not informed through any mode by the relevant authorities. Even though the relevant authorities are gathering information from the local community, the outcome of these surveys is never circulated among local people. One of the interviewees commented:

"We really despair about the way that government authorities are treating us. If they want to get something, they are visiting us and requesting our support, but it has been limited to just collecting information. We are never informed about the outcome of these activities" (pers.com. villager 32).

Some of the villagers said in their answers to the open-ended questions, that most of the tourism-related projects have started, and some tourism-related activities have been launched, without informing local people. They got to know about these things when projects reached the operational stage.

According to the table, the next highest mean ranking (mean 4.35, SD 0.492) was held by "People are consulted, but final decisions are made by

formal bodies". This reveals that when some tourism projects are initiated, the relevant authorities have taken the locals' opinions and viewpoints, but at the end, the final decision has been taken by the government or the relevant stakeholder. It seems that people are not worried about that aspect, because they know that community people haven't enough capacity to take sustainable decisions, as confirmed by:

"Sir, we never expected to implement our suggestion as it is. At least we want to forward our views and opinions on certain matters, because we still believe that, as the owners of existing resources in our area, we have some rights to express our thoughts and opinions. At the same time, we believe that it may not the best suggestion to implement, because our poor people don't have that capacity, but we hope that final decision-makers may consider our suggestion when they take the final decisions." (pers.com. villager 3).

•n the other extreme, the respondents overall refused or disagreed with five statements. Starting from "Participation in tourism decision-making as community group" (mean 1.99, SD 0.856), they confirmed that local people as a group do not contribute to the decision-making process at a satisfactory level. The next statement, "Have control over local decision making and resource allocation" (mean 1.83, SD 0.662), shows that local people do not believe that they have authority in tourism decision-making or the appropriate resource allocation in their region. The tenth mean rank, "People have a voice in tourism decision making" (mean 1.81, SD 0.823), confirms that local people are not satisfied with the space that relevant authorities have given to local people in the tourism decision-making process. The last two positions in mean ranking were "Keep contact with external parties for advices and resources but retain the control" (mean 1.69, SD 0.662), and "Participate in tourism decision-making by taking initiatives independently" (mean 1.64, SD 0.657). Even through these two statements, it is very clear that local people's participation in the tourism decision-making process is restricted. Respondents have confirmed that they have not taken enough initiative to get advice and consultation from external parties to boost their contribution to tourism decision-making. Moreover, respondents have confirmed that they themselves have not taken any initiatives towards taking part in the tourism decision-making process.

The researchers compiled the survey questions based on Pretty's (1995) typology of community participation. According to Pretty's typology, there are seven levels of community participation in the tourism decision-making process, starting from the situation where local communities have no power (or manipulative or passive participation), to maximum engagement of local

people for tourism decision-making (self-mobilization or interactive participation). The results of this study show that community participation in the decision-making process in Arugam Bay represents 'passive participation', 'participation by consultation', and 'participation for material incentives', as explained in Pretty's model. Further, it has revealed that there is no 'functional participation', 'Interactive participation', or 'self-mobilization' of the local community in the tourism decision-making process in Arugam Bay.

When compared with Tosun's (1999) typology, there was 'induced' participation of the local community in Arugam Bay in the tourism-decision making process. The terms 'participation for material incentives', and 'participation by consultation' of Pretty's typology represents 'induced' participation in Tosun's typology. Therefore, it seems that the local community in Arugam Bay is participating in the tourism decision-making process at a moderate level. The best way to get maximum community participation in the decision-making process is 'spontaneous' participation, because it emphasises the allocation of full managerial power, responsibility, and authority to local people. As Tosun (2000), and Li (2005) revealed, it is a kind of top-down approach, a passive and indirect mode of community participation, mostly found in developing countries; where local people just endorse, but may take part in implementation of tourism development initiatives, or decisions made for, rather than by, them. As previous scholars have revealed, 'coercive' participation is the mode of community participation mostly found in developing countries, but as the results show, the local community in Arugam Bay is able to maintain 'induced' participation in the tourism decision-making process. As a result, we can feel justified that Sri Lanka, as a developing country, has been practicing a better community participation mechanism in the tourism decision-making process, compared to other countries.

Conclusion and Implications

Through this case study, we have been able to construct a vital, practical, contribution to understanding the tourism development process, and local community participation in it, in the Sri Lankan context. Particularly, local people's participation and involvement in the tourism development decision-making process does appear to be occurring. The results of this study are expected to be useful for tourism policy makers, tourism entrepreneurs, government authorities, academicians, and other key stake-holders in the tourism industry.

The study findings established that there is 'induced participation' of the local community in Arugam Bay in the tourism decision-making process.

Therefore, it seems that the local community in Arugam Bay is participating in the tourism decision-making process at a moderate level, where local people just endorse, but may take part in the implementation of, tourism development initiatives, or decisions made for, rather than by, them. Even though many scholars have said that 'coercive' participation is the main mode of community participation in developing countries, our results show that the local community in Arugam Bay is able to maintain their 'induced' participation in the tourism decision-making process.

References

- Arnstein, S. R. 1971. Eight rungs on the ladder of citizen participation. Citizen participation: Effecting community change. New York: Praeger Publishers.
- Beeton, S. 2006. Community development through tourism. Sydney: Landlink Press.
- Blank, S. 1989. The psychological sense of community: Prospects for a community psychology. San Francisco: Jossey-Bass Publishers.
- Blank, U. 1991. The community tourism inclustry imperative: The necessity, the opportunities, its potential. State College, PA: Venture Publishing.
- Chok, S., and J. Macbeth. 2007. "Tourism as a tool for poverty alleviation: a critical analysis of 'pro-poor tourism' and implications for sustainability." *Current Issues in Tourism* 10(2-3): 144-165.
- Dinham, A. 2005. "Empowered or over-empowered? Real experience of local participation in UK's new deals for communities." *Community Development Journal* 40(3): 301-312.
- Heinen, S. 2006. "Information and empowerment: The keys to achieving sustainable tourism." *Journal of Sustainable Tourism* 14(6): 629-644.
- Havel, V. 1996. Reflections-what is participation. Washington DC: The World Bank.
- Hawkins, D. 2006. Corporate social responsibility: balancing tomorrow's sustainability and today's profitability. New York: Palgrave Macmillan.
- Honeck, D. 2008. LDC poverty alleviation and the Doha development agenda: is Tourism being neglected? World Trade ●rganisation Working Paper ERSD-2008-03. New York: WT●.
- Kaufman, H. 1959. "Toward an interactional conception of community." *Social Forces*: 381.
- Kibicho, W. 2003. "Community tourism: a lesson from Kenya's coastal region." *Journal of Vacation Marketing* 10(1).
- Li, W. 2009. "Community decision-making: participation in development." Annals of Tourism Research 33: 132-143.

- Li, Y. 2005. "Exploring community tourism in China: the case of Nanshan Cultural Tourism Zone." *Annals of Tourism Research* 12(3):175-193.
- Marzuki, A., I. Hay, and J. James. 2012. "Public participation shortcomings in tourism planning: the case of the Langkawi Islands, Malaysia." *Journal of Sustainable Tourism* 20(4):757-772.
- Mikkelsen, J. C. 2005. "Place, Community Development, and Social Capital." *Journal of the Community Development Society*.
- Muhana, E. 2007. "The contribution of sustainable tourism development in poverty alleviation of local communities in South Africa." Journal of Human Resources in Hospitality and Tourism 6(1): 37-67.
- Nault, T.B., and D. Stapleton. 2011. "Collaboration theory and community tourism planning." *Annals of Tourism Research* 22(1): 186–204.
- Nicolau, M. 2008. "Progress in tourism management: Community Benefit Tourism Initiatives: A conceptual oxymoron?" *Tourism Management*.
- Pretty, J. 1995. "Participatory learning for sustainable agriculture." World Development.
- Ribot, J. 2004. "From exclusion to participation: turning Senegal's forestry policy around?" World Development.
- Richards, G. 2003. "Tourism and labour mobility in the European Union." Tourism Recreational Research 28(1): 77-86.
- Sheyvens, R. 2002. Tourism for development: empowering communities. Prentice Hall, England.
- Songorwa, A. N. 1999. "Community-based wildlife management CWM in Tanzania: are communities interested." World Development 27(12): 2061-2079.
- Spenceley, A. 2008. "Responsible tourism in Southern Africa." In Responsible tourism: critical issues for conservation and development, edited by A. Spenceley. New York: Earthscan.
- Sooriyagoda, T. 2011. "Tourism boost as SLTDA seizes new opportunities." *The Island-online*.
- Timothy, D. J. 1999. "Participatory planning: a view of tourism in Indonesia." *Annals of Tourism Research* 26: 371-391.
- Tosun, C. 1999. "Towards a typology of community participation in the tourism development process." *International Journal of Tourism and Hospitality Research* 10: 113-134.
- Tosun, C. 2000. "Limits to community participation in the tourism development process in developing countries." *Tourism Management* 21(6): 613-633.
- Tosun, C. 2006. "Expected nature of community participation in tourism development." *Tourism Management* 27: 493-504.

- UNCTAD. 2007. FDI in tourism: the development dimension. UNCTAD Current Studies.
- Van Der Merwe, M., and A. Wocke. 2007. "An investigation into responsible tourism practices in the South African hotel industry." South African Journal of Business Management 38(2).
- Wilkinson, P. F. 1991. "Strategies for tourism in island microstates." *Annals of Tourism Research* 16(2): 153-177.
- Zhao, W. and Ritchie J. R. 2007. "Tourism and poverty alleviation: an integrative research framework." *Current Issues in Tourism* 10(2/3): 119-143.

CHAPTER TWENTY-THREE

IMPACTS OF UNPLANNED DEVELOPMENT ON TOURIST SATISFACTION: NEGOMBO, SRI LANKA

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Abstract

Negombo is a popular tourist destination, and has attracted millions of tourists over the last few decades. However, unplanned tourism development and construction have become major impediments for its sustainability, and lower tourist satisfaction. The objective of this study was to identify the relationship between unplanned tourism development and tourist satisfaction, to see what could be done about this situation. An analysis of the quantitative data gathered from a questionnaire survey of 378 tourists at Negombo beach, and two interviews with authorized persons in Negombo were used to gather qualitative data. Hence, the study used the mixed methodology, and found that tourist satisfaction is dependent on specific factors related to the tourism planning process and development. Natural and manmade attractions, infrastructure and superstructure, social and cultural settings, environmental management, and government and industry intervention in tourism planning, through the development rules, regulations and policies, etc., were those identified factors. The results show that, except for the social cultural setting, all other factors positively influence tourist satisfaction. Conversely, tourists are dissatisfied about some social cultural factors, especially the behavior of beach boys and hawkers. Even though tourists are dissatisfied with the socio-cultural setting of the area, the study concludes that the majority are satisfied with the present tourism development

in the studied area. However, government and industry should intervene to take necessary action to improve the social cultural setting of the Negombo area, to ensure sustainable tourism development.

Keywords: Tourism planning, tourists' satisfaction, unplanned tourism development.

Introduction

Negombo is the fifth largest city of Sri Lanka, and lies at the mouth of the Negombo lagoon, in the administrative district of Gampaha. This city is located approximately 37km north of Colombo (the capital and major commercial city of Sri Lanka), and 7km from the Bandaranaike International Airport, in Katunayake. Negombo has an attractive strip of sandy beach which entertains thousands and thousands of visitors every year. The importance of Negombo city can be identified as four major factors: its capacity as a major commercial and service centre; its importance as one of the major tourist attractions in Sri Lanka; its role as a major fishing harbour of Sri Lanka; and its role as a sub-regional growth centre of Colombo (City Profile 2002).

As a major tourist attraction in Sri Lanka, the natural beauty of the Negombo beach and lagoon area has attracted tourists over several decades. However, unplaimed tourism development has become a big issue in the area. Unplaimed development can be identified through major segments like unplaimed natural and man-made environments, lack of plaimed infrastructure and superstructure, influence on the local community to support tourism development, and lack of government and industry intervention in tourism plaiming (Adom et al. 2012, Anuar et al. 2012, Cho et al. 2014, Gnanapala 2015, Honey et al. 2010, Oliveira 2003, Rashid 2013).

Around 25% of Trip Advisor traveller reviews on Negombo beach, up to 22 January 2016, said that the experience at Negombo beach is poor, or terrible, and Negombo is only chosen as a destination because of its proximity to Bandaranaike International Airport. When we analysed 100 of these reviews, highlighted advice, such as 'don't select Negombo for a beach stay', and 'this place is not recommended for relaxation' was common. For many reviewers, Negombo is just a normal beach, and is unattractive or unimpressive. Those reviewers observed that the beach located in front of the large hotels is nice, but generally tourists are disappointed with the beach. Lack of infrastructure, water sports, and aquatic activities, was also highlighted. Many reviewers hoped not to revisit this destination. Finally, the

overcrowded beach, and the rude hawkers, meant dissatisfaction with Negombo.

"Tourism planning is designed to generate income and employment, and ensure resource conservation and traveller satisfaction" (Gunn 1994). That is, the planning of tourism should ultimately be able to satisfy tourists. Tourist satisfaction is considered one of the prime variables in sustained competitive business in the tourism industry, because it affects the choice of destination, the consumption of products, and the services made available (Kozak and Rimmington 2000). Satisfaction surveys therefore are an essential tool to gather information on tourists' opinions of a destination. So, the aims of this study were first, to discuss the relationship between unplanned tourism development and tourists' satisfaction in the Negombo area, and next, to explore the opinions of tourists and other stakeholders about unplanned tourism development in this area.

Literature Review

Unplanned Tourism Development of the Negombo Area

Negombo city is the fifth largest city of Sri Lanka, with a population of 142,676 people (Department of Census and Statistics 2012). At present, the Negombo Municipal Council Area covers an area of 30.84km² (City Profile 2002, 1). This city is a major tourist destination in Sri Lanka, with the advantage of proximity to Bandaranaike International Airport. However, it is dealing with unplarmed tourism development, concerning several aspects, like environment management, infrastructure development, government and industry intervention in tourism plarming, social and cultural setting, and so on.

According to Andriotis (2007), planning is about setting and meeting objectives. In this respect, planning is an essential tool to achieve the goals of tourism development. To stimulate tourism development and its sustainability, planning is very important. Without tourism planning, many unintended consequences may develop, causing tourist and resident dissatisfaction (Kim 2002). Generally, unplanned tourism construction can be referred to as the poor quality and uncontrolled nature of tourism construction, a lack of rules and regulations, and legal claims. Those developments may not satisfy the tourist, as they show a lack of consideration for the environment, lack of space for recreational facilities, as well as poor construction. Negombo has an extremely high development pressure mainly due to the presence of tourist beaches and industries (Fernando 1995). According to the Negombo Municipal Council, the local ecosystem is threatened, due to

over-exploitation and misuse of resources and habitation (City Profile 2002). All these issues may negatively impact on the satisfaction levels of tourists.

The Natural and Manmade Environments of Negombo and their Unplanned Aspects

Negombo has contributed to the increasing degradation of valuable coastal habitats (Ranasinghe 2015). This overcrowded, disorderly, town faces the challenges of inadequate infrastructure (Sri Lanka Tourism Development Authority 2009). "Negombo Lagoon has an area of 33.88 km², which is connected to the sea by a single narrow opening at its northern end" (Katupotha 2014, 45). Samaranayake (2005) identifies Negombo lagoon as a harbour containing pollution, sewage disposal sites, and industrial effluent. Furthemore, it is severely impacted by encroachment and land reclamation. In the recent past, visible degradation of ecological complexes, the presence of inadequately plarmed settlement, industrial and municipal pollution, increasing fishing pressure, and general habitat destruction have been huge problems in Negombo (Joshep 2011).

Usually, the development of tourism activities in coastal areas is based on a process where any planning or/and management decisions are mainly taken on financial criteria, while the environment is taken into consideration only in a sense that can be described as "trying to minimize effects given the available budget" (United Nations Environment Programme 2009, 13). This comment provides a bigger picture of the present 'worst-case' situation of tourism development in coastal areas worldwide.

Lack of Infrastructure and Superstructure

Infrastructure can be divided into two categories; general infrastructure, and basic service infrastructure. General infrastructure encompasses facilities, systems and services, such as transportation systems, public safety, water supplies and sources, electrical supplies, sewerage and drainage, telecommunication systems, and medical systems. Basic service infrastructure may refer to retailing and shopping, petrol stations, restaurants, food stalls, car workshops, and so forth (Anuar et al. 2012). Infrastructure is a building or facility that is meant to fulfil the requests or interests of tourists. Infrastructure consists of transportation and accommodation, food services, and several main places of attraction. The Ceylon Tourist Board, with some foreign assistance, has prepared a plan for the coastal belt of Negombo, to improve the infrastructure and environment of Negombo beach (City Profile

2002). However, even today, Negombo is unable to provide the proper amount of sunbeds and umbrellas, sanitary facilities in public areas, good access roads to hotels and to the beach, at least one tourism information centre for the area, recreation facilities, and water sports and entertainment facilities.

The development considerations for tourism attractions are tourism development impacts, environmental attitudes, and place attachment. They finally impact on destinations' competitive strategies. Strategies used by tourism stakeholders then influence the planning of the destinations and attractions. Residents may experience a sense of exclusion and alienation over planning and development concerns. They may feel a loss of control over the community's future, as 'outsiders' take over existing establishments and new development (Kreag 2001). A good example of this would be the struggle started by the fishermen to stop the Negombo sea plane project. If implemented, that project may deprive 3500 fishermen of their livelihood, and create wide ecological destruction (John 2011).

At the cultural impact level, Oliveira (2003) identifies some negative impacts from tourism, such as burrowing culture for a day, tourist arrogance, social tension, drugs, alcoholism and prostitution, and xenophobia. In addition, commercialization, standardization, changing cultural products according to tourism demand, and cultural clashes of economic inequality, are some other negative social and cultural impacts arising from tourism (Abir 2013). These impacts can influence highly the poor planning of destinations, as the community is one of the major influential stakeholders in a destination.

Oliveira (2003) goes on to identify some groups important for policy making for tourism. These are, local governments, state governments, small tourism businesses, large tourism businesses, community groups and local NG⊙s, and other external actors and developers. According to the Megapolis and Western Development Minister, Negombo and Maggona were designated as tourism cities in 2016. The Negombo lagoon area will be labelled a major tourist area in the Megapolis program. The Minister has added that all proposed, ongoing, and completed, development projects in the Western province over the past 1⊙ years are not within the new regional plans. Community participation is essential for the implementation of development projects (Sirimanna 2015). The private sector is also important in tourism planning, but should intervene with the cooperation and involvement of the public sector (Sillignakis 2007).

Tourist Satisfaction with a Destination

A consumer is considered satisfied when his/her weighted sum-total of experience shows a feeling of gratification when compared with expectations. On the other hand, a consumer is considered dissatisfied when actual experience induces a feeling of displeasure when compared with expectations. According to the model created by Rajesh (2013), revisits and wordof-mouth recommendation are two results related to destination lovalty when tourist satisfaction is great. From the other point of view, dissatisfied tourists may complain about the services. Valle, Silva and Mendis (2006) identified that tourist satisfaction gave strength to the destination loyalty intention, and that it can be measured by two indicators; intention to return, and willingness to recommend. Marin and Taberner (2008) have identified some aspects of dissatisfaction. Some of these are: too much construction: destruction of the landscape; too much development; too commercial; too many people; noise; too much traffic; lack of nature; expensive; sports facilities and infrastructure; problems of the airport; pollution (beaches, street, and so on); lack of professionalism in outside of the hotel; and road conditions

Methodology

Instruments

This study used a mixed methodology to collect data. Basically, the priority was given to quantitative data analysis, but the researchers also used the qualitative method (face-to-face interviews), and therefore this research belongs in the mixed methodology framework. The main method of data collection was the questionnaire survey carried out at Negombo beach with the help of 378 foreign tourists. The second method of collecting data for the study involved conducting interviews with two authority people, and the residents and vendors in the area. The two authorized persons were the development assistance of ficer of the Negombo Municipal Council, and the president of the Negombo Hoteliers' Association. Secondary data were gathered from the city profile of NMC, journal articles, newspaper articles, past research articles, and books and internet browsing.

The Sample

The population of the questionnaire survey was 25,000 foreign tourists; the approximate number of monthly arrivals to the Negombo area. This flow

has been determined according to the statement of the President of Negombo Municipal Council as "around 300,000 tourists have been arriving in the Negombo per year, recently." The sample size for this research is thus 378, according to the recommended sample size table developed by Krejce and Morgan (1970). Therefore, the data were collected from 378 respondents, between 1 April and 6 June 2016.

For this research, the researchers used the convenience sampling method to collect the data from the sample. Convenience sampling is a method of non-probability sampling that refers to the collection of information from the members of a population who are conveniently available to provide it (Sekaran and Bougie 2013).

Data Analysis

The data obtained by the survey was analysed using SPSS version 21, and is presented in the following tables. The questionnaire consisted of two parts. Part A covered three demographic factors, including 'purpose of visit to Sri Lanka', 'travel type (FIT/GIT)', and whether the respondents had visited the Sri Lanka and Negombo area previously. Part B of the questionnaire was developed with 48 questions used to measure five independent variables and one dependent variable. The independent variables measured by the questionnaire were: natural and manmade environment (NME); infrastructure and superstructure (IS); social and cultural setting (SCS); government and industry intervention in tourism planning (GOV); and environment management (EM), as factors related to unplanned tourism development and construction. The dependent variable of this study was tourist satisfaction (TS). The five independent variables were measured by 44 questions using a five-point Likert scale: "strongly disagree, disagree, neutral, agree, and strongly agree." Other questions were answered by selecting the correct one, or writing the answer briefly. One open-ended question was provided, for tourists to express their opinions on Negombo regarding their satisfaction level.

Results & Discussion

Travel-Related Characteristics of Tourists

Most of the respondents, 91.3%, had visited the area for pleasure purposes. The Negombo area has attracted more free independent travelers (FIT) than group-inclusive tourists (GIT) for some time. Sri Lanka also attracts a considerable number of repeat visitors, however the Negombo area

has a small number of repeat visitors compared with the national total. Table 23.1 presents the travel-related characteristics of tourists.

Table 23.1 Travel-Related Characteristics of Tourists

	N	%
Purpose of Visit to Sri Lanka		
Pleasure	345	91.3
Visiting friends and relatives	22	5.8
Business	5	1.3
Education	4	1.1
Health	2	●.5
Travel Type (FIT/GIT)		
FIT (free independent traveller)	347	91.8
GIT (group-inclusive tourists)	31	8.1
Repeat Visitor to Sri Lanka		
Yes	56	14.8
N●	322	85.2
Repeat Visitor to Negombo		
Yes	29	7.7
N●	349	92.3

Multiple Regression Analysis

Having identified five factors related to unplanned tourism development, such as natural and man-made attractions (NMA), infrastructure and superstructure (IS), government and industry intervention for tourism planning (GOV), environment management (EM), and social and cultural setting (SCS), a multiple regression analysis was used to investigate whether, and to what extent, the independent variables influence the dependent variable (tourists' satisfaction). Table 23.2 shows the independent and dependent variables, and the indicators used for the study.

Table 23.2 Variables and Indicators

In dependent	Indicators
Variable 1	Q-1: Many fun and entertainment activities in Negombo
Natural and	Q-2: Many attractions in Negombo
manmade envi-	Q-3: Quality environment in beach, lagoon and city areas
renment	Q-4: Too much noise in Negombo
(Five-point	Q-5: Bad smell felt in the city and beach
Likert Scale 1	Q-6: Safety on beach and sea is ensured
"strongly	Q-7: Higher visual pollution in Negombo
disagree" to 5-	
"strongly agree")	
Accommodation	Indicators
Quality	Q-8: Satisfied on location of stay
(Five-point	Q-9. Satisfied with the room conditions
Likert Scale,	Q-10: Restaurants and eateries in the area are clean and
as above)	quality
	Q-11: Accommodation establishment situated in a con-
	gested area
	Q-12. It provides calm and quiet environment
	Q-13: The place of accommodation is well planned, with
	good standards
	Q-14: The place should be refurbished
Independent	Indicators
Variable 2	Q-15: Accommodation area was poorly maintained, and
Infrastructure	•utdated infrastructures and p••r superstructures
and	Q-16: Access reads to accommodation area are bad
Superstructure	Q-17: Many sports and recreational opportunities are facilitated at the area
(Five-point Likert Scale,	Q-18: Banking, internet and IDD facilities are at a good
as above)	level
as above)	Q-19. Traffic congestion is very high
	Q-20: Infrastructure and superstructure level is poor in Ne-
	gombo
Independent	Indicators
Variable 3	Q-21: There are many beach boys and they disturb at the
Social and	beach
cultural setting	Q-22. Sri Lankans have modified their cultural products as
(Five-point	tourist demand
Likert Scale,	Q-23. Many locals have xenophobia (don't like tourists)
as above)	Q-24: The area people are friendly
	Q-25: Alcoholism could be observed
	Q-26: Many hawkers always disturb
	Q-27: Prostitution could be observed

Independent	Indicators
Variable 4	Q-28: Public facilities and infrastructure level is good
Government	Q-29: Environmentally sensitive areas have encroachments
and industry	Q-30: Tourist information centres could be observed
intervention	Q-31: Police, or tourist police, are readily available to help
in tourism	tourists
planning	Q-32. This is a sustainable destination
(Five-point	
Likert Scale,	
as above)	
Independent	Indicators
Variable 5	Q-33. Natural environment is well maintained and pollu-
Environment	tion-free
management	Q-34. Design and construction in area damaged the natural and man-made environment
	Q-35: The area is evercrewded and polluted
	Q-36: There are no dustbins or proper ways of garbage disposal
	Q-37: Proper sanitary facilities could be found in the area
	Q-38: The aesthetic value is more attractive in the area
	\widetilde{Q} -39. Disturbances by animals and insects is an issue
Dependent	Indicators
Variable	Q-40. •verall, satisfied with this city
Tourists'	\tilde{Q} -41: Negombo will remain in mind as sweet memories for
satisfaction	a long time
(Five-point	Q-42: Like to re-visit Negombo
Likert Scale,	Q-43: Like to recommend Negombo for friends and rela-
as above)	tives
	Q-44. Like to share opinion on Negombo through social me-
	dia

Cronbach's Alpha value for the survey was 0.792 for the 44 items, and that value is acceptable when greater than 0.7. The validity of the survey was also attained, as KMO sampling adequacy was 0.718, greater than 0.5. The test of normality showed a value of 0.926, and this can be accepted as it is closer to 1, as per Field (2009). The correlation matrix of the survey is shown in Table 23.3.

	Tourists' satisfaction (TS)	Type of correlation
Natural and man-made attractions (NMA)	+0.329	Weak positive correlation
Infrastructure and superstructure (IS)	+0.394	Weak positive correlation
Government and industry intervention for tourism planning (GOV)	+0.462	Weak positive correlation
Environment management (EM)	+0.544	High positive correla- tion
Social and cultural setting (SCS)	+0.183	Weak positive correla- tion

Table 23.3: The Correlation Matrix

According to Table 23.3, all the independent variables show positive correlations with the dependent variable, tourist satisfaction. Among the independent variables, environment management shows a higher positive correlation, while other variables show weak positive correlations. The hypothesis testing results were obtained by analysing the B coefficient. NME, IS, GOV, and EM, positively influence tourist satisfaction, and we should accept the alternate hypothesis. SCS is negatively influenced by tourist satisfaction, according to the findings of this study. Table 23.4 shows the model summary. According to this, the R Square value is 0.365, and means that the variance of the independent variables can explain the dependent variable by only 36.5%.

Table 23.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.605	●.365	●.357	●.61143

As a primary method of collecting data, the two interviews conducted with the two authorized persons in Negombo identified several unplanned development problems for Negombo. These were firstly, while star class hotels pay taxes, 90% of the others (200-300 accommodation units) do not pay taxes to the government. Equally, those unplanned accommodation establishments do not pay employment EPF or ETF, and can be observed on the beach. There are complaints among hoteliers that the CCD has not given development approvals to the correct people, and whenever they felt like it,

have approved their opening a place on the beach. The problem is that most unauthorized small tourism accommodation establishments are not concerned about the rules and regulations, thus the need to observe and check unauthorized tourism development is always there in Negombo. Efforts should be made to identify them, rearrange them, register them, and control them.

Conclusions

The overall objective of this study was to determine whether there is a relationship between unplarmed tourism development and the satisfaction levels of tourists in the Negombo area. A questionnaire survey was the main method of collecting primary data. 378 respondents participated. The descriptive statistics, correlation analysis, and regression analysis were used to achieve the objectives of the research.

The results show that tourists are moderately happy with the present tourism development in the Negombo area. Yet they are dissatisfied with the social and cultural setting of Negombo. Tourists are dissatisfied with the experience of the 'beach boys', the xenophobia of local people directed towards tourists, the feeling that the tourism facilities and attractions in the area have not been modified according to tourist demand, as well as the fact that the many hawkers disturb them. Many of them disagree that they see prostitution and alcoholism. When considering the environment management factor though, many tourists recorded their dissatisfaction concerning the problem of garbage disposal.

By going through the information gained from the two interviews, the researchers could present some recommendations that may bring Negombo tourism onto the correct path. Those recommendations are as follows:

- a) A viable mechanism should be introduced to clean the environment regularly with the support of the stakeholders;
- b) The local people should be made aware about tourism, tourist behaviour, and environmental conservation;
- c) All the unauthorized tourism developments must be brought under the control of SLTDA, and other relevant state organisations;
- d) Regular maintenance of street lighting and road pavements must be undertaken, to ensure the safety of tourists;
- e) Tourist police units in the area should be redeveloped with proper facilities by moving to government-owned land;
- f) A tourism information centre should be established for the area; and

g) Tourism development should be carried out in line with a good development plan, and the approval of any development should be restricted to the appropriate people.

As many tourists spend only a short period in Negombo, many of the problems existing with tourism development in the area could be corrected through good planning programs.

References

- Abir, L. M. 2013. *Impact of tourism in coastal areas*. http://coastalwiki.org/wiki/impact_of_tourism_in_coastal_areas
- Adom, A. Y., B. Jussem, J. Pudun, and A. B. Yatim. 2012. "Factors that Affect Visitor's Satisfaction toward Kuching Waterfront." *Journal for the Advancement of Science and Arts* 3(2): 40-48.
- Andriotis, K. 2007. "A Framework for the Tourism Planning Process." In Sustainability, Profitability and Successful Tourism, edited by A. Raj. New Delhi: Kanishka.
- Anuar, A. N., H. Ahmed, H. Jusoh, and M. Y. Hussain. 2012. "The Essencial Elements underlying Formation of Tourist Friendly Destination Concept: Analysis in Micro Level." *Asian Social Science* 8(13).
- Cho, H. S., B. Byun, and S. Shin. 2014. "An Examination of the Relationships in Rural Tourist Satisfaction." Sustainability 3(9).
- City Profile. 2002. Sustainable Colombo Core Area Project (SCCP II).

 Negombo: Negombo Municipal Council and UNDP/UN-Habitat
 Sustainable Cities Development Project (SCP).
- Department of Census and Statistics. 2012. Statistics.gov.lk. Colombo: Department of Census and Statistics
- Fernando, C. 1995. Evaluation of Negombo Offshore Breakwater Scheme: Morawala to Maha Oya. 1-5.
- Field, A. 2009. Discoveriing statistics by using SPSS. London: Sage Publications.
- Gnanapala, W. K. A. C. 2015. "Tourist Perception and Satisfaction: Implications for Destination Management." *American Journal of Marketing Research* 1(1): 7-19.
- Gunn, C. A. 1994. *Tourism planning: Basics, Concepts, Case* (3rd Edition). Washington: Taylor and Frances.
- Honey, M., E. Vargas, and W. H. Durham. 2010. Impact of Tourism Related Development on the Pacific Coast of Coasta Rica: Summary Report.

- Ireland, N. T. 2007-2009. Tourism and Environment: Failte Irelands Action Plan. Dublin: Failte Ireland.
- John, P. M. 2011. Government Tourism Policy. London: Department for Culture, Media and Sports.
- John, T. 2011. Joining hands-Newsletter 'Tourism That Engulfs People's Rght to Life and Livehood'.
 - http://relufa.org/partners/jhnewsletter/archives/srilankal 6.htm
- Joshep, L. 2011. Fisheries and Environmental Profile of Negombo Estuary Food and Agriculture organisation of the United Nations: Regional Fisheries Livelihoods Programme for South and Southeast Asia. Colombo: FAO.
- Katupotha, J. 2014. "Anthropogenic Impacts on Urban Coastal Lagoons in the Western and North-Western Coastal Zones of Sri Lanka." ESOFT Metro Campus International Journal 1(1): 41-47.
- Kim, K. 2002. *Quality of Life of Residents in the Community*. https://vtechworks.lib.vt.edu/bitstream/handle/.../Title and Text.pdf?...1.
- Kozak, M., and M. Rimmington, M. 2000. "Tourist Satisfaction with Mallorca, Spain, as an Off-Season Holiday Destination." *Journal of Travel Research* 38(3): 260-269.
- Kreag, G. 2001. *The Impacts of Tourism*. http://www.seagrent.umn.edu/tourism/pdfs/ImpactsTourism.pdf.
- Krejce, R. V., and D. W. Morgan. 1970. "Determining Sample Size for Research Activities." Educational and Psychological measurement 30: 607-610.
- Marin, J. A., and J. G. Taberner. 2008. Satisfaction and Dissatisfaction with Destination Attributes: Influence on Overall Satisfaction and the Intention to Return. http://www.escade.edu/cedit/pdfs/papers/pdf6.pdf)
- liveira, J. 2003. "Governmental Responses to Tourism Development: Three Brazilian Case Studies." *Tourism Management* 24: 97-110.
- Rajesh, R. 2013. "Impact of Tourist Perceptions, Destination Image and Tourist Satisfaction on Destination Loyalty: A Conceptual Model." *PASOS-www.pasosonline.org* 11(3)(Special Issue): 67-78.
- Ranasinghe, R. 2015. "Strategic Myopia of Tourism Development in Sri Lanka: A Critique." *Internationational Journal of Multidisciplinary* Research and Development 2(2): 604-609.
- Rashid, B. 2013. "Post Visit Assessment: The Influence of Consumption Emotion on Tourist Future Intention." *IOSR Journal of Business and Management (IOSR-JBM)*: 39-45.
- Sekaran, U., and R. Bougie. 2013. Research Methods for Business: A Skill Building Approach (5th edition). UK: John Wiley and Sons.
- Sillignakis, K. E. 2007. The Role of private and Public Sector in Tourism

- Planning and Development. www.sillignakis.com.
- Sirimanna, B. 2015. Western Region Megapolis Project to Kick Start With Smart City Concept. http://www.sundaytimes.lk/151206/businesstimes/western-region-megapolis-project-to-kick-start-with-smart-cityconcept-173909.html.
- Sri Lanka Tourism Development Authority. 2009. Sri Lanka Sustainable Tourism Development Project: Environment Assessment and Management Framework; Draft Final Report. Colombo: Sri Lanka Tourism Development Authority.
- United Nations Environment Programme. 2009. Sustainable Coastal Tourism: An integrated Planning and Management Approach. Paris: UNEP.
- Valle, P., J. A. Silva, J. Mendis, and M. Guerreiro. 2006. "Tourist Satisfaction and Destination Loyalty Intention: A Structural and Categorical Analysis." *International Journal of Business Science and Applied Management* 1(1).

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