**KNOWLEDGE SHARING,
ORGANIZATIONAL REWARDS AND
LIFE SATISFACTION OF EMPLOYEES: A
STUDY OF KNOWLEDGE INTENSIVE
FIRMS**

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Abstract

The success of knowledge intensive firms is dependent on knowledge management practices in the firm. A better knowledge management system comprises feasible strategies to identify, react and overcome problems inherited in knowledge resources. Employees of knowledge intensive firms are considered the prime resource in terms of knowledge creation, accumulation, sharing and protection. This research examines the impact of knowledge sharing intentions on the life satisfaction of employees working in knowledge intensive firms in Sri Lanka. A questionnaire was used to collect data from employees who are working in IT oriented firms in Sri Lanka. Respondents from different job categories and companies for the sample were selected using a stratified sampling method. Descriptive and correlation analysis of the respondents and responses were done to identify basic features of the sample. Study findings indicated that knowledge sharing in the profession by employees of knowledge intensive firms has strong positive influenced on their life satisfaction. Further, the analysis confirmed that organizational rewards mediate the relationship of knowledge sharing and life satisfaction. Findings of the study have contributed immensely to both theory and practice.

Keywords: ICT industry, knowledge management, knowledge sharing, life satisfaction, organisational rewards, Sri Lanka.

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INTRODUCTION

Spillover hypothesis proposes a corresponding influence on experiences in different domains of life (Judge et al., 2001). Experiences gained from one domain of life might be the result of activities that took place in the other domain. Life satisfaction which is mostly interchanged by well-being, happiness and subjective well-being is identified as the prime requirement of the human's general life domain. Eid and Larsen (2008) define life satisfaction as frequent satisfaction and joy in life than dissatisfaction and sadness. Scholars have shown a great enthusiasm to explore this concept on an individual basis as life satisfaction consists of unique features. Each individual has their own conclusion about well-being of their lives and individual's subjective and self-reported opinions are oriented on their personalities. However, scientists in well-being studies have commonly agreed that life satisfaction of individuals can be measured subjectively without harming any aspect of individual preferences (Frey & Stutzer, 2001). Some scholars have identified life satisfaction as major component of overall quality of individual's life (Cheung & Lucas, 2014). Exploring the antecedents of life satisfaction, Moksnes and Espnes (2013) identified psychological well-being as an antecedent which is influenced positively by life satisfaction. Physical health (Zullig et al., 2006) and personal achievement in life like career development and marriage (Diener & Chan, 2011) have also shown positive influence on life satisfaction.

Another life domain which is frequently addressed by scholars is the job or profession of a person. A job of a person is critical to one's life satisfaction (Sirgy et al., 2001). Further, it is found that a person's level of satisfaction in the job has direct influence on his or her life satisfaction (Erdogan et al., 2012). However, the literature of life satisfaction of working people has not adequately explained what factors of the work domain influences the general life satisfaction of working people. Instead, previous scholars have discussed life satisfaction in case of individual and personal characteristics (Kapikiran, 2013; Erdogan et al., 2012), economic aspects (Boyce et al., 2010), social aspects (Kapikiran, 2013), and cultural aspects (Diener et al. 2003).

As far as an individual in organizational level is concerned, the status of the job has been shown to be linked to the status of life. For an example, one's achievement in the career has shown a direct relation to life satisfaction (Judge et al., 2010; Wright et al., 2009). Performance in the job (Wright & Cropanzano, 2000), remuneration from the job (Haring, Stock, & Okun, 1984) and job attainment (Judge, Klinger, & Simon, 2010) have been already explored in case of life satisfaction. Also, work-life balance, job satisfaction and life satisfaction of individuals have been conceptualized by previous researchers (Judge & Watanabe 1993; Bowling et al. 2010). Although these studies have enhanced the body of knowledge on the domain of the job, many other aspects in the case of life satisfaction remains underexplored (Suh et al., 1998). The literature on life satisfaction is still not able to provide comprehensive elaborations on certain important aspects related to the job

domain (Erdogan et al., 2012). Nevertheless, knowledge sharing which is identified as prime requirement of gaining competitive advantages for firms has not adequately been explored in relation to life satisfaction of individual employees. The lack of understanding about critical concepts like employee's knowledge sharing of their work domain has limited the development of the knowledge base of life satisfaction (Bowling et al., 2010). Available limited research studies (Zhou & Xiaowen, 2016; Shaker, Donald & Bárbara, 2007) have also provided inconsistent conclusions. Accordingly, this research examines the knowledge sharing behaviour of employees on their life satisfaction focusing to advance the knowledge about the quality of life of employees. Investigating self-reported knowledge sharing on life satisfaction and exploring the intervening aspect on the relationship between knowledge sharing and life satisfaction in knowledge-based industries serve as specific objectives. These specific objectives would ultimately contribute to literature in enhancing the understanding of antecedents of work status on life satisfaction of employees. The remainder of this paper with literature review, research methodology, data analysis and discussion and conclusion would confirm the achievement of the above objectives.

LITERATURE REVIEW

The literature review of this study focuses on developing a brief argument in case of life satisfaction of working personalities. Accordingly, the argument, 'life satisfaction of working people is determined mainly by their profession and in this case knowledge sharing and organizational rewards play a major role in making their life satisfied' is developed. In order to develop this argument the concepts of employee's knowledge sharing and organizational rewards in a firm is discussed briefly.

Knowledge Sharing

Knowledge sharing is recognised as an activity through which knowledge, skills and/or expertise is/are exchanged among individuals, societies and organisations. Knowledge sharing has been specifically confirmed as a tool of improving individual and organization performance. Meantime, the social exchange theory (Emerson, 1976) also explains that human relationships are solely based on the cost and the benefit of association. The same association might be seen in the employee and employer (organization) relationship in the business world. When employees are satisfied about what is offered from the organization as rewards, such employees also try to contribute to the firm in return. Then the organization also treats employees by offering more rewards. This mutual relationship is not only limited to the job domain of the employee. It would experience positively or negatively matters related to life domain other than the job such as life satisfaction (Zhou & Xiaowen, 2016). In addition to theories, scholars of

this field believe that organization and employee relationship is dependent on the organizational culture which is developed on individual experience, psychological assumptions, beliefs, norms and behaviours (Aycan, 2000). As a result, life satisfaction is also dependent on what an employee does in the job. Specifically, volunteer activities in the job like knowledge sharing make an employee happy in his/hrt life in general (Shaker, Donald & Bárbara, 2007). However, this exchange relationship between organization and employees is obvious in case of knowledge sharing in an organization. Accordingly, the first hypothesis of the study is set as below.

H₁: Knowledge sharing of employees in the job positively related to life satisfaction.

Organizational Rewards

Organizational rewards refer to all the benefits that an employee receives from his or her organization. Katz and Maanen (1977) identified three distinct types of rewards as task, social and organizational. In this categorization, task rewards are intrinsic in nature and social and organizational rewards were identified as extrinsic rewards. However, employee's persuasion about rewards stick to the intrinsic, extrinsic and social (Williamson et al., 2009). Intrinsic rewards are intangible benefits emerging from the job of the employee. Extrinsic rewards such as salaries, promotions and welfare facilities are more visible and common benefits which an employee is offered from the organization. Social rewards originate from the network of individuals and teams of a firm. These benefits of an employee, derived from interpersonal relationships with colleagues, subordinates and superiors are called social rewards (Williamson et al., 2009). Literature of human resource management is clear that employee's knowledge sharing in the firm leads to organizational rewards (Kathryn & Abhishek, 2016). At the same time, the relationship between organization rewards and life satisfaction has also been established (Berhad, Izwan & Baharom, 2013). Accordingly, the second hypothesis of the study is established as below.

H₂: Organizational rewards mediate the relationship between knowledge sharing and life satisfaction

Figure 1: Conceptual Framework

METHODOLOGY

The data for this study intends to adapt primary data from employees who are working in Knowledge-based industry (Information, Communication and Technology) in Sri Lanka. National ICT Survey 2013 revealed that current workforce of ICT industry is approximately 75,000 employees. The survey further reported 63% of the workforce is having either Bachelors or Master's Degree as educational qualifications. The industrial revenue in exports in 2016 is reported as USD one billion and USD five billion with workforce of 200,000 projected for year 2022.

Adapting to survey methods, a questionnaire was constructed to collect data from employees who are employed as Software Development Engineers in the ICT industry. A sample of 126 respondents who were represented by 13 software development and related services providing companies were finally selected as respondents while a few questionnaires were rejected due to inadequacy of information. Convenient sampling technique was engineered to select respondents. Respondents as executives were attached to Departments of Database Administration & Development, Systems & Network Administration, Web Development & Programming and Software Engineering. All the questions in the questionnaire were related to knowledge sharing, organizational rewards, job satisfaction and life satisfaction and the variables and were in a seven point Likert Scale from strongly disagree to strongly agree. Accordingly, measurements for variables such as life satisfaction with five items (Diener et al., 1985), knowledge sharing with five items (Brock et al., 2005), organizational rewards with two items (Brock et al., 2005) and job satisfaction (control variable) with six items (Schriesheim & Tsui's, 1980) were adapted and used in the questionnaire (refer Annexure 1 for more details).

As shown in Figure 1, employee's knowledge sharing serves as the predictor while life satisfaction is the outcome variable. Organizational rewards play the intervening role between knowledge sharing and life satisfaction. Job satisfaction and age of the employee are controlled in the model. Descriptive statistics and hierarchical regression or step-wise regression in SPSS software facilitated the analysis.

DATA ANALYSIS AND DISCUSSION

Table 1 shows descriptive information about respondents and firms of the sample. The average number of employees working in firms is reported as 91 (SD = 31). All firms in the sample were mostly medium in size. The average age of all firms in the sample is around 23 years (SD=11) indicating appropriateness of selection of sample to represent suitable respondents. Male population represented around 63 percent while mean experience and age of employees respectively indicates 7.2 years (SD=5.8) and 29 years (SD=8).

Table 1: Descriptive Information of Respondents

	Minimum	Maximum	Mean	Std. Deviation
Size of the firm (employees)	29.00	123.00	91.11	31.01
Age of the firm (years)	10.00	40.00	23.05	10.92
Gender	1	2	1.37	0.48
Employee's experience (years)	1	25	7.20	5.77
Employee's age (years)	19	50	29.36	7.64

Source: Author's calculations

Means, Standard Deviations and Coefficient of Correlation of variables of this study are given in Table 2. Result in the table and Variance Inflation Factors confirm that the multicollinearity among the study variables is not such an issue as most values have not crossed the limit of the risk of multicollinearity (Romme et al., 2013). However, the first hypothesis of the study is supported by the results given in this table. A positive correlation ($r = 0.553$, $p < 0.01$) is reported between knowledge sharing and life satisfaction. Other than that, organizational rewards correlate strongly with life satisfaction ($r = 0.744$, $p < 0.01$) and knowledge sharing as well ($r = 0.736$, $p < 0.01$).

Table 2. Means, Standard Deviations and Coefficient of Correlation

	Mean	SD	A	B	C	D	E
A. Gender	1.37	0.48					
B. Employee's experience	7.20	5.77	-.089				
C. Knowledge sharing	5.61	0.96	-.024	.744**			
D. Life satisfaction	5.82	0.64	.026	.456**	.553**		
E. Organizational rewards	5.81	0.66	.057	.619**	.736**	.744**	
F. Job satisfaction	5.09	0.80	.112	.283**	.391**	.247**	.395**

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

Table 3 presents the results of hierarchical regression. This table serves to test the second hypothesis of this study. Results of hierarchical or step-wise regression in this study are used to test the second hypothesis in the same process recommended by Baron and Kenny's (1986). They have recommended four conditions or pre-requisites to confirm the mediation effect of a variable between two other variables. The existence of the relationship between independent and dependent variables, independent and mediate

variables, mediate and dependent variables and when the mediate variable is added to the model, the relation between independent and dependent variable become non-existence and weaken. In that case, if the independent and dependent variable become nonexistence, it is identified as full mediation while if relation becomes weaken, it is identified as partial mediation.

Table 3: Results of Hierarchical Regression

Variables	Organizational rewards			Life satisfaction					
	Model 1			Model 2			Model 3		
	β	t	Sig.	β	t	Sig.	β	t	Sig.
Gender	.073	1.20	.231	.043	.566	.572	-.012	-.186	.853
Employee's experience	.172	1.92	.057	.106	.938	.350	-.024	-.256	.798
Job satisfaction	.117	1.79	.076	.031	.377	.707	-.057	-.846	.400
Knowledge sharing	.564	6.07	.000	.463	3.94	.000	.037	.344	.732
Organizatio nal rewards							.755	8.13	.000
R ²	0.57		.000	.314		.000	.557		.000
Overall F	40.4		.000	13.81		.000	30.22		.000

Regression results in Table 3 are consistent with Baron and Kenny's (1986) first condition of mediation effect. Model 2 data which are the results of life satisfaction regressed over knowledge sharing indicate that knowledge sharing is positively influenced by life satisfaction ($\beta = 0.463$, $p < 0.05$). When the second condition is concerned, model 1 data show that mediate variable, organizational rewards are influenced positively to independent variable, knowledge sharing ($\beta = 0.564$, $p < 0.05$). At the same time, model 3 data which are results of life satisfaction regressed over organizational rewards shows that organizational rewards are positively influenced by life satisfaction ($\beta = 0.755$, $p < 0.05$). At the confirmation of all these first three conditions of mediation effect, the last condition was tested. Model 3 data which show results of life satisfaction regressed over knowledge sharing when mediation variable is added to the model confirms full mediation effect. Because when the mediate variable is added life satisfaction over knowledge sharing becomes insignificant ($\beta = 0.732$, $p > 0.05$). Accordingly, the second

hypothesis of the study satisfy the conclusion that organizational rewards fully mediate the relationship of knowledge sharing and life satisfaction of employees in knowledge intensive firms.

The contribution of this article can be divided into manifold benefits. This study is among several other studies which explore the behaviour of employees in case of their general life domain. This study is one of the initial research studies which attempted to combine employee's job and life domains together. In one way, this brings uniqueness to the study as employees working in knowledge intensive firms are attached to their jobs sharing the knowledge with others. In another way, their knowledge sharing is highly related to life satisfaction as well. However, a positive strong influenced between knowledge sharing in the job and general well-being of employees working in knowledge intensive firms was identified. This finding clearly signals that life satisfaction of employees is really related to activities that take place in the job. In addition, identification of full mediation effect by organizational rewards in the relationship between knowledge sharing and life satisfaction is a new concept for theory and practice. Theoretically, the intervening role of organizational rewards in the case of life satisfaction of employees could be established by this study and thereby advancing the knowledge of the well-being of employees. Practically, the value of organizational rewards as an intervening factor in case of general well-being of employees could signify several other actions by the management of a firm that leads to the enhancement of the quality of life of employees.

CONCLUSION

This research focused to study the knowledge sharing behaviour of employees on their life satisfaction aiming to advance the knowledge about the quality of life of employees. Findings of this study confirmed a strong positive influence brought by knowledge sharing of employees in their profession in relation to their general life satisfaction. Further, the intervening role of organisational rewards as a mediating factor in the relationship between knowledge sharing and life satisfaction of employees was evidenced. Organisational rewards as a variable has shown a full mediation effect than a partial mediation. These findings have contributed newly to the theory as well the practice.

Findings of this study underscore several important implications for practice. The role of managers and employees of knowledge intensive firms in case of life satisfaction is clearly defined by the study. In one way, managers can promote life satisfaction of employees through knowledge sharing and organizational rewards. As a result, as exchange theory explains, the firm would get the maximum output from their employees by making employees happy in their life domain in addition to their job domain. The other way, employees themselves can be happy in their general life by sharing the knowledge

in their profession. Policy makers also can develop policies based on knowledge sharing and organizational rewards to enhance the quality of life of employees. But some concepts have made the study findings limited.

Findings of this study would be interpreted carefully with study limitations. First, study conceptualization comprises only of one independent, intervening and three control variables to interpret the life satisfaction of employees. Practically, more factors could probably involve in determining the life satisfaction of working people. Second, the results represent only a sample of respondents in knowledge intensive firms. Number of respondents, firms, geographical area and time period of the survey may be reflected by the results rather than the whole population of knowledge intensive firms. Finally, confining a broad concept like life satisfaction to a few questions would not reflect the real life satisfaction of working people in general. Specifically, employees who represent in different societal levels, standards and status would not be possible to put into one basket. Future researchers can focus to eliminate one or several limitations to carry out their study about life satisfaction of working people.

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Annexure 1. Validated measurements of variables used in the questionnaire

Constructs	Measurement Item
<i>Knowledge Sharing</i>	I share my work reports and official documents with my organizational members more frequently in the future.
	I always share my manuals, methodologies and models with my organizational members in the future.
	I always share my experience or know-how from work with my organizational members in the future.
	I always share my know-where or know-whom at the request of my organizational members.
	I always try to share my expertise obtained from education and training with my organizational members in a more effective way.
<i>Life satisfaction</i>	In most ways my life is close to my ideal.
	The conditions of my life are excellent.
	I am satisfied with my life.
	So far I have gotten the important things I want in life.
<i>Organizational rewards</i>	If I could live my life over, I would change almost nothing.
	I receive monetary rewards in return for my knowledge sharing.
<i>Job Satisfaction</i>	I receive additional points for promotion in return for my knowledge sharing.
	How satisfied are you with your current job?
	How satisfied are you with your current salary?
	How satisfied are you with your independence at work?
	How satisfied are you with your health care security & welfare/benefits?
	How satisfied are you with your professional status?
	How satisfied are you with your work schedule?