Relationship between the Facebook Usage and the Student

Engagement in Education of Sri Lankan

Management Undergraduates

BN

Lakmali Chandani Herath Jayarathna

A research submitted to the University of Sri Jayawardenepura in partial fulfillment of the requirements for the Degree of Master of Business Administration (Information Systems) 87^{+h} June 2015

Declaration

The work described in this research was carried out by me under the supervision of Mr. W.M.N. Fernando and a report on this has not been submitted in whole or in part to any university or any other institution for another Degree/ Diploma.

L C H Jayarathna

Supervisor Approval

I certify that the above statement made by the L C H Jayarathna is true and that this research is suitable for submission to the university for the purpose of evaluation.

2 then hit

Mr. W.M.N. Fernando Senior Lecturer Department of Information Technology Faculty of management Studies and Commerce University of Sri Jayewardenepura Nugegoda Sri Lanka

TABLE OF CONTENTS

Decla	ration	i
Super	rvisor Approval	ii
TAB	LE OF CONTENTS	iii
LIST	OF TABLES	vii
LIST	OF FIGURES	ix
LIST	OF ABBREVIATIONS	x
ACK	NOWLEDGMENT	xi
ABS	ГRАСТ	xii
СНА	PTER ONE	1
INTE	RODUCTION	1
1.1	Background to the study	1
1.1	Facebook use in Sri Lanka	
1.2	Student engagement	
	Problem statement	
	Research questions	
	Research objectives	
1.7	Significance of the study	
	Chapter outline	
	PTER TWO	
LITE	CRATURE REVIEW	12
2.1	Introduction	12
2.2	Social Networking Sites	12
2.3	Facebook as a social networking site	16
2.4	Facebook usage and the undergraduates	18
2.5	Student engagement in education	21
2.6	Facebook usage and the student engagement in education among undergraduates	23
2.7	Facebook users	26
2.8	Factors affecting on student engagement in education	32
2.9	Chapter summary	38

1

CHAPTE	R THREE	40
METHOD	OOLOGY	40
3.1 Intro	oduction	40
3.2 Rese	earch methodology	40
3.3 Cone	ceptualization & hypothesis development	41
3.3.1	Profiling variables	41
3.3.2	Facebook usage and the student engagement in education	42
3.3.3	Exogenous variables in the model	43
3.3.4	Factors influencing on Facebook usage	44
3.3.5	Factors influencing on student engagement in education	48
3.4 Cond	ceptual model of the study	52
3.5 Oper	rationalization and measurements of variables	54
3.5.1	Endogenous variables in the conceptual model	54
3.5.1.1	Facebook usage	54
3.5.1.2	Student engagement in education	56
3.5.2	Exogenous variables in the conceptual model	57
3.5.2.1	Social support	57
3.5.2.2	Loneliness	58
3.5.2.3	Perceived stress	59
3.5.2.4	Personality type	61
3.5.2.5	Technical factors	61
3.6 Pilot	study	62
3.7 Vali	dity and reliability of measurement	64
	ulation and sample	
	collection	
	stical analysis design: methods and tools	
	oter summary	
CHAPTEI	R FOUR	73
ANALYSI	S & DISCUSSION	73
4.1 Intro	duction	73
4.2 Data	screening	73
4.2.1	Testing for missing values and univariate outliers	74
4.2.2	Univariate normality and linearity	74

	4.2.3	Testing for multivariate normality and outliers	75
	4.2.4	Testing for multicollinearity	76
	4.3 Profi	ling of Sri Lankan management undergraduates	77
	4.3.1	Gender	77
	4.3.2	Religion and ethnicity	78
	4.3.3	University and the studying year	79
	4.3.4	Professional education	79
	4.4 Socia	al factor profiles of the management undergraduates in Sri Lanka	80
	4.4.1	Social support	80
	4.4.2	Loneliness	80
	4.5 Psych	hological factor profiles of the management undergraduates in Sri Lanka	81
	4.5.1	Perceived stress	81
	4.5.2	Personality	82
	4.6 Tech	nical factor profiles of the management undergraduates in Sri Lanka	82
	4.7 Facel	book usage and the student engagement in education	83
	4.7.1	Facebook usage of the Sri Lankan management undergraduates	83
	4.7.2	Student engagement level in education of the management undergraduates Lanka	
	4.8 Corre	elation analysis of variables in path model of the study	88
	4.9 Path	analysis of the model	92
	4.9.1	Model specification	92
	4.9.2	Model identification and estimation	93
	4.9.3	Model testing	94
	4.9.4	Model fit	95
	4.10 Discu	ussion of hypothesis	97
	4.10.1	Relationship between Facebook usage and the student engagement in education	
	4.10.2	Factors influencing on Facebook usage	
	4.10.3	Factors influencing on student engagement in education	
	4.12 Test	for mediation	
		ter summary	
(CHAPTER	R FIVE	113
(CONCLUS	SION	

5.1	Limitations of the study	115
5.2	Future research directions	116
5.3	Contribution to the theory and practice	117
REF	ERENCES	120
APP	ENDICES	140

LIST OF TABLES

Table 1.1. Facebook usage of the Sri Lankan undergraduates
Table 3.1. Measuring instruments for Facebook usage
Table 3.2. Measuring instruments for social support
Table 3.3. Measuring instruments for loneliness
Table 3.4. Measuring instruments for perceived stress
Table 3.5. Measuring instruments for individual personality type61
Table 3.6 Measuring instruments for technological acceptance
Table 3.7. Testing for convergent and discriminant validity
Table 3.8 Cronbach's alpha statistics of scales: pilot and the real study
Table 3.9. Item total statistics: item number 09 & 15: student engagement scale66
Table 3.10 Item total statistics: item number 02: technology acceptance scale67
Table 3.11. Item total statistics: item number 02: perceived stress
Table 3.12. Management undergraduate population in Sri Lanka – 2011/2012
academic year
Table 4.1. Univariate normality test results
Table 4.2. Multivariate normality test results of the variables in the model
Table 4.3. Multicollinearity test of exogenous variables of conceptual model

Table 4.4. Religion and ethnicity of the responded management undergraduates78
Table 4.5. University and the year of study of the respondents
Table 4.6. Professional education background of the management undergraduates in
Sri Lanka80
Table 4.7. Social support score of the management undergraduates in Sri Lanka80
Table 4.8. Loneliness level of the management undergraduates in Sri Lanka81
Table 4:9: Perceived Stress level of the management undergraduates in Sri Lanka81
Table 4.10. Personality type of the management undergraduates in Sri Lanka82
Table 4.11. Facebook intensity of the management undergraduates in Sri Lanka84
Table 4.12. Student engagement level in education of the management undergraduates
in Sri Lanka
Table 4.13. Cognitive and psychological engagement level of the management
undergraduates in Sri Lanka
Table 4.14.Pearson product movement correlation of variables in conceptual
mode91
Table 4.15. Cutoff criteria model fit indices and path model values
Table 4.16. Summarized data analysis on hypothesis
Table 4.17. Bootstrapping results of the mediation effect

LIST OF FIGURES

Figure 1.1. Facebook usage of the Sri Lankan undergraduates
Figure 2.1. Monthly Facebook users
Figure 2.2. Age distributions on Facebook usage in Sri Lanka20
Figure 3.1. Abstract conceptual framework53
Figure 3.2 Conceptual framework
Figure 4.1. Gender composition of the responded management undergraduates77
Figure 4.2. Religion of the responded management undergraduates78
Figure 4.3. Ethnicity of the responded management undergraduates78
Figure 4.4. Perception on technical acceptance on Facebook
Figure 4.5.Student engagement total score mean value of Sri Lankan management
undergraduates
Figure 4.6. Dispersion of the higher percentage of student engagement in education of
the undergraduates
Figure 4.7. Standardized estimates of the path model of the study94

LIST OF ABBREVIATIONS

AGFI= Adjusted Goodness-of-fit statistic

AMOS= Analysis of Moment Structures

- CFI= Comparative Fit Index
- EDA= Exploratory Data Analysis

FB= Facebook

GFI= Goodness-of-fit statistic

GPA = Grade Point Average

ICT= Information and Communication Technology

MAU = Monthly Active Users

ML = Maximum Likelihood

NFI= Normed-Fit Index

NSSE = National Survey of Student Engagement

PSS= Perceived Stress Scale

RMSEA= Root Mean Square Error of Approximation

SD= Standard Deviation

SE= Student Engagement

SNS = Social Networking Sites

SPSS= Statistical Package for Social Sciences

SRL = Survey Research Lanka

TAM= Technology Acceptance Model

ACKNOWLEDGMENT

First I remind my parents, school teachers, lecturers without whom this work will not be there today.

Then I am grateful to my supervisor, Mr. W.M.N. Fernando, for his valuable guidance, supervision, advice and encouragement throughout the study.

Next I would like to express my gratitude to Dr. P.J. Kumarasinghe, Coordinator, Post Graduate Centre for Business Studies, University of Sri Jayawardenepura, for his guidance and continuous support and also to Prof. Kennady Gunawardane for the contribution on constructing knowledge and proficiency on research methodology which was the groundwork for this research.

Then I wish to present my immense appreciation to Dr. C. N. Wickramasinghe, and Mr. S. Dissanayaka lecturers of the Department of Commerce & Financial Management, University of Kelaniya for the enormous support, kind cooperation in the statistical analysis and academic writing. They have devoted their time with patience whenever I need the support for the study in various aspects. Also I am grateful to Ms. H. K. N. S. Surangi, Mr. M. M. M. Shamil sharing international and local research articles to be used in the study.

Then I wish to extent my gratitude to Ms. S. Naotunna, Ms. V. Vithanage, Mr. C. Jeevantha, Mr. H. Hettiarachchi, Mr. D. Anuranga and Ms. C.Jayarathna lecturers from Sabaragamuwa University of Sri Lanka, University of Ruhuna and University of Kelaniya for their kind and dedicated support given me to data collection process in the research. Further, I would like to extent my gratitude to all the undergraduates who patiently participated as the respondents for my study in different aspects.

Finally, I am indebted to Mr. Dhanushka Madhawa and all the loved ones who were there with me during the works on this research, without whom this would not be a possible. Their encouragements, patience and enormous support in my all the decisions was a big courage for me.

Relationship between the Facebook Usage and the Student Engagement in Education of Sri Lankan Management Undergraduates Lakmali Chandani Herath Jayarathna

ABSTRACT

Effects of Social Networking Sites (SNSs) on college students' engagement, development and success, has become one of the contemporary research areas today. Because of the popularity of the Facebook among the other SNSs, the academics put their interests on studying the impact the Facebook may have on student engagement, development and success in college students' education.

Few previous studies which were based on the western higher education context have examined the relationship between Facebook usage and the student engagement in education of college students and concluded with contradictory results. Where some scholars concluded with positive influence from Facebook usage on the student engagement in education, others concluded with negative or neutral influence.

Accordingly, the purpose of this research was to find out whether the Facebook usage has an impact on student engagement in education and determine the factors influencing the Facebook usage and student engagement in education. Thus, this study fills a gap in the literature by exploring the contradictory results on the same topic using a sample of Sri Lankan management undergraduates. Three hundred management undergraduates from five state universities who were randomly selected, participated as the respondents of the study. Student engagement was measured by an adopted scale based on the National Survey of Student Engagement scale and Facebook usage by Facebook Intensity scale. Findings confirmed that, in Sri Lanka also Facebook is the most popular social networking site among the undergraduates. And there is a significant negative relationship between the level of Facebook usage and the level of student engagement in education. Accordingly, if students have at least moderate level of Facebook usage, it reduces the level of student engagement in relation to studies.

Moreover, the level of loneliness of the students and their intention on technology acceptance factors were significant in affecting both the level of student engagement and the level of Facebook usage. Agreeableness and the conscientiousness personality types were the only personality types that had a significant effect on student engagement while openness personality type had a significant effect only on the level of Facebook usage. The study highlighted that the level of Facebook usage negatively influences the level of student engagement in education of the Sri Lankan management undergraduates.

Key Words: social networking sites, student engagement, Facebook intensity

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Social network sites (SNSs) have become one of the most popular online destinations in recent years (Comscore, 2007). Also SNS are one of the major categories of web based communication applications which have been widely used, and many college students have integrated these sites into their daily lives (Boyd & Ellison, 2008). With such social networking activities, Facebook has become the most popular SNS and the largest proportion of overall Internet traffic (Wang et al., 2013). Especially for college students' most popular SNS is the Facebook (Staff, 2007; Hargittai, 2007). It is used by the majority of undergraduate students on a daily basis (Ellison, 2010) and researchers have shown that in anywhere between 85% and 99% of college students use Facebook (Hargittai, 2007; Matney & Borland, 2009 cited in Junco 2011). Hence, Facebook has attracted a substantial consideration among researchers nowadays. With that can be seen a fair amount of interest among the researches on the effect of Facebook use on university students' development and success. Mainly because of the wide spread of Facebook usage, the academics put their interests on the impact that these technologies may have on student engagement, development and success (Junco et al., 2010) and so on.

Based on the previous research findings, the researcher noted that there are different findings by various scholars on the relationship between the level of Facebook usage and the student engagement in education (Junco, 2011; Kirschner & Karpinski, 2010; Ellison et al, 2011; Wang. J. et al, 2013). Most of these studies are based on the western