



International Journal of Economic Research

ISSN : 0972-9380

available at <http://www.serialsjournals.com>

© Serials Publications Pvt. Ltd.

Volume 14 • Number 14 (Part-II) • 2017

Millennials' Knowledge Sharing Behaviour Via Social Media: The Effects of Reciprocity, Extroversion and Collaborative Learning Style

Ng Shu Kae¹, Yenwan Chong^{1*} and Hazlinda Hassan¹

¹ School of Business Management, Universiti Utara Malaysia, Sintok, Malaysia
Corresponding author E-mail: *yenwchong@gmail.com; chongyen@uum.edu.my

Abstract: Educators today should use ICT tools to meet the needs of millennial students. The use of social media to share knowledge among students in support of their studies has been less explored although knowledge and information sharing play an important role in learning and personal development. This research aims to study the effects of collaborative learning style, reciprocity and extroversion on knowledge sharing behavior via social media among university students at Universiti Utara Malaysia (UUM). The results of the study indicated that collaborative learning style, reciprocity and extroversion are significant predictors of knowledge sharing behavior via social media among millennial students.

Keywords: Knowledge sharing, collaborative learning style, reciprocity, extroversion, social media

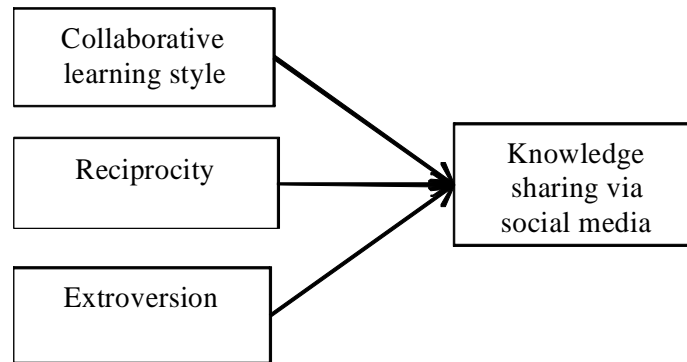
I. INTRODUCTION

Effective knowledge management occurs in organization whereby employees are eager to share their knowledge among themselves (Amanyah, 2013). Knowledge sharing was one of the main reasons for instituting Knowledge Management in Malaysia organizations (Chong, 2013). Most of the previous studies on knowledge sharing have been undertaken in corporate settings. However, knowledge sharing among students, particularly via social media has been less explored (Hrastinski & Aghaee, 2012). Social media plays a vital role in the lives of undergraduate students in Malaysian universities who comprises mostly generation young (Gen-Y) or millennials who are defined as those born between the years 1981 and 2001. Gen-Y students is the first generation who have spent their entire lives in the digital environment (Bennett et al., 2008; Wesner and Miller, 2008) are technologically savvy, better learners, more open to change and efficient in multi-tasking (NAS, 2006). Educators today should use ICT tools to meet the needs of millennial students (Black, 2010).

Collaborative learning involves active knowledge sharing among students which can result in better academic performance, enhanced social and interpersonal skills (Majid & Chitra, 2013). Several studies have found that knowledge and information sharing play an important role in learning and personal development (Robson et al, 2003; Rafaeli & Ravid, 2003). According to Falk and Fischbacher (2006), reciprocity has positive influence on attitudes towards online knowledge sharing behaviour. In addition, Cyr & Choo (2010) highlighted that reciprocity together with trust promote knowledge sharing. Wasko and Faraj (2005) also found a positive association between reciprocity and knowledge sharing in an online networking environment. Personality traits can to influence an individual’s knowledge sharing behaviour. Chong, Teh and Tan (2014) found that knowledge sharing is positively influenced by extroversion and conscientiousness. The objective of this research is to study the effect of collaborative learning style, reciprocity and extroversion on students’ knowledge sharing behaviour among peers via social media.

II. RESEARCH FRAMEWORK

The research framework for this study is presented in the following diagram.



III. METHODOLOGY

A total of 370 university students participated in this study. However, only 363 sets of questionnaires are usable in order to run the analysis. The variables in this study are measured using instruments adapted from previous studies as listed in the table below:

Table 1
Measurement of variables

<i>Variables</i>	<i>Total items</i>	<i>Scales</i>	<i>Sources (Author Adapted)</i>
1 Knowledge sharing behavior	8	5 Point Likert Scale	Davenport and Prusak (2000)
2 Collaborative Learning Style	10	5 Point Likert Scale	Hsu, M. H., Ju, T. L.; Yen, C. H., and Chang, C. M. (2007)
3 Reciprocity	3	5 Point Likert Scale	Riechmann and Grasha (1974)
4 Extroversion	7	5 Point Likert Scale	Bock, G. W.; Zmud, R. W; Kim, Y. G., and Lee, J. N. (2005)
5 Knowledge sharing behavior	8	5 Point Likert Scale	Goldberg (1992)

IV. FINDING

Reliability analysis was performed on the data to measure the reliability and internal consistency of the scales that were used. The Cronbach Alpha values obtained were between 0.61 to 0.83 as shown on Table 2.

Table 2
Reliability Statistic

<i>Variable</i>	<i>Number of items</i>	<i>Cronbach Alpha</i>
Knowledge sharing behaviour	8	0.74
Collaborative learning style	10	0.83
Reciprocity	3	0.73
Extroversion	7	0.61

ANOVA analysis was used to test the differences in mean scores for knowledge sharing behaviour among different group of respondents. ANOVA analysis was used to examine whether there are significant differences in the mean scores on the dependent variable (knowledge sharing behaviour) across the three sub-groups of respondents, namely college groups, religion groups and races groups. The results indicated that there is no statistically significant difference in knowledge sharing behaviour between students from the three college groups, i.e the College of Business (COB), the College of Arts and Sciences (CAS) and the College of Law, Government and International Studies (COLGIS).

Table 3
ANOVA Test Result for College Groups

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	.004	2	.002	.004	.996
Within Groups	185.204	367	.505		
Total	185.208	369			

ANOVA analysis was also used to explore the impact of religion on knowledge sharing behaviour. Respondents were divided into six religious groups (namely Islam, Buddha, Christian, Catholic, India, Others). There is a statistically significant difference at the $p < 0.003$ level in knowledge sharing behaviour for six religion groups. Post hoc comparisons test indicate that the knowledge sharing behaviour between Islam and Buddha are statistically different at $p\text{-value} = 0.03 < 0.05$.

Table 4
ANOVA Test Result for Religion Groups

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	9.01	5	1.80	3.65	.003
Within Groups	176.29	357	0.49		
Total	185.30	362			

Table 4
ANOVA Test Result for Religion Groups (con't)

Multiple Comparisons

<i>(I) Religion</i>	<i>(J) Religion</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Islam	Buddha	0.25	.081	0.03
	Christian	0.54	0.30	0.44
	Catholic	-0.40	0.32	0.80
	Hindu	-0.17	0.23	0.98
	Others	-0.40	0.32	0.80
Buddha	Islam	-0.25	.081	0.03
	Christian	0.29	0.30	0.92
	Catholic	-0.65	0.32	0.33
	Hindu	-0.41	0.23	0.48
	Others	-0.65	0.32	0.33
Christian	Islam	-0.54	0.29	.044
	Buddha	-0.29	0.29	0.92
	Catholic	-0.94	0.43	0.32
	Hindu	-0.70	0.36	0.37
	Others	-0.94	0.43	0.25
Catholic	Islam	0.40	0.32	0.78
	Buddha	0.65	0.32	0.49
	Christian	0.94	0.43	0.32
	Hindu	0.24	0.39	0.96
	Others	0.00	0.44	1.00
Hindu	Islam	0.17	0.23	0.97
	Buddha	0.41	0.23	0.45
	Christian	0.70	0.36	0.37
	Catholic	-0.24	0.39	0.96
	Others	-0.24	0.39	1.00
Others	Islam	0.40	0.32	0.82
	Buddha	0.65	0.32	0.33
	Christian	0.94	0.43	0.25
	Catholic	0.00	0.44	1.00
	Hindu	0.24	0.39	1.00

*.The mean difference is significant at the 0.05 level.

A one way between groups analysis of variance was conducted to explore the impact of race on knowledge sharing behaviour. Respondents were divided into four race groups (Malay, Chinese, India, Others).

ANOVA analysis was also used to explore the impact of race on knowledge sharing behaviour. Respondents were divided into four race groups (Malay, Chinese, India, Others). The results show that there the level of knowledge sharing behaviour for the various racial groups are not all the same. There is statistically significant difference at the $p < 0.05$ level in knowledge sharing behaviour across the four groups.

Post hoc comparisons test indicate that the knowledge sharing behaviour between Malay and Chinese are statistically different at $p\text{-value} = 0.018 < 0.05$.

Table 5
ANOVA Test Result for Race Groups

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	5.661	3	1.887	3.771	0.011
Within Groups	179.634	359	.500		
Total	185.295	362			

Multiple Comparisons

<i>(I) Race</i>	<i>(J) Race</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Malay	Chinese	.23555	.07985	.018
	India	-.16875	.22872	.882
	Others	-.17670	.21855	.850
Chinese	Malay	-.23555	.07985	.018
	India	-.40430	.23268	.306
	Others	-.41226	.22269	.251
India	Malay	.16875	.22872	.882
	Chinese	.40430	.23268	.306
	Others	-.00795	.30907	1.000
Others	Malay	.17670	.21855	.850
	Chinese	.41226	.22269	.251
	India	.00795	.30907	1.000

*. The mean difference is significant at the 0.05 level.

Multiple regression analysis was also undertaken to study the collective and individual effects of collaborative learning style, reciprocity and extroversion on knowledge sharing among undergraduates via social media. Results in Table 6 indicates that the overall model is statistically significant at $p < .000$. The predictors (collaborative learning style; reciprocity; extroversion) in the proposed model account for 26% of the observed variance in knowledge sharing.

Table 6
Multiple Regression Analysis

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>		
1	.510a	.260	.254		
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.242	3	16.081	42.122	.000
Residual	137.053	359	.382		
Total	185.295	362			

The multiple regression statistics for predictor variables in Table 7 indicate that all three independent variables are statistically significant ($p < .000$). Among the three predictor variables, reciprocity is the most important factor that affect undergraduates knowledge sharing, followed by collaborative learning style and extroversion.

Table 7
Summary of multiple regression statistics for predictor variables

<i>Model</i>	<i>Unstandardized</i>	<i>Standardized</i>	<i>t</i>	<i>Sig.</i>	<i>Model</i>
	<i>Coefficients</i>	<i>Coefficients</i>			
	<i>B</i>	<i>Std. Error</i>			
(Constant)	.479	.297		1.612	.108
Collaborative learning style	.265	.070	.196	3.776	.000
Reciprocity	.287	.047	.308	6.131	.000
Extroversion	.240	.073	.162	3.263	.001

V. CONCLUSION

Knowledge and information sharing play important role in learning and personal development. Knowledge sharing is also an important soft skill that can enhance graduate employability in today's knowledge intensive business environment. This study found that collaborative learning style, reciprocity and extroversion increases knowledge sharing among undergraduates. The findings of this study suggests that students online knowledge sharing can be enhanced developing teaching and learning activities that promotes collaborative learning, extroversion and reciprocity among millennial. Future studies can include others factors such as online trust to increase the predictive power of the regression model.

ACKNOWLEDGMENT

The authors would like to thank the Malaysian Ministry of Higher Education (MOHE) for funding this research through the Research Acculturation Grant Scheme (RAGS/1/2014/SS05/UUM//2).

REFERENCES

- Amayah, A. T. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454-471. doi:10.1108/JKM-11-2012-0369.
- Bennett, S., Maton, K. and Kervin, L. (2008), "The 'digital natives' debate: a critical review of the evidence", *British Journal of Educational Technology*, 39(5), 775-786.
- Black, A. (2010). Gen Y: Who they are and how they learn. *Educational Horizons*, 88(2), 92-101.
- Bock, G. W. & Kim, Y. G. (2002). Breaking the Myths of Rewards: An Exploratory Study of Attitudes about Knowledge Sharing. *Information Resources Management Journal*, 15(2), 14-21.
- Chong, C., Teh, P., & Tan, B. (2014). "Knowledge sharing among Malaysian universities students: Do personality traits, class room and technological factors matter?", *Educational Studies*, 40(1), 1-25.
- Chong, Y. W. (2013). Formulating an integrated framework for conceptualizing, operationalizing and advancing knowledge management. Ph.D, Universiti Malaya, Kuala Lumpur.
- Cyr, S., & Choo, C. W. (2010). The Individual and Social Dynamics of Knowledge Sharing – An Exploratory Study, 67(1), 1–37.

- Davenport, T. H., and De Long, D. W. (1998). Successful knowledge management projects. *Sloan Management Review*, 39(2): 43-57.
- Goldberg, L.R. (1992), "The development of markers for the big-five factor structure", *Journal of Personality and Social Psychology*, 59(6), 1216-1229.
- Hrastinski, S., & Aghaee, N. M. (2012). How are campus students using social media to support their studies? An explorative interview study. *Education and Information Technologies*, 17(4), 451-464.
- Hsu, M.-H., Ju, T. L., Yen, C.-H., & Chang, C.-M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International journal of human-computer studies*, 65(2), 153-169.
- Majid, S., Idio, C. D., Shuang, L., & Wen, Z. (2015). Preferences and Motivating Factors for Knowledge Sharing by Students. *Journal of Information & Knowledge Management*, 14(1), 1550004-1-9. <http://doi.org/10.1142/S0219649215500045>
- NAS (2006). Generation Y: The Millennials...Ready or Not, Here They Come, National Academy of Sciences.
- Robson, R., Norris, D. M., Lefrere, P., Collier, G. & Mason, J. (2003). Share and share alike: The e-knowledge transformation comes to campus. EDUCAUSE Review.
- Wasko, M.M., and Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57.
- Wei, C., Choy, C., Chew, G., & Yen, Y. (2012). "Knowledge sharing patterns of undergraduate students", *Library Review*, 61(5), 327-344.
- Wesner, M.S. and Miller, T. (2008). "Boomers and Millennials have much in common", *Organizational Development*, 26(3), 89-96.
- Black, A. (2010). Gen Y: Who they are and how they learn. *Educational Horizons*, 88(2), 92-101.