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Examining the Relationship Between Social Capital And Self Efficacy: A Study Amongst Postgraduate Students

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Abstract

Inspired by the scarcity of studies on social capital and its effect on self-efficacy among postgraduate students, a study was conducted to fill this gap. An empirical based framework connecting social capital and self efficacy was developed and tested using data obtained using survey research method. A total of 121 respondents participated in the study, and the results indicate that social capital, dimensionalized into six constructs, namely a sense of belonging, shared language, trust, networks, norm of reciprocity and shared vision, is found to have a significant relationship with self efficacy. Further analysis showed that shared language, trust and shared vision are the significant predictors of self-efficacy. The findings further signify the contribution of social capital in increasing the level of self-efficacy in the context of students in Higher Education Institutions (HEI).

Key words: social capital, self-efficacy, knowledge management, university setting

1.0 Introduction

A common understanding among social scientists is that social capital is a relational resource composed of a variety of elements, most notably social networks, social norms, values, trust and shared physical resources (Maslac & Magzan, 2011). Social capital is one of the most commonly used construct for examining the effect of different factors on educational phenomena and outcomes (Elllison et al. 2012) . This is because social capital provides researchers with a framework for considering not only the resources explicitly held by an individual, but also those available to the individual via his or her social relationships. Support and access to tangible resources such such as financial aid or information, or more psychological in nature, such as social support, have been found to have a significant effect on the success of college or university students. These forms of support, termed as social capital, describe the potential resources that reside within social relationships and thus may be accessed by an individual. Three crucial components of social capital are the resources embedded in a social structure, the accessibility of these resources, and the ability to utilize or mobilize these resources (Lin, 2001). Despite the importance of social capital in shaping the success of university-going students, empirical studies are still very limited. Most of the available literature also reports, studies done in countries outside Malaysia. Given the dissimilarity of culture, infrastructure, economic background, political landscape, the findings of these studies may not applicable and relevant to the content of Malaysian education. Against this

background, a study was conducted in the Malaysian university context with the aim of investigating the influence of social capital on students' self efficacy

2.0 Literature Review

2.1 Self efficacy

Within the domain of psychological research, it is widely acknowledged that the concept of 'self-efficacy' was first proposed by Albert Bandura (Bandura, 1977) in a theory known as Social Cognitive Theory (SCT). The term is defined as "the beliefs in one's capacity or capability to organize and execute courses of action aimed at achieving one's goals" (Bandura, 1977). In contrast, Han et al. (2014) defined self-efficacy as an individual's anticipation of one's ability to be in control under a particular situation. The author further described that self-efficacy plays an intermediate role between cognition and behavior, which reflects an individual's perception and confidence of his ability to complete specific tasks and reach particular goals (Han et al. 2014).

Building upon SCT, Dinther et al. (2011) outlined four main sources of information that can develop create students' self-efficacy, which are (i) mastery experiences, (ii) vicarious (observational) experiences, (iii) social persuasions and (iv) physiological and psychological states. The first source i.e. mastery experiences are regarded as the most strongest source of developing a strong sense of efficacy. The reason is because students interpret the results of their activities and use these interpretations to further strengthen their beliefs about their capability to perform in subsequent tasks or activities (Dinther at al. 2011). The second source i.e. through observational experiences, facilitate students to further develop thier ability and capacity by observing others, especially colleagues who offer suitable possibilities for comparison. The third source i.e. social persuasion, facilitate students to further boost their beliefs of self-efficacy through persuasive communication and evaluative feedback from social ties. Both persuasive communication and evaluative feedback are most effective especially when the people who provide this information or feedback are highly regarded by the students as knowledgeable, reliable and resourceful. The last source of developing self efficacy of the students is through physiological and psychological states which relates to the person's perception of their physical responses such as stress, depression, or mood to threatening environments and situations. A positive mood state has strong effect in strengthening someone's self-efficacy while a dejected mood state would weakens it.

Mining the literature unveiled that, most empirical studies have studied self efficacy as predictors or determinants of diverse constructs such as technology adoption behavior (e.g. Masrek, 2007; Masrek et al., 2008; Masrek & Rashidi, 2012; Akanbi, 2013; Samadi et al. 2014); physical activities (e.g. McAuley & Blissmer, 2000); prosocial behavior (e.g. Caprara & Steca, 2005); individual well being (eg. Caprara et al. 2006) and ethical work behavior (e.g. Okoye et al 2016). Very few studies have examined the antecedents or determinants of self-efficacy. To this effect, this study will add to the body of literature by examining factors that will influence self efficacy.

2.2 Social capital

Since the inception of the term "social capital", various definitions have emerged in the literature. Each and every definition is tightly connected to background disciplines of the authors (Olives & Kawachi, 2015). Two points of arguments are

whether social capital should to be considered as an “individual or as a group attribute, and as social cohesion or as resources embedded in networks” (Olives & Kawachi, 2015). Coleman stressed that social capital should be defined by “its function, because it is not a single entity, but a range of different entities with common attributes, and they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure” (Coleman, 1988).

According to Islam et al. (2006), social capital can be divided into several dimensions, namely, cognitive social capital, structural social capital, horizontal social capital and vertical social capital. Cognitive social capital is normally operationalized as “people’s perception of the level of interpersonal trust, sharing and reciprocity”. The structural social capital is usually operationalized as “density of social networks or patters of civic engagement”. The horizontal social capital is oftenly operationalized as bonding social capital and briding social capital. The former is concerned with the “relations within homogenous groups i.e. strong ties that connect family members, neighbours, and close friends and colleagues” while the later is about the “weak ties that link different ethnic and occupational backgrounds, including formal or informal social participation” (Briggs, 1998; Gitell & Vidal, 1998). Lillbacka (2006) used the terms social resources when defining social capital with relates to social contacts, e.g. friendship ties, which an individual may mobilize in order to achieve certain ends, and which possess a certain degree of consistency and predictability.

According to Woolcock (2001) linking social capital enables groups to leverage resources, ideas and information. In a university or higher education setting, the concept of social capital has been used directly and indirectly (Carpenter & Morgan, 2012). Miracle (2013) states that, higher education is a conducive place to develop social capital because participants, particularly students, have the opportunity to build valuable relationships with individuals that results in access to resources such as information, the mutual exchange of favors, emotional support and networking.

As described by Bandura (1977), one of the source for developing self efficacy is through social persuasions which is closely related to social capital. It is only through social contacts, one can expect positive and evaluative feedbacks. Our social contacts whom we have a sense of belonging, shared language, trust and shared vision are those who concern with our progress and development. Their continuous constructive feedback on would further enhance our self efficacy. Past studies showed that social capital has significant effect on employee well being (Tasi, 2013; Seifollah & Shahidnik, 2016). Studies by Han et al. (2014) and Carbello-Medina et al. (2011) evidently showed the contribution of social capital towards the improvement of self efficacy. The findings of these studies suggest that social capital works sparingly with self-efficacy. The higher is the social capital of an individual, the higher is the self efficacy. Drawing upon the aforementioned arguments, the research framework as shown in Figure 1 was developed. The dependent variable is self-efficacy while the independent variable is social capital dimensionalized as sense of belonging, shared language, trust, networks, norm of reciprocity and shared vision and derived from the work of Thilo et al. (2006); Haris (2012); Abbas et al. (2013); Michailova & Worm (2003); Wellman (2001); Fukuyama (1995). Table 1 presents the operational definition of these independent variables.

Table 1: Operational Definition of independent variables

Variable	Operational Definition
Sense of Belonging	The belonging and support by members and social networks that may be especially important for academic motivation, engagement, and performance of students.
Shared Language	The ability to easily understand, communicate, and agree with one another
Trust	the expectation that arises within a community of regular, honest and co-operative behaviour, based on commonly shared norms.
Networks	The relations among people who deem other members to be important or relevant to them in some way
Norm of Reciprocity	The expectation that people will respond to each other in similar ways
Shared Vision	A common understanding about the ways of interaction leads to more and better opportunities for resource sharing without any misunderstanding.

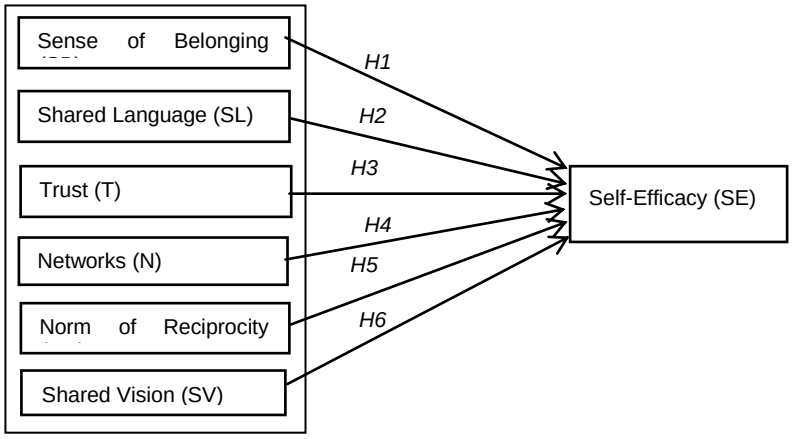

Figure 1 The Theoretical Framework of the study

Based on the theoretical framework, the following hypotheses are established:

H1: Sense of belonging is a significant predictor of self-efficacy
H2: Shared language is a significant predictor of self-efficacy
H3: Trust is a significant predictor of self-efficacy
H4: Network is a significant predictor of self-efficacy
H5: Norm of reciprocity is a significant predictor of self-efficacy
H6: Shared vision is a significant predictor of self-efficacy

3.0 Research Methodology

According to Noordin & Masrek (2016) “adopting certain methodologies in the social science research requires researchers to understand the procedural framework within which the research is conducted”. The study used survey research methods with questionnaire as the instrument for data collection. The questionnaire was developed based on the questionnaire use by previous studies. For each variable, five or six items were used with a corresponding Likert scale anchored as 1 for “Strongly Disagree” and 5 = “Strongly Agree”. The respondents were required to respond based on their level of agreeableness. Prior to main data collection, the

questionnaires were pre-tested and pilot tested to address the validity and reliability requirements. A systematic random sampling technique was used to determine the sample from the population. The questionnaires were distributed to the identified respondents and they were given about one week to respond. Reminders were given after one week for those who had not responded. After the one week period, a total of 121 questionnaires was returned. All of the questionnaires were found to be usable for further analyses. The execution of reliability analysis showed that the Cronbach Alpha for all variables are well above 0.7, implying that the measurement used is reasonably reliable. The result of the reliability analysis is shown in Table 2.

4.0 Findings

Table 3 showcases the demographic profile of the respondents. Out of 121 respondents, 39.7% were male, while the remaining 60.3% were female. In terms of age, the highest percentage was aged between 21 and 30 (77.7%) and followed by 31 and 40 (21.1%). The majorities indicated to be in semester one (48.8%) while the minority were from semester four (6.6%). The highest participation comes from MSc. in Information Management (52.9%) followed by MSc. in Knowledge Management (24.8%) and followed by MSc. in Library Management (22.3%).

Table 2: Demographic Profile of Respondent

	Variable	Frequency	Percent
Gender	Male	48	39.7
	Female	73	60.3
Age	21-30	94	77.7
	31-40	26	21.5
	41-50	1	0.8
Semester	Sem 1	59	48.8
	Sem 2	34	28.1
	Sem 3	20	16.5
	Sem 4	8	6.6
Program	MSc. in Knowledge Management	30	24.8
	MSc. in Information Management	64	52.9
	MSc. in Library Management	27	22.3

In order to identify whether the data is experiencing common method bias, Harman's single factor test was executed. All items from all constructs under study were entered for analysis and constrained to only single factor. The result shows that the single factor explained only 42.78%, less than the benchmark value of 50% of the total variance, implying that the collected data is free from the problem of common method variance.

The results of the descriptive analysis and correlation between variables are presented in Table 4. The overall mean value for all variables surpass the mid-point value of three while the standard deviation is less than 1.00 (based on the Likert scale, where 1 is the minimum and 5 is the maximum), suggesting that, generally these postgraduate students felt that their social capital is relatively high. The highest overall mean is for sense belonging while the lowest is for trust. The overall mean score for self efficacy is also high standing at 3.89.

Prior to executing multiple regressions, Pearson correlation analysis was executed. The results of the analysis indicate that the highest correlation value is 0.708 while

the lowest is 0.401. According to Cohen (1988), Pearson correlation values between 0.5 and 1.0 is categorized as strong, while between 0.30 and 0.49 as moderate and 0.10 and 0.29 as weak. Following Cohen (1988), the results suggest that the relationship between social capital and self-efficacy is strong.

Table 3: Descriptive Analysis and Correlation Analysis of Research Variables

	Mean	Standard Deviation	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Sense of Belonging [1]	4.02	0.750	1						
Shared Language [2]	3.89	0.813	.315**	1					
Trust [3]	3.63	0.779	.395**	.412**	1				
Networks [4]	3.78	0.781	.463**	.497**	.565**	1			
Norm of Reciprocity [5]	3.90	0.750	.601**	.349**	.558**	.503**	1		
Shared Vision [6]	3.85	0.740	.437**	.621**	.531**	.491**	.399**	1	
Self Efficacy [7]	3.89	0.709	.401**	.708**	.540**	.505**	.409**	.644**	1

Table 5, and 6 showcase the results of the multiple regression analysis between the independent variables and dependent variable. Out of six independent variables, only three turned out to be significant predictors, which are share language, trust and shared vision. The other three independent variables, sense of belonging, networks and norm of reciprocity are found to be insignificant. Drawing upon this results, H2, H3 and H6 are supported while H1, H4 and H5 are not supported.

For a substantial model, Cohen (1988) suggests that R^2 should be about 0.35 or greater, while Falk & Miller (1992) recommended 0.10 or above. In this study, the R^2 is 0.610, indicating that the estimated model is substantial. The results indicate that shared language, trust and shared vision jointly account for 61% variance in self-efficacy.

Table 4: Model Summary of Regression Analysis between the independent variables and self efficacy

R	R Square	Adjusted R Square	Standard Error of the Estimate
0.781[a]	0.610	0.590	1.90609

Table 6: Coefficients of Regression Analysis between the independent variables and self efficacy

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
(Constant)	3.922	1.415		2.772	.007
Sense_of_Belonging	.071	.072	.076	.992	.323
Shared_Language	.457	.077	**.462**	**5.928**	**.000**
Trust	.206	.085	**.195**	**2.409**	**.018**
Networks	.039	.105	.030	.377	.707
Norm_of_Reciprocity	-.005	.098	-.004	-.054	.957
Shared_Vision	.299	.120	**.208**	**2.492**	**.014**

5.0 Discussion

The objective of this research has been to investigate the relationship between social capital and self efficacy from the individual perspective in the context of higher learning institutions. Social capital has been operationalized as six dimensions which are a sense of belonging, shared language, trust networks, norm reciprocity and shared vision. Through correlation analysis, the results indicate that all the six dimensions of social capital are found to have a significant relationship with self efficacy. The findings are consistent with previous studies by Han et al. (2014) and Carbello-Medina et al. (2011). It also provides further support of the Social Cognitive Theory developed by Bandura (1977). Upon further analysis, three out of the six dimensions of social capital are found to be significant predictors, which are shared language, trust and shared vision.

The first predictor of the self efficacy is shared language ($\beta = 0.46$). Shared language facilitates people's ability to gain access to people and their information and provides a common conceptual apparatus for evaluating the likely benefits of exchange and combination (Nahapiet & Ghoshal, 1998). Shared language is not only beneficial in terms of sharing specific ideas, but it is considered crucial for the communication process with the people who have the same background or practical experience (Aljohani Amer Helail & Lei, 2016). It is because of this reason, perhaps, shared language has a significant effect on self-efficacy.

The second predictor of self efficacy is shared vision ($\beta = 0.21$). A shared vision is concerned with collection of goals and aspirations, which are relevant to the employees of an organization. The people involved in the process of shared vision are more inclined to share their ideas and resources with each other. In the context of university setting, particularly postgradudate students, their shared vision could be completing the study with flying colors. In the process of accomplishing their objective, the students would share their ideas and resources with each other, and this in turn improved their self efficacy.

The third and predictor found is in this study is trust ($\beta = 0.19$). Trust is an individual belief or expectation that involves the other members of the society to observe the accepted principles (Aljohani Amer Helail & Lei, 2016).. Trust can exhibit greater openness to the potential for value creation through knowledge exchange and combination (Nahapiet & Ghoshal, 1998).. Trust is also considered to be crucial in knowledge sharing process, especially in the context of postgraduate students when they have to complete their course assignment in the form of group projects. By means of interaction and knowledge exchange, the self efficacy students is also enhanced.

6.0 Conclusion

The contributions of the study can be viewed from the theoretical and practical perspectives. From the theoretical perspective, it has developed an empirical based framework linking between social capital with self efficacy. The framework developed in this study can be further tested in other settings. From the practical viewpoint, the model can be used as a tool to gauge an individual social capital. While this study has achieved its objectives, it also has limitations. The sample size involved in the study was drawn from one faculty of one university only. Future studies should consider expanding the sample size and instead of focusing to one university,

several universities should be engaged. Larger sample size taken from several universities would make generalizations of the findings possible.

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