

Mentoring Program as an Instrument of Enhancing Mentees' Self-Efficacy

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Abstract: This study investigates the correlation between mentoring program and mentees' self-efficacy. Self-report questionnaires were employed to collect data from undergraduate business students at a research university in Malaysia. The results of SmartPLS path model showed two essential findings: firstly, communication was positively and significantly correlated with mentees' self-efficacy. Secondly, support was positively and significantly correlated with mentees' self-efficacy. The result demonstrates that mentoring program does act as an important determinant of mentees' self-efficacy in the organizational sample. Further, the paper provides discussion, implications and conclusion.

Keywords: mentoring program; mentor; mentee; communication; support; self-efficacy

1. Introduction

In an ancient Greek literature, mentoring is first highlighted in the epic story of 'The Odyssey' written by Homer. In this story, Odysseus tells his loyal and experienced friend, namely, Mentor (a person who has great wisdom and trustworthy) to teach his son, namely, Telemachus (a mentee or protégé who has less experience) about the tips for handling challenging lifestyles before he goes to the Trojan War (Edlind & Haensly, 1985; Ismail et al., 2005, 2006; Merriam,

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1993). Mentoring has transcended this classical story and has become an important field of education (Little et al., 2010; Johnson et al., 1991) and/or counselling (Gregson, 1994; Zuraidah et al., 2004) whereby mentors are represented by the elderly who have wisdom, experiences and can be trusted to educate young men who have little experience and knowledge (Little et al., 2010; Mohono-Mahlatsi & Tonder, 2006; Johnson et al., 1991; Russell & Adams, 1997; Wanguri, 1996). Today, the traditional mentoring concept has been given new interpretations by contemporary educationists, social psychologists and management scholars in order to be in line with the current organizational development and challenges (Dennison, 2000; Ismail et al., 2005, 2006; Ismail & Ridzwan, 2012; Oliver & Aggleton, 2002).

In an organizational context, mentoring is often defined as a learning method where it encourages comfortable relationship between mentors (i.e., knowledgeable and experienced person) and a mentee (i.e., less knowledgeable and experienced person) and also as an instrument to develop individual and/group potentials in carrying out particular duties and responsibilities, familiarize with new techniques, and care for all aspects of mentees (Cummings & Worley, 2009; Johnson et al., 1991; Long, 2002; Noe et al., 2002). According to Anderson and Shannon (1988) mentoring is defined as a nurturing process by individuals who are more skilled or experienced, become a role model, teaches, sponsors, motivates, advises and befriends to the unskilled and less experienced person for the purpose of promoting and developing the latter's potential.

There is no one best mentoring program model to fit all organizations, because it has to be designed and implemented according to the uniqueness of organizational contexts in terms of beliefs, policy, orientations, stresses, strengths and weaknesses (Irving et al., 2003; Ismail et al., 2005, 2006; Santos & Reigadas, 2002, 2005). These factors have influenced organizations in the designing and administering of the various types of mentoring program, especially informal one (e.g., specific demands, spontaneous and adhoc) and/or the ones dealing with formal relationship (e.g., structured and coordinated relationship between mentor and mentee, using standard norms, continuously action plans, time frame, and particular objectives). In organizations, formal and informal mentoring programs are viewed as equally important, but informal mentoring programs are often implemented to complement and strengthen formal mentoring programs in order to achieve organizational strategies and goals (Friday & Friday, 2002; Hansford & Ehrich, 2006; Hansford et al., 2003; Ismail et al., 2005, 2006).

Among the areas that applied mentoring program include are health profession (Byrne & Keefe, 2002; Ljungberg et al. 2011), corporate and organizational settings (Lyness & Thompson, 2000; Riley & Wrench, 1985) and academic context (Campbell & Campbell, 1997). According to Byrne and Keefe (2002), mentoring is an effective strategy in various discipline including health profession, the aim which are to develop skills, expertise and leadership. In addition, mentoring program is used to help and facilitate patients to face and overcome psychosocial challenges in their lives (Ljungberg et al., 2011). Meanwhile in organizational setting, studies have shown a positive correlational between mentoring and subordinate promotions and compensations (Lyness & Thompson, 2000), career satisfaction (Riley & Wrench, 1985) and organizational commitment (Douglas & Schoorman, 1988). One interesting finding by Allen and O'Brien (2006), organizations that practice formal mentoring programs in the workplace could enhance organizational attraction and would attract applicant's interest in pursuing employment opportunities with the company. On the other hand, in an academic context, student that undergo mentoring program obtain better academic achievement, complete more units completed per semester and show lower dropout rate than those who are not involved in mentoring program (Campbell & Campbell, 1997). Result of the studies show that many mentoring programs have been applied in various settings to help individuals in need.

A review of the current literature relating on higher education student development program highlights that effective mentoring programs have two important dimensions, i.e., communication and support (Bernier et al., 2005; Ismail & Ridzwan, 2012; Tennenbaum et al., 2001). In the context of university mentoring program, communication is generally defined as mentors openly delivering information about the procedures, content, tasks and objectives of the mentoring programs, conducting discussions about tasks that should be learned, giving detailed explanations about the benefits of attending mentoring programs and providing performance feedback (Allen et al., 2005; Fox et al., 2010; Ismail et al., 2005, 2006; Santos & Reigadas, 2005; Stewart & Knowles, 2003). Conversely, support is broadly defined as mentors providing mentees emotional support (e.g., acquire new knowledge, skills, and attitudes, and guide them to properly apply in daily life) and instrumental support (e.g., assist mentees to adapt campus environments) at varying times (Allen & Finkelstein, 2003; Davis, 2007; Fox et al., 2010; Stewart & Knowles, 2003; Zuraidah et al., 2004).

Surprisingly, recent studies in university/faculty mentoring programs reveal that the ability of mentors to appropriately implement such mentoring characteristics may have a significant impact on positive mentee outcomes, especially self-efficacy (Ismail & Ridzwan, 2012; Rayle et al., 2006). From a social psychology perspective, self-efficacy is generally interpreted as individuals' beliefs and confidence about their abilities to perform certain functions (Blanchard & Thacker, 2007; Diwyaa, 2014; Hornby, 2005) such as choice behavior, expenditure and persistence, feelings of stress and anxiety, as well as personal accomplishments (Bandura, 1977, 1986; Van Vianen, 1999). For example, individuals who have high self-efficacy tend to learn, transfer learning, and put greater effort to overcome difficult situations and continuously improve his/her performance. Conversely, individuals with low self-efficacy tend to exhibit minimal effort, tend to give up hope easily and have no confidence to deal with difficult situations (Blanchard & Thacker, 2007; Kozlowski et al., 2001; Pittenger & Heimann, 2000).

The nature of this relationship is interesting, but the role of mentoring program as an important predictor of mentees' self-efficacy has been left unexplained in the higher education mentoring program research literature (Ismail & Ridzwan, 2012; Santos and Reigadas, 2005). Many scholars argue that this situation is due to many factors. Previous studies have much emphasized on the mentoring program characteristics, employed a simple survey method to explain different respondent perceptions toward the types of mentoring program, used a simple correlation method to determine the strength of association between specific mentoring program and global mentee outcomes, and ignored the magnitude and nature of the relationship between mentoring program and mentees' self-efficacy. Consequently, these studies have provided insufficient information to be used as guidelines by practitioners in understanding the complexity of mentoring program, and formulating strategic action plans to improve the management of mentoring programs in dynamic institutions of higher learning (Ismail & Ridzwan, 2012; Rayle et al., 2006; Santos & Reigadas, 2005). This gap has motivated the researchers to uncover the nature of this relationship.

2. Purpose of the Study

This study has three major objectives: firstly, is to determine the levels of communication, support and mentees' self-efficacy. Secondly, is to examine the correlation between communication and mentees' self-efficacy. Finally, is to examine the correlation between support and mentees' self-efficacy.

3. Literature Review

Research by Santos and Reigadas (2002) found that, relationship with mentors can broaden students' awareness about the resources available to successfully cope with demanding academic condition and increase self-competence and self-efficacy. Besides, this research also proved that mentoring program facilitate student to set better academic goals and frequency of contacts with mentors has a positive relationship with student's adjustment to college life. This finding proved that mentor appeared to be a person that can help and facilitate student's personal and academic adaptation of college life by providing emotional support (Santos & Reigadas, 2002). Moreover, mentoring also can help in enhance personal, intellectual and professional development among students (Harris & Brewer, 1986).

Several extant studies have specifically utilized a direct effects model to discover mentoring activities based on different samples such as perceptions of 39 big brothers/big sisters and undergraduate students mentors at an American university (DuBois & Neville, 1997), 65 college students in a Faculty Mentoring Program (FMP) at a four-year institution in the United States (Santos & Reigadas, 2005), 527 female undergraduates in Southwestern University (Rayle et al., 2006), and 21 Malaysia teachers (Lyne, 2013). The results of these studies reported that the readiness of mentors to appropriately implement communication and provide support in formal and/or informal mentoring relationships had motivates mentees to improve their self-efficacy in the respective organizations (DuBois & Neville, 1997; Rayle et al., 2006; Santos & Reigadas, 2005).

The empirical studies support the notion of adult learning theories. For example, Bandura's (1986, 1997) self-efficacy theory explains that individuals who believe in their capabilities will serve as a self-regulating agent for their behaviour and motivation such as effort, perseverance and resilience to be put on a task. Besides, Vroom (1964) states that individuals will perform certain actions if they perceive

that their actions will produce valued outcomes. Application of these theories in institutions of higher learning shows that the readiness of mentors to appropriately provide meaningful communication and adequate support in formal and/or informal mentoring relationships may lead to enhanced mentees' self-efficacy in organizations (DuBois & Neville, 1997; Rayle et al., 2006; Santos & Reigadas, 2005).

The literature has been used as foundation to establish a conceptual framework for this study as illustrated in Figure 1.

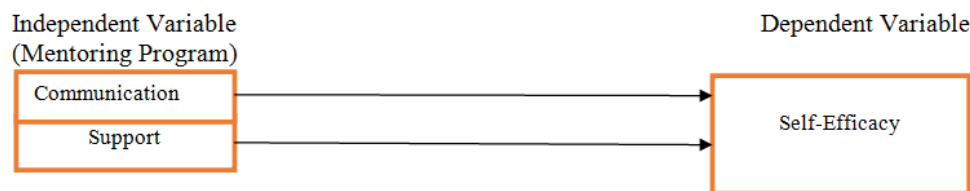


Figure 1. Conceptual Framework

Based on the framework, it can be hypothesized that:

H1: There is a positive correlation between communication and mentees' self-efficacy

H2: There is a positive correlation between support and mentees' self-efficacy

4. Method

4.1. Research Design

This study used a cross-sectional research design where it allowed the researchers to integrate the mentoring program literature, the pilot study and the actual study as a main procedure to gather its empirical data. Using such methods may gather accurate data, decrease bias and increase quality of data being collected (Sekaran & Bougie, 2010; Zikmund, 2000). This study was conducted to assess the relationship between mentoring program and mentees' self-efficacy at a research university in Malaysia. For confidential reasons, the name of the organizations used is kept anonymous. In the context of this university, the mentoring program was implemented forty four years ago to enhance the effectiveness of teaching and learning program at the faculty level. This mentoring program is planned and monitored by the deputy dean for student, academic and international affairs.

Mentors are selected from academic staff who hold different positions such as professors, associate professors, senior lecturers and lecturers while mentees are undergraduate students who will be guided by academic staff. In mentoring relationships, mentors are allowed to use their creativity in advising, guiding and supporting mentees to enable them to manage their academic and personal affairs, as well as adapt to university demands and expectations.

In order to accomplish the mentoring program objectives, the leadership of the university has cooperated with all deputy deans for student, academic and international affairs to design content and methods for special training to enable mentors to communicate and support mentees who have different needs and expectations. For example, mentors often use communication skills gained from the courses to deliver necessary knowledge, maintain face-to-face meetings, telephones and/or the internet. In addition, mentors also implement support skills in interpersonal and group meetings.

A careful observation of the mentoring programs reveals that the ability of mentors to openly and honestly communicate useful information and adequately provide material and moral support may enhance mentees' self-efficacy such as proactive personality, adaptability with different social environments in campus and continuous improvement of academic performance. Although the nature of this association is interesting, the effectiveness of mentoring program in enhancing mentees' self-efficacy has not been empirically tested in the university. Therefore, a further investigation about this issue is imperative.

At the initial stage of data collection, the survey questionnaires were drafted based on the information gathered from the mentoring program literature. After that, a back translation technique was employed to translate the survey questionnaires into English and Malay languages in order to increase the validity and ensure the reliability of research findings (Sekaran & Bougie, 2010; Zikmund, 2000).

4.2. Participants

The target population of this study is undergraduate students in a research university in Malaysia. A convenient sampling technique was employed to distribute 150 survey questionnaires to undergraduate students in the organization. This sampling technique was chosen because the management of the organizations had not given the list of undergraduate students and this situation did not allow the researchers to randomly select respondents for this study. From the total number, 136 usable questionnaires from participants were returned to the researchers, yielding 90.7 percent of the response rate. The survey questionnaires were answered by participants based on their consents and on voluntarily basis. The number of this sample exceeds the minimum sample of 30 participants as required by probability sampling technique, showing that it may be analyzed using inferential statistics (Sekaran & Bougie, 2010; Zikmund, 2000).

4.3. Measures

The survey questionnaire used in this study had three sections. Firstly, communication was measured using 4 items that were adapted from mentoring communication system literature (Foxon, 1993; Sullivan, 2000; Yamnill & McLean, 2001; Young & Cates, 2005). The elements used to measure communication are knowledge, understanding and information. Secondly, support was measured using 7 items that were adapted from mentoring support system literature (Tsai & Tai, 2003; Chiaburu & Takleab, 2005; Langhout et al., 2004; Rayle et al., 2006; Vieno et al., 2007). The elements used to measure support are motivation, opinion, praise and help. Thirdly, self-efficacy was measured using 9 items that were adapted from undergraduate student performance literature (Bandura, 1986, 1997; Butler and Winne, 1995; Rayle et al., 2006). The elements used to measure self-efficacy are belief and confident with the mentoring program. All items used in the questionnaires were measured using a 7-item Likert scale ranging from “strongly disagree/dissatisfied” (1) to “strongly agree/satisfied” (7). Demographic variables were used as controlling variables because this study focused on undergraduate business student attitudes.

4.5. Data Analysis

The SmartPLS 2.0 was employed to analyse the survey questionnaire data because it has the capability to deliver latent variable scores, avoid small sample size problems, estimate every complex models with many latent and manifest variables, hassle stringent assumptions about the distribution of variables and error terms, and handle both reflective and formative measurement models (Henseler et al., 2009; Riggle et al., 2009). The procedure of data analysis is: first, confirmatory factor analysis was used to assess the validity and reliability of instrument. Second, Pearson correlation analysis and descriptive statistics were employed to estimate the validity and reliability of constructs. Third, SmartPLS path model analysis was utilized to test the hypothesized model. The outcomes of this test will clearly show the significant relationship between the independent variable and the dependent variable if the value of t statistic larger than 1.96 (Henseler et al., 2009). The value of R^2 is used as an indicator of the overall predictive strength of the model. The value of R^2 are considered as follows; 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998; Henseler et al., 2009). In addition, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzels et al.'s (2006) global fit measure. If the results of testing hypothesized model exceed the cut-off value of 0.36 for large effect sizes of R^2 , showing that it adequately support the PLS path model globally (Wetzels et al., 2006).

5. Results

5.1. Sample Profile

Table 1 shows the respondents' characteristics. The majority of the respondents were female (80.1 percent), their ages varying from 19 to 21 years (73.5 percent), the highest education level amongst the respondents was matriculation certificate (75.0 percent). These respondents were third year students (77.2 percent), studying in the School of Management (54.4 percent), and who achieving CGPA between 3.33 to 3.66 (50.7 percent), and students who study in School of Management (54.4 percent).

Table 1. Respondents' Characteristics (n=136)

Respondents' Profile	Sub-Profile	Percentage
Gender	Male	19.9
	Female	80.1
Age	19 to 21 years old	73.5
	22 to 24 years old	23.5
	25 to 27 years old	2.9
Education	Matriculation	75.0
	STPM	7.4
	Diploma	17.6
Year of Study	Year 1	12.5
	Year 2	8.8
	Year 3	77.2
	Year 4	7
Academic Achievement	CGPA 1.32 and Below	1.5
	CGPA 2.33 to 2.66	2.9
	CGPA 2.67 to 3.00	28.7
	CGPA 3.33 to 3.66	50.7
	CGPA 3.67 to 4.00	15.4
Faculty	School of Management	54.4
	School of Economics	20.6
	School of Accounting	25.0

Note: STPM : Sijil Tinggi Pelajaran Malaysia/ Higher School Certificate

CGPA : Cumulative Grade Performance Achievement

5.2. Model Measurement

The confirmatory factor analysis was employed to assess the psychometric of survey questionnaire data. Table 2 shows the results of convergent and discriminant validity analyses. All constructs had the values of average variance extracted (AVE) larger than 0.5, indicating that they met the acceptable standard of convergent validity (Henseler et al., 2009). Besides that, all constructs had the values of AVE square root in diagonal were greater than the squared correlation with other constructs in off diagonal, showing that all constructs met the acceptable standard of discriminant validity (Henseler et al., 2009; Yang, 2009).

Table 2. The Results of Convergent and Discriminant Validity Analyses

Variable	AVE	Communication	Support	Academic Performance
Communication	0.7997	0.8942		
Support	0.7222	0.57642	0.8498	
Academic Performance	0.7348	0.66227	0.7590	0.8572

Table 3 shows the factor loadings and cross loadings for different constructs. The correlation between items and factors had higher loadings than other items in the different constructs, as well as the loadings of variables were greater than 0.7 in their own constructs in the model are considered adequate (Henseler et al., 2009). In sum, the validity of measurement model met the criteria.

Table 3. The Results of Factor Loadings and Cross Loadings for Different Construct

Construct/ Item	Communication	Support	Self-Efficacy
<u>Communication</u>			
Encourage knowledge sharing	0.899548	0.491754	0.566157
Understand appraisals	0.887915	0.530605	0.598055
Deliver useful information	0.894892	0.513817	0.589845
Encourage to use communication openness	0.894592	0.523982	0.612734
<u>Support</u>			
Encourage to practice new skills	0.534730	0.874558	0.644578
Motivate to improve academic achievement	0.473808	0.870061	0.662072
Motivate to improve interpersonal communication skills	0.489790	0.870518	0.708994
Provide positive comments	0.522642	0.831466	0.586268
Willing to help	0.449114	0.809695	0.579498
Praise for good performance	0.397439	0.838120	0.632275
Explain consequences	0.558579	0.852394	0.684930
<u>Self-Efficacy</u>			
Able determine my study objectives.	0.609304	0.613043	0.855478
Able to adapt with my study.	0.567113	0.624202	0.830883
Able to build my proactive attitudes.	0.565725	0.667338	0.852715

Able to complete my assignments.	0.545252	0.658584	0.878707
Able perform well in my class.	0.533750	0.640161	0.876814
Able to organize my study time.	0.576250	0.640963	0.875039
Encourage me to learn new information	0.560745	0.632383	0.830357
Encourage me to learn new skills	0.550661	0.659149	0.835377
Encourage me to learn problem-solving methods.	0.597570	0.712682	0.877681

Table 4 shows the results of reliability analysis for the instrument. The values of composite reliability and Cronbach’s Alpha were greater than 0.8, indicating that the instrument used in this study had high internal consistency (Henseler et al., 2009; Nunally & Benstein, 1994). These statistical analyses confirmed that the measurement scales met the acceptable standard of validity and reliability analyses as shown in Table 4.

Table 4. Composite Reliability and Cronbach’s Alpha

Construct	Composite Reliability	Cronbach Alpha
Communication	0.941063	0.916517
Support	0.947884	0.935821
Self-Efficacy	0.961434	0.954813

5.3. Analysis of Constructs

Table 5 shows that the mean values for the variables are between 5.3 and 5.7, showing that the levels of communication, support and academic performance are ranging from high (4) to highest level (7). The correlation coefficients for the relationship between the independent variable (i.e., communication and support) and the dependent variable (i.e., academic performance) are less than 0.90, showing the data are not affected by serious collinearity problem (Hair et al, 2006).

Table 5. Pearson Correlation Analysis and Descriptive Statistics

Variable	Mean	Standard Deviation	Pearson Correlation analysis (r)		
			1	2	4
1. Communication	5.7	.81	1		
2. Support	5.3	.99	.57**	1	
3. Self-Efficacy	5.6	.87	.66**	.76**	1

Note: Significant at ** $p < 0.01$

Reliability Estimation is Shown in a

Diagonal ($r=1$)

5.4. Outcomes of Testing Hypotheses 1 and 2

Figure 2 shows the outcomes of SmartPLS path model for testing the direct effects model. In terms of exploratory of the model, the inclusion of communication and support in the analysis had explained 65 percent of the variance in dependent variable. Specifically, results of testing hypothesis highlighted two important findings: first, communication significantly correlated with self-efficacy ($\beta=0.34$; $t=4.76$), therefore H1 was supported. Second, support significantly correlated with self-efficacy ($\beta=0.56$; $t=8.00$), therefore H2 was supported. In sum, the result confirms that mentoring program does act as an important determinant of mentees' self-efficacy in the organizational sample.

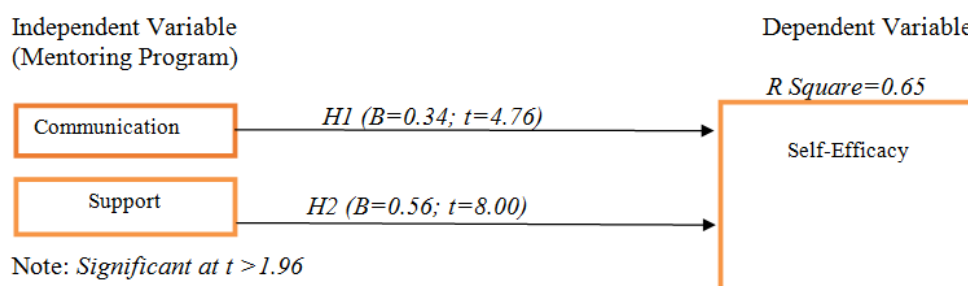


Figure 2. The Outcomes of SmartPLS Path Model

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al.'s (2009) guideline as follows: $GoF = \sqrt{\text{MEAN (Communality of Endogenous)} \times \text{MEAN (R}^2\text{)}} = 0.70$, signifying that it exceeds the cut-off value of 0.36 for large effect sizes of R^2 . This result confirms that the PLS path model has better explaining power in comparison with the baseline values (GoF small=0.1, GoF medium=0.25, GoF large=0.36). It also provides strong support to validate the PLS model globally (Wetzel et al., 2009).

6. Discussion and Implications

The findings of this study confirm that mentoring program does act as an important predictor of mentees' self-efficacy in the organization studied. In the context of this study, mentors plan and implement mentoring activities based on the stakeholder's needs and expectations. The majority of the respondents perceived that the levels of communication, support and self-efficacy is high. This situation explains that the

readiness of mentors to implement mentor-mentee communication and support program has enhanced mentees' self-efficacy in the organization.

This study presents three major implications: theoretical contribution, robustness of research methodology, and practical contribution. In terms of theoretical contribution, the results of this study highlight that communication and support have been important determinants of mentees' self-efficacy. This result is consistent with studies by DuBois and Neville (1997), Santos and Reigadas (2005), Rayle et al. (2006), and Ismail and Ridzwan (2012). With respect to the robustness of research methodology, the survey questionnaires used in this study have met the acceptable standards of validity and reliability analyses. This may lead to the production of valid and reliable findings. With regards to practical contributions, the findings of this study may be used to improve the design and administration of mentoring programs in institutions of higher learning. Compatible suggestion would be: firstly, update training content and methods for mentors to in order to improve their competencies in teaching, counseling and guiding students who have different ability levels. Secondly, form mentoring groups according to students' academic achievement in order to ease mentors fulfilling their needs and expectations. Thirdly, mentors who have high teaching loads and active in research, but can show high commitment in improving student studies need to be given a high priority in getting better promotions. Fourthly, plan various kinds of learning activities in order to attract students who have different interests and capabilities to be actively involved in mentoring programs. Fifthly, give recognition to student who have continue discussing with Ismail after 11.48 am actively participated in mentoring activities and show improvement in academic performance. If these suggestions are given more attention this may motivate mentees to support mentoring program strategy and goals.

7. Conclusion

The study developed a conceptual framework based on the higher education mentoring program research literature. The confirmatory factor analysis confirmed that the instrument used in this study met the acceptable standards of validity and reliability analyses. Thus, the results of SmartPLS path model showed two important findings: first, communication was positively and significantly correlated with mentees' self-efficacy. Second, support was positively and significantly correlated with mentees' self-efficacy. This result confirms that mentoring program

does act as an important predictor of mentees' self-efficacy in the organizational sample. This result also support and broadened mentoring program research literature mostly published in Western countries. Therefore, current research and practice within higher education student development program needs to consider communication and support as fundamental elements in the mentoring program domain. This study further suggests that the readiness of mentors to communicate and provide adequate support will be important factors that may induce subsequent positive mentee outcomes (e.g., commitment, career, psychosocial and ethics). These, positive outcomes may lead to the enhancement of the performance of higher learning institutions.

Despite the above encouraging implications, the conclusions drawn from this study should consider the following limitations. First, a cross-sectional research design used to gather data at one time within the period of study might not capture the causal connections between variables of interest. Second, this study does not specify the relationship between specific indicators for the independent variable and dependent variable. Third, the outcomes of SmartPLS path model have only focused on the level of performance variation explained by the regression equations, but there are still a number of unexplained factors that affect the causal relationship among variables and their relative explanatory power. Finally, this study used a convenient sampling technique to collect data from one institution of higher learning in Malaysia. Although this sampling technique is often used in management research, its result may not be able to represent the whole population characteristics. These limitations may decrease the ability to generalize the results of this study to other organizational settings.

The conceptual and methodological limitations of this study should be considered when designing future research. First, several organizational and personal characteristics should be further explored, as these may provide meaningful perspectives for understanding how individual similarities and differences influence the mentoring program within an organization. Second, other research designs (e.g., longitudinal studies) should be used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest (Sekaran & Bougie, 2010; Zikmund, 2000). Third, to fully understand the effect of mentoring program on mentee attitudes and behavior, more institutions of higher learning need to be used in future studies. Fourth, other specific theoretical constructs of mentoring program, such as learning abilities, decision making, and assignment need to be considered because they have widely

been recognized as an important link between mentoring program and mentee's self-efficacy (Davis, 2007; Dutton, 2003). Finally, other outcomes of mentee like self-efficacy, transfer of knowledge, skills and ability, positive change, and career help should be considered because they exist in mentoring program research literature (Fox et al., 2010; Hansford & Ehrich, 2006; Ismail et al., 2006; Ismail & Ridzwan, 2012). The importance of these issues needs to be further explained considered in future studies.

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