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Linking Mentoring Program to Self-Efficacy as a Predictor of Mentee Outcomes

[1]Azman Ismail, [2]Mohd Noor Mohd Shariff, [1]Michael Kho Khian Jui and [1]Norashikin Sahol Hamid
[1]Faculty of Defence and Management Studies, National Defence University of Malaysia,
Sungai Besi Camp., 57000 Kuala Lumpur, Malaysia
[2]School of Business Management, College of Business, Universiti Utara Malaysia,
06010 UUM Sintok, Kedah, Malaysia

Abstract: The purpose of this study is to examine the influence of self-efficacy in the relationship between mentoring program practices and mentee outcomes using 196 usable questionnaires collected from students studying in institutions of higher learning in Sarawak, Malaysia. The outcomes of stepwise regression analysis showed two important findings; firstly, the relationship between self-efficacy and mentoring program practices (i.e., communication, participation and support) is insignificantly correlated with psychosocial. Secondly, the relationship between self-efficacy and mentoring program practices (i.e., communication, participation and support) is significantly correlated with academic performance. Statistically, this result confirms that the relationship between self-efficacy and mentoring program practices has not been an important predictor of psychosocial but the relationship between self-efficacy and mentoring program practice has been an important predictor of academic performance in the organizational sample.

Key words: Mentoring program practices, self-efficacy, psychosocial and academic performance, Sarawak, commication, Malaysia

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 protege who has less experience) about the tips for handling challenging lifestyles before he goes to the Trojan War (Edlind and Haensly, 1985; Merriam, 1993). Based on this classical story, mentoring is often related to as an important field of education (Little *et al*., 2010; Johnson *et al*., 1991) and/or counseling (Gregson, 1994) whereby mentors are the elderly whom have wisdom, experiences and can be trusted to educate young men who have little experience and knowledge (Little *et al*., 2010; Johnson *et al*., 1991; Russell and Adams, 1997; Wanguri, 1996).

Hence, it has inspired organizational development scholars to generally interpret the concept and practice of mentoring programs in line with the development of the current organizational practices (Dennison, 2000; Northcott, 2000; Oliver and Aggleton, 2002). In an organizational context, mentoring is often viewed as a method of training and development program where relationship between mentors (i.e., knowledgeable and experienced person) and mentee (i.e., less knowledgeable and experienced person) can help to increase group and/or individuals' potentials in carrying out particular duties and responsibilities, familiarize with new techniques and care for all aspects of mentees (Cummings and Worley, 2009; Johnson *et al*., 1991; Long, 2002).

Mentoring models differ according to different organizational contexts and there is no one best model to fit all organizations. These models have been designed and administered based on differences and uniqueness of an organization in terms of beliefs, policy, orientations, stresses, strengths and weaknesses (Irving *et al*., 2003; Santos and Reigadas, 2002, 2005).

These factors have affected organizations to design and administer the types of mentoring program: informal relationship (e.g., specific demands, spontaneous and adhoc) and/or formal relationship (e.g., structured and coordinated relationship between mentor and mentee using standard norms, continuously action plans, time frame and particular objectives). In modern organizations, informal mentoring programs are often used to complement and strengthen formal mentoring programs in order to support organizational strategies and goals

Corresponding Author: Azman Ismail, Faculty of Defence and Management Studies,
National Defence University of Malaysia, Sungai Besi Camp., 57000 Kuala Lumpur, Malaysia

(Friday and Friday, 2002; Hansford and Ehrich, 2006; Hansford *et al*., 2003). In the early development of human resource literature much emphasize is highlighted on the characteristics of mentoring programs (Hansford and Ehrich, 2006; Zuraidah *et al*., 2004). For example, mentoring programs have three salient practices, i.e., communication openness between mentors and mentees, active participation among mentees in formal and informal meetings and mentors support the implementation of mentoring programs (Santos and Reigadas, 2005; Rayle *et al*., 2006; Vieno *et al*., 2007). According to many scholars such as Santos and Reigadas (2005) view communication openness 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. While active participation on the other hand is often viewed as mentors and mentees being actively involved in mentoring activities or events together as scheduled by the organization/s (Allen *et al*., 2005; Santos and Reigadas, 2002).

Mentors supporting the implementation of mentoring programs is often seen as mentors providing advises and encouraging mentees to overcome job and personal problems such as stress, motivation, work relationships, performance and ethnics (Rayle *et al*., 2006; Stewart and Knowles, 2003). Extant studies in university/faculty mentoring programs highlight that the ability of mentors to properly implement such mentoring characteristics may give a significant impact on mentee outcomes, especially in the psychosocial sense (DuBois and Neville, 1997; Vieno *et al*., 2007) and academic performances (Fox *et al*., 2010; Zajacova *et al*., 2005; Rayle *et al*., 2006). In an institution of higher learning context, psychosocial is often viewed as students making preparations to adapt to campus life which entails social integration well being and self confidence (Dutton, 2003; Pope, 2002; Santos and Reigadas, 2005).

Conversely, academic performance is usually evaluated by the students' persistence rates, graduation rates and grade-point average (Granger, 1995; Levin and Levin, 1991; Santos and Reigadas, 2005). Surprisingly, a thorough review of such mentoring programs reveals that the effect of mentoring program practices on mentee outcomes is not direct but it is indirectly influenced by perceptions of self-efficacy (Rayle *et al*., 2006; Vieno *et al*., 2007).

According to Bandura (1993, 2000), self-efficacy is viewed as a person's perception of his or her capabilities to attain a specific task or goal. Within a mentoring program model many scholars perceive that communication, participation, support, psychosocial and academic performance are distinct constructs but strongly interrelated. For example, the ability of mentors to properly practice mentoring programs will strongly invoke mentees' self-efficacy about the programs. As a result, it may lead to increased positive mentee outcomes, especially in the area of psychosocial (Santos and Reigadas, 2005; Vieno *et al*., 2007) and academic performances. The nature of this relationship is significant but the mediating role of self-efficacy has been given less emphasis in mentoring program models (Rayle *et al*., 2006; Santos and Reigadas, 2005; Vieno *et al*., 2007).

Many scholars reveal that this situation is due to many previous studies being over emphasized on a segmented approach and direct effects model in analyzing mentoring programs but less emphasized on the significance of self-efficacy in developing mentoring program models. As a result, the findings of these studies have not captured dynamic changes of human believes in influencing the effectiveness of mentoring programs in organizations (Rayle *et al*., 2006; Vieno *et al*., 2007). Thus, it motivates the researcher to future explore the nature of this relationship.

Purpose of the study: This study has two major objectives: firstly, it is to measure the mediating effect of self-efficacy in the relationship between mentoring program practices (i.e., communication, participation and support) and psychosocial. Secondly, it is to measure the mediating effect of self-efficacy in the relationship between mentoring program practices (i.e., communication, participation and support) and academic performance.

Relationship between mentoring program practices, self-efficacy and mentee outcomes: Several recent studies used an indirect effect model to investigate mentoring activities based on different samples like perceptions of 678 faculty students on mentoring communication systems at higher educational institutions in the United States (Campbell and Campbell, 1997); perceptions of 39 big brothers/big sisters and undergraduate students mentors on mentoring participation program at a large university located in America (DuBois and Neville, 1997); perceptions of 32 students on mentoring participation styles in higher education located in United States (Santos and Reigadas, 2002); perceptions of 65 college students on mentoring communication systems at Faculty Mentoring Program (FMP) in United States (Santos and Reigadas, 2005); perceptions of 527 female undergraduates on mentoring support systems in

Southwestern University (Rayle *et al*., 2006) and perceptions of 7097 students on mentoring support systems in Northern Italy (Vieno *et al*., 2007). Findings from these studies reported that the ability of mentors to properly implement communication, participation and support in mentoring activities had increased mentees self-efficacy and this could lead to an enhanced mentees' psychosocial (DuBois and Neville, 1997; Santos and Reigadas, 2002, 2005; Vieno *et al*., 2007) and academic performance (Campbell and Campbell, 1997; Rayle *et al*., 2006).

The mentoring research literature is consistent with the notion of Bandura (1993, 2000)'s social cognitive theory where it highlights that self-efficacy is a motivating factor that may invoke an individual's believe about his/her capability in organizing, regulating and executing his/her behavior to meet certain levels of performance. Application on this theory in institutions of higher learning shows that the ability of mentors to properly implement communication, participation and support in formal and/or informal mentoring relationships will strongly invoke mentees' self-efficacy. Consequently, it may lead to increased mentees' psychosocial (Santos and Reigadas, 2005; Vieno *et al*., 2007) and academic performance (Rayle *et al*., 2006; Santos and Reigadas, 2002).

Conceptual framework and research hypothesis: The theoretical and empirical evidence were used as a foundation of establishing the conceptual framework for this study as shown in Fig. 1. Based on the conceptual framework, it can be hypothesized that:

H_1: Self-efficacy positively mediates the effect of communication on psychosocial
H_2: Self-efficacy positively mediates the effect of participation on psychosocial
H_3: Self-efficacy positively mediates the effect of support on psychosocial
H_4: Self-efficacy positively mediates the effect of communication on academic performance
H_5: Self-efficacy positively mediates the effect of participation on academic performance
H_6: Self-efficacy positively mediates the effect of support on academic performance

MATERIALS AND METHODS

Research design: This study used a cross-sectional research design that allowed the researchers to integrate

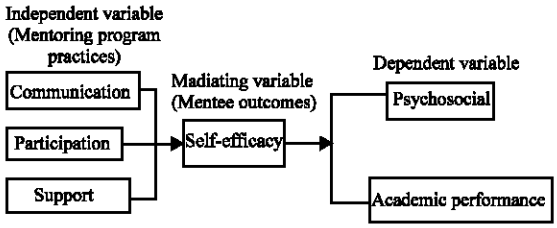

Fig. 1: Self-efficacy mediates the relationship between mentoring program practices and mentee outcomes

mentoring program literature, the in-depth interview and the pilot study as a main procedure to gather data. Using such methods may gather accurate data, decrease bias and increase quality of data being collected (Sekaran, 2002; Zikmund, 2000).

The location of this study is Malaysian institutions of higher learning in Sarawak. For confidential reasons, the name of the organizations used is kept anonymous. At the initial stage of data collection, the in-depth interviews were conducted involving 5 senior year students (2nd year and above) in public institutions and 5 senior year students (2nd year and above) in private institutions, respectively.

They are selected based on purposive sampling where they have good knowledge and experiences in mentoring programs. The information gathered from this interview method helped the researchers to understand the mentoring program practices, self-efficacy features, psychosocial and academic performance characteristics as well as the relationship between such variables in the institutions. This information was transcribed, categorized and compared with the relevant mentoring program literature.

Next, the triangulated outcomes were used as a guideline to develop the content and format of the survey questionnaires. In order to verify that all questions were importance, relevance, clear and suitable for an actual study, the researchers have discussed the survey questionnaires with the interviewed participants.

After that back-to-back translation techniques were used to translate the survey questionnaires into English and Malay languages in order to increase the validity and ensure the reliability of research findings (Hulland, 1999; Hussey and Hussey, 1997).

Measures: The survey questionnaire used in this study had 6 sections. Firstly, communication was measured

using 6 items that were adapted from mentoring communication system literature (Foxon, 1993; Sullivan, 2000; Yamnill and McLean, 2001; Young and Cates, 2005). Secondly, participation was measured using 7 items that were adapted from mentoring participation style (Bisk, 2002; Hansford and Ehrich, 2006; Weber *et al*., 2004). Thirdly, support was measured using 8 items that were adapted from mentoring support system literature (Tsai and Tai, 2003; Chiaburu and Tekleab, 2005; Langhout *et al*., 2004; Rayle *et al*., 2006; Vieno *et al*., 2007). Fourthly, self-efficacy was measured using 9 items that were modified from self-efficacy related mentoring program literature (Bandura, 1993, 2000; Butler and Winne, 1995; Paglis *et al*., 2006; Rayle *et al*., 2006; Santiago and Einarson, 1998; Weber *et al*., 2004). Fifthly, psychosocial was measured using 8 items that were modified from undergraduate student psychosocial literature (Allen *et al*., 2005; Noe, 1988; Noe *et al*., 2002). Finally, academic performance was measured using 10 items that were adapted from undergraduate student performance literature (Campbell and Campbell, 1997; Irving *et al*., 2003; Rayle *et al*., 2006). 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 student attitudes.

Unit of analysis and sampling: The population of this study is undergraduate students in Malaysian institutions of higher learning in Sarawak, Malaysia. The researchers had obtained an official approval to conduct the study from the heads and management of the organizations and also received advice from them about the procedures of conducting the survey in the organization. Based the information given the researchers had distributed 250 survey questionnaires using a convenient sampling technique to undergraduate students in the public and private institutions.

The convenient sampling was chosen because the heads and management of the organizations did not give the list of employees and this situation had not allowed the researchers to randomly select respondents for this study. From the survey questionnaires distributed, 196 usable questionnaires from the institutions of higher learning were returned to the researchers and yielding 78.4% 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 2002; Zikmund, 2000).

Data analysis: A Statistical Package for Social Science (SPSS) Version 17.0 was used to analyze the data. Firstly, exploratory factor analysis was used to assess the validity and reliability of measurement scales (Coakes and Steed, 2002; Hair *et al*., 2006; Nunally and Bernstein, 1994). Secondly, Pearson correlation analysis and descriptive statistics were conducted to determine the collinearity problem, further confirm the validity and reliability of constructs (Coakes and Steeds, 2002; Hair *et al*., 2006; Nunally and Bernstein, 1994).

Finally, stepwise regression analysis was recommended to assess the magnitude and direction of each independent variable and vary the mediating variable in the relationship between many independent variables and one dependent variable (Aiken *et al*., 1991; Baron and Kenny, 1986). Baron and Kenny (1986) suggest that a mediating variable can be considered in stepwise regression analysis when a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variables into the analysis. In this regression analysis, standardized coefficients (standardized beta) were used for all analyses.

RESULTS AND DISCUSSION

Sample profile: Table 1 shows the respondents' characteristics. The majority of the respondents were female (70.9%) their age varies from 22-24 years (70.4 %), the highest education level amongst the respondents were STPM holders (51.0%), (68.9%) comprises of 3rd year students being the majority in the respondent

Table 1: Respondents' characteristics (n = 196)

Respondents' profile	Sub-profile	Percentage
Gender	Male	29.1
	Female	70.9
Age (years)	19-21	25.0
	22-24	70.4
	25-27	4.6
The highest educational level	SPM/MCE	6.1
	STPM/HSC	51.0
	Diploma	10.8
	Matriculation	32.1
Current year of study	2nd year	6.1
	3rd year	68.9
	4th year	24.5
	5th year	0.5
Academic achievement	CGPA 2.01-2.50	5.6
	CGPA 2.51-3.00	34.7
	CGPA 3.01-3.50	48.5
	CGPA 3.51-4.00	11.2
Institution	Public	85.7
	Private	14.3

SPM/MCE: Sijil Pelajaran Malaysia/Malaysia Certificate of Education; STPM/HSC: Sijil Tinggi Pelajaran Malaysia/Higher School Certificate; CGPA: Purata Poin Gred Terkumpul/Cummulative Grade Point Average

Table 2: The results of validity and reliability analyses for the measurement scales

Measures	Items	Factor loadings	KMO	Bartlett Test of Sphericity	Eigen value	Variance explained	Cronbach alpha
Communication	6	0.51-0.82	0.82	445.82	3.38	56.40	0.84
Participation	7	0.54-0.72	0.86	706.04	4.18	59.73	0.88
Support	8	0.63-0.82	0.92	1.041E3	5.27	65.83	0.93
Self-efficacy	9	0.54-0.87	0.92	1.362E3	6.06	67.33	0.94
Psychosocial	8	0.59-0.79	0.93	1.078E3	5.30	66.23	0.92
Academic performance	1	0.52-0.76	0.92	1.315E3	6.21	62.06	0.93

group, students achieving CGPA between 3.01-3.50 also being the majority amongst the respondents consists of (48.5%) and students who study in a public institution consists of (85.7%).

Exploratory factor analysis: Table 2 shows the results of validity and reliability analyses for the measurement scales. A factor analysis with direct oblimin rotation was first done for five variables with 87 items and based on this factor analysis the number of items was condensed to 48 items which related to communication (6 items), participation (7 items), support (8 items), self-efficacy (9 items), psychosocial (8 items) and academic performance (10 items). Next, Kaiser-Mayer-Olkin Test (KMO) that is a measure of sampling adequacy was conducted for each variable.

Relying on Hair *et al.* (2006) and Nunally and Bernstein (1994)'s guideline, these statistical analyses showed that the value of factor analysis for all items that represents each research variable was 0.5 or above indicating the items had met the acceptable standard of validity analysis, all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6 were significant in Bartlett's Test of sphericity, all research variables had eigenvalues <1, all research variables had variance explained <0.45 (Hair *et al.*, 2006) and all research variables exceeded the acceptable standard of reliability analysis of 0.70 (Nunally and Bernstein, 1994). These statistical analyses confirmed that the measurement scales met the acceptable standard of validity and reliability analyses as shown in Table 2.

Analysis of the construct: Table 3 shows that the mean values for the variables are between 4.9 and 5.5, signifying that the levels of communication, participation, support, self-efficacy, psychosocial and academic performance are ranging from high to highest level. The correlation coefficients for the relationship between the independent variable (i.e., communication, participation and support) and the mediating variable (i.e., self-efficacy) and the relationship between the dependent variable (i.e., psychosocial and academic performance) are <0.90, indicating the data are not affected by serious collinearity problem (Hair *et al.*, 2006).

Table 3: Pearson correlation analysis and descriptive statistics

		Pearson correlation analysis (r)					
Variables	Mean±SD	1	2	3	4	5	6
Communication	5.5±0.79	1					
Participation	5.0±0.99	0.64**	1				
Support	5.1±1.07	0.41**	0.45**	1			
Self-Efficacy	4.9±1.03	0.49**	0.61**	0.45**	1		
Psychosocial	5.3±0.82	0.46**	0.55**	0.41**	0.44**	1	
Academic performance	5.3±0.81	0.49**	0.52**	0.45**	0.55**	0.72*	1

Significant at **p<0.01; reliability estimation are shown in a diagonal (value 1)

Table 4: The results of stepwise regression analysis

	Dependent variable (psychosocial)		
Variables	Step 1	Step 2	Step 3
Controlling			
Gender	0.03	0.06	0.07
Age	0.06	0.16*	0.16*
Level of education	-0.15	-0.11	-0.11
Current year of study	0.18	0.10	0.11
Academic achievement	-0.01	0.02	0.03
Program	-0.08	-0.17	-0.18
Faculty	-0.08	-0.09	-0.08
Institution	0.30	0.19	0.20
Independent			
Communication	-	0.11	0.10
Participation	-	0.45***	0.39***
Support	-	0.16*	0.13*
Mediating			
Self-efficacy	-	-	0.13
R^2	0.07	0.40	0.41
Adjusted R^2	0.03	0.34	0.01
R^2 change	0.07	0.34	0.01
F	1.67	11.27***	10.68***
F change R^2	1.67	34.49***	2.90

Significant at *p<0.05, **p<0.01, ***p<0.001

Outcome of testing hypotheses 1-3: Table 4 shows that demographic variables were entered in step 1 and then followed by entering independent variable (i.e., mentoring program practices) in step 2 and mediating variable (i.e., self-efficacy) in step 3.

Psychosocial was used as the dependent variable. An examination of multicollinearity in the regression analysis shows that the tolerance value for the relationship between the independent variable (i.e., communication, participation and support) and the dependent variable (i.e., psychosocial) were 0.91, 0.89, 0.93, 0.93 and 0.59, respectively. While the tolerance value for the relationship between the independent variable (i.e., communication, participation and support), the mediating

Table 5: The results of stepwise regression analysis

	Dependent variable (academic performance)		
Variables	Step 1	Step 2	Step 3
Controlling			
Gender	0.08	0.11	0.14**
Age	0.05	0.15	0.15*
Level of education	-0.16	-0.10	-0.10
Current year of study	0.14	0.05	0.09
Academic achievement	0.06	0.10	0.12*
Program	0.04	-0.05	-0.09
Faculty	-0.06	-0.03	-0.01
Institution	0.22	0.08	0.12
Independent			
Communication	-	0.20**	0.16*
Participation	-	0.33***	0.19*
Support	-	0.22***	0.15*
Mediating			
Self-efficacy	-	-	0.32***
R^2	0.08	0.41	0.47
Adjusted R^2	0.04	0.38	0.43
R^2 change	0.08	0.33	0.06
F	1.99*	11.66***	13.48***
F change R^2	1.99*	34.59***	20.15***

Note: Significant at *p<0.05, **p<0.01, ***p<0.001

variable (i.e., self-efficacy) and the dependent variable (i.e., psychosocial) was 0.56. These tolerance values were more than the established tolerance value of 0.20 (as a rule of thumb), indicating the variables were not affected by multicollinearity problems (Fox, 1991). Table 4 shows the results of testing hypotheses in step 3. The inclusion of self-efficacy in this step of the process reveals that relationship between self-efficacy and mentoring program practices (i.e., communication, participation and support) is positively and insignificantly correlated with psychosocial (β = 0.13, p>0.05), therefore H_1-H_3 were not supported. Statistically, this result confirms that self-efficacy does not act as a mediating variable in the relationship between mentoring program practices and psychosocial in the studied organizations.

Outcome of testing hypotheses 4-6: Table 5 shows that demographic variables were entered in step 1 and then followed by entering independent variable (i.e., mentoring program practices) in step 2 and mediating variable (i.e., self-efficacy) in step 3. Academic performance was used as the dependent variable. An examination of multicollinearity in the regression analysis shows that the tolerance value for the relationship between the independent variable (i.e., communication, participation and support) and the dependent variable (i.e., psychosocial) were 0.91, 0.89, 0.93, 0.93 and 0.59, respectively. While the tolerance value for the relationship between the independent variable (i.e., communication, participation and support), the mediating variable (i.e., self-efficacy) and the dependent variable (i.e., academic performance) was 0.56. These tolerance values were more than the established tolerance value of 0.20 (as a rule of thumb), indicating the variables were not affected by multicollinearity problems (Fox, 1991). Table 5 shows the results of testing hypotheses in step 3. The inclusion of self-efficacy in step 3 of the process reveals that relationship between self-efficacy and mentoring program practices (i.e., communication, participation and support) is positively and significantly correlated with academic performance (β = 0.32, p<0.001), therefore H_4-H_6 were fully supported. In terms of explanatory power, the inclusion of self-efficacy in step 3 had explained 47% of the variance in dependent variable. Statistically, this result confirms that self-efficacy does act as an important mediating variable in the relationship between mentoring program practices and academic performance in the studied organizations.

IMPLICATIONS

The findings of this study demonstrates that effect of mentoring program practices on mentees' psychosocial is not indirectly affected by mentees' self-efficacy but effect of mentoring program practices on mentees' academic performance is indirectly affected by mentees' self-efficacy in the studied organizations. In sum, this study confirms that self-efficacy does act as a partial mediating variable in the relationship between mentoring program practices and mentee outcomes.

Further, 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 two major findings: firstly, self-efficacy has mediated the effect of mentoring program practices (i.e., communication, participation and support) on academic performance.

This result is consistent with studies by Campbell and Campbell (1997), Santos and Reigadas (2002) and Rayle *et al.* (2006). Secondly, self-efficacy has not mediated the effect of mentoring program practices (i.e., communication, participation and support) on psychosocial. A careful observation of the information gathered from in-depth interview shows that this result may be affected by external factors.

Firstly, majority mentors have many workloads and they do not have enough time to arrange meetings with their mentees. In this situation, mentors feel that they have constraints to communicate the important information to mentees, actively plan and involve in formal and informal activities and provide material and moral support to mentees who have different needs and expectations. Secondly, each mentor has many mentees to

guide. For example, in faculties/schools/departments with a large number of students, one mentor usually has to guide 40-50 mentees. In this situation, the majority of the mentors feel that they have to give most focus on discussing general issues (e.g., personality development and study) and entertaining immediate mentees problems (e.g., class attendance, expenses, transport and discipline).

These factors have not increased mentee's self-efficacy in mentoring programs and this may lead to decreased mentees' psychosocial in the higher learning institutions. With respect to the robustness of research methodology, the survey questionnaires used in this study have exceeded a minimum standard of validity and reliability analyses; this can lead to the production of accurate findings.

In terms of practical contributions, the findings of this study may be used to improve the management of undergraduate mentoring programs in Asian institutions of higher learning. In order to achieve this objective, management may give priority to improve the following aspects: firstly, update training content and methods for mentors to improve their competencies in teaching and guiding students. Secondly, form mentoring groups according to students' academic achievement in order to ease mentors handling their needs and expectations. Thirdly, plan various kinds of learning activities to attract students who have different interests and capabilities to actively involve in mentoring programs. If these suggestions are heavily considered this may enhance the ability of undergraduate students to succeed in their studies.

CONCLUSION

This study used a conceptual framework that was developed based on the mentoring program research literature. The measurement scales used in this study met the standards of validity and reliability analyses. The outcomes of stepwise regression analysis confirmed that self-efficacy had mediated the effect of mentoring program practices (i.e., communication, participation and support) on academic performance. This result has also supported training assignment literature mostly published in Western countries.

Conversely, self-efficacy had not mediated the effect of mentoring program practices (i.e., communication, participation and support) on psychosocial in the organizational sample. This result may be affected by two major external factors i.e., majority mentors do not have sufficient time and energy to commit with mentoring programs because they have to handle many workloads and guide many mentees in their organizations. Therefore, current research and practice within the mentoring program model needs to consider self-efficacy as a crucial dimension in the mentoring program domain. This study further suggests that the ability of mentors to properly practice mentoring activities will strongly invoke mentee's self-efficacy and this may lead to increased positive mentee outcomes (e.g., satisfaction, commitment, career, leadership skills and ethics). Thus, these positive outcomes may motivate students to maintain and support institutions of higher learning goals, mission and vision in an era of global competition.

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