
MENTORS' COMMUNICATION STYLES AS PREDICTORS OF MENTEES' ACADEMIC PERFORMANCE

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Abstract:

According to an organizational mentoring literature, mentors often implement two important communication styles: interpersonal communication and communication openness. The ability of mentors to properly implement such communication styles may lead to an increased mentees' academic performance. Although this relationship is interesting, little is known about the effectiveness of mentors' communication styles as a predicting variable in the mentoring program models. Therefore, this study was conducted to examine the relationship between mentors' communication styles and academic performance using self-report questionnaires collected from undergraduate students in a defence based university, Malaysia. The outcomes of testing hypothesis using a multiple regression analysis showed two important findings: firstly, interpersonal communication insignificantly correlated with academic performance. Secondly, communication openness significantly correlated with academic performance. Statistically, this result confirms that the ability of mentors implement interpersonal communication has not been an important predictor of academic performance. Conversely, the ability of mentors practice communication openness has been an important predictor of academic performance in the studied organization. Further, discussion, implication and conclusion are elaborated.

Key words: *Interpersonal communication, communication openness, academic performance, mentoring program*

1. Introduction

Mentoring is often viewed as an important training, education and/or counselling methods, which are planned and implemented to enhance human

potentials to meet organizational needs and expectations (Cummings & Worley, 2009; Ismail et al., 2012). In a Western history, mentoring is first highlighted in the epic story of 'The Odyssey' written by Homer. For example, mentor is referred to a more senior person who has great wisdom and trustworthy; named for a fable character in Homer's the Odyssey who taught the title character's son (mentee or protégé) about the tips for handling challenging lifestyle before he goes to the Trojan war (Edlin & Haensly, 1985; Merriam, 1993; Ismail et al., 2005, 2011, 2012). Based on this story, term mentoring is formed based on two interrelated words: mentor and mentee. Mentor is generally defined as a more knowledgeable and experience person (e.g., lecturer and senior people) and mentee is broadly defined as a less knowledgeable and experience person (e.g., student and junior people). This historical perspective has inspired contemporary management scholars to interpret the role and significance of mentoring programs in developing and enhancing the capability of group and/or individuals to carry out duties and responsibilities for achieving organizational strategy and goals (Cummings & Worley, 2009; Hansford & Ehrich, 2006; Ismail et al., 2005, 2011, 2012).

In organizations, mentoring programs are often implemented in two major types: formal activity and informal activity. Formal mentoring activity is usually employed based on structured and coordinated relationships using standard norms, continuously action plans, time frame, and particular objectives while informal mentoring program is usually done based on specific demands, spontaneous and ad-hoc. In practice, informal mentoring programs are often used to complement and strengthen formal mentoring programs in order to achieve organisational strategies and goals (Hansford & Ehrich, 2006; Hansford et al., 2003; Ismail et al., 2011, 2012). The goals of *mentoring* are to "increase desirable behavior, decrease undesirable behavior" (Eby, Allen, Evans, Ng, & DuBois, 2008, p.256), and foster growth and development for the mentee (Keller, 2007). These goals are accomplished by the mentors by building trust, providing understanding, and creating relationship reciprocity (Zeldin, Larson, Camino, & O'Connor, 2005). *In* this manner, communication practices seem to be the process by which positive individual changes occur in organisations.

According to formal and informal mentoring program literature, mentors frequently deal with mentees using two major communication styles: interpersonal communication and communication openness (Ismail et al, 2012; Santos & Reigadas, 2005; Vieno et al., 2007). In general, interpersonal communication includes communication that is personal and occurring between people who are more than acquaintances (Peter, 1974). Another view is a goals approach; in which interpersonal communication includes communication used to define or attain personal goals through interaction with others (Canary, Cody, & Manusov, 2003). Thus, interpersonal communication is often viewed as mentors who share their knowledge, feelings, thoughts and experience with mentees to increase group and/or individual's potentials in carrying out particular duties and responsibilities, familiarize with new techniques and care for almost all aspects of mentee (Cummings & Worley, 2009; Johnson et al., 1991; Long, 2002). Comparatively, openness is defined as a quality of interpersonal effectiveness include a willingness to interact openly with others, to self-disclose as

appropriate; a willingness to react honestly to incoming stimuli; and a willingness to own your feelings and thoughts (DeVito, 2008). The open of communication is one where a high degree of information sharing occurs (Troy et al., 2001). In view of that, communication openness is usually seen as mentors openly delivering information about the procedures, content, tasks, objectives and benefits of attending mentoring programs to mentees, as well as mentors conducting honest and comfortable discussions about mentees' academic and personal matters (Santos & Reigadas, 2005; Rayle et al., 2006; Vieno et al., 2007).

Interestingly, recent studies in university/faculty mentoring programs highlight that the ability of mentors to properly implement interpersonal communication and communication openness may give a significant impact on mentee outcomes, especially academic performances (Ismail et al., 2005, 2011, 2012; Santos & Reigadas, 2005). Several studies have used a student's cumulative GPA as a measure of academic achievement and performance at the university level (Burger, 1992; McKenzie, Gow & Schweitzer, 2004; Nguyen, Allen, & Fraccastoro, 2005; Svanum & Zody, 2001). Similarly, other scholars like Granger (1995), Santos and Reigadas (2005), and Ismail et al. (2011, 2012) commonly consider academic performance as students' persistence rates, graduation rates, and cumulative grade-point average. In an undergraduate mentoring program model, many scholars think that interpersonal communication, communication openness, and academic performance are distinct, but strongly interrelated constructs. For example, the ability of mentors to properly practice interpersonal communication and communication openness may lead to an increased mentees' academic performance (Ismail et al., 2011, 2012, Santos & Reigadas, 2005). Although the relationship is significant, little is known about the effectiveness of mentors' communication styles as a predicting variable in mentoring program research literature (Ismail et al., 2012; Rayle et al., 2006; Santos & Reigadas, 2005; Vieno et al., 2007). Thus, it persuades the researchers to further examine the nature of this relationship.

2. Literature Review

Several recent studies used a direct 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 & Campbell, 1997), perceptions of 65 college students on mentoring communication systems at Faculty Mentoring Program in United States (Santos & Reigadas, 2005), and views of 196 undergraduate students from institutions of higher learning in Malaysia (Ismail et al., 2012). Findings from these studies advocated that the ability of mentors to comfortably implement interpersonal communication and communication openness in mentoring programs had been major predictors of mentees' academic performance in the institutions of higher learning (Campbell & Campbell, 1997, Ismail et al., 2012; Santos & Reigadas, 2005).

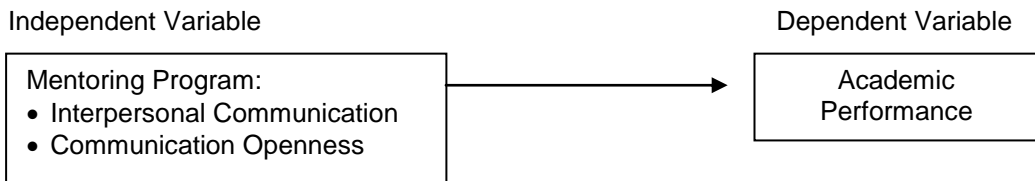
These studies are pursuant to the notion of Humanistic theory, prominently on Humanistic theories of Carl Roger (1951), Abraham Maslow's (1970) Hierarchy of Needs, and Erik Erikson Psychosocial Development. Developmental theories of mentoring and humanistic approaches tend to focus on mentor behaviours and actions as part of relationship building with the mentee to facilitate the mentee's development (Ehrich, 2009). For example, Maslow's (1970) theory advocates that the most basic level of needs must be met before the individual will intensely seeking for the secondary or higher level needs. Thus, an individual needs to meet 4 basic needs, which are physiology, safety, belonging, and esteem, before reaching self-actualization. In the context of this study, it falls under the third and fourth level, which are belonging and esteem. Both of these elements are heavily related in mentor-mentee relationship. It supports mentoring through its emphasis on relationship-seeking and competence-seeking behaviour. Individuals seek out relationships because of an instinctive need for belongingness. The establishment of relationships in return will promote a desired competence in an individual's personal and profesional development.

Carl Rogers agree with most of what Maslow believed, but further explained that for an individual to develop, they need an environment that offers them with genuineness (openness and self-disclosure), acceptance, and empathy. In the context of this study and with regard of the above theory, mentor's communication skills such as interpersonal communication and communication openness can lead to a positive mentees' academic and personal development. There is some evidence that a degree of personal intimacy, or self-disclosure, facilitates mentorship relationships in a professional domain (Rogers & Holloway, 1993). Integrating the humanist factor in mentoring can lead to a positive course for personal and profesional development as the humanist approach believes that every individual has the potential to be self-directing under the right conditions (Ligadu, 2008). These conditions include openness to the possibility of change and growth, willingness to break old habits and try out alternatives, commitment to deepening self-knowledge and involvement in non-directive, developmental and collaborative approaches (Yost, 2002; Kulman, 1998).

Meanwhile, Erik Erikson's (1982) Theory of Psychosocial Development has eight distinct phases. This theory posits that successful completion of each stage leads to a healthy personality and positive interactions with others. Failure to successfully complete a stage can result in a reduced ability to complete further stages and unhealthy personality and sense of self. Thus, an important factor in healthy development of adolescents and young adults is the search of Erikson's (1968) notions of identity and intimacy. At this stage, mentees or protégés are young adults, who are in a quest of discovering their self-image, sense of belonging, and social bonds, both at the personal and professional levels. Thus, mentors' communication skills that can build positive relationship with mentee can spurs mentees' quest in developing their psychosocial development and academic performance. Among the benefits of psychosocial mentoring relationships are friendship and emotional support, enhanced self-esteem and confidence, role modelling, and possible career advancement

(Hansman, 1998). Application on this theory in university/faculty mentoring program models shows that the ability of mentors to comfortably implement interpersonal communication and communication openness will increase employees' understanding about the value of formal and/or informal mentoring activities. This situation may lead to an enhanced mentees' academic performance in institutions of higher learning (Campbell & Campbell, 1997, Ismail et al., 2012; Santos & Reigadas, 2002).

The literature was used as foundation to develop a conceptual framework for this study as shown in Figure 1.



Conceptual Framework

Based on the conceptual framework, it can be hypothesized that:

H1: There is a positive relationship between interpersonal communication and academic performance.

H2: There is a positive relationship between communication openness and academic performance.

3. Methodology

This study used a cross-sectional research design that allowed the researchers to integrate mentoring program literature, the pilot study and the actual survey as a main procedure to gather data for this study. Using such methods may decrease the inadequacy of single method and increase the ability to gather accurate data, decrease bias and increase quality of data being collected (Sekaran & Bougie, 2011; Zikmund, 2000). The location of this study is a defence based university in Malaysia. For confidential reasons, the name of the organisation used is kept anonymous. At the initial stage of data collection, a pilot study was conducted involving seven students and five academic staff in order to get their opinions about the content and format of the undergraduate mentoring program questionnaire developed by Ismail, Abdullah and Khian Jui (2011). Based on this pilot study, the researchers adopted all items in the survey questionnaires because they were significant, relevant, clear and suitable for the context of this study. 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 & Hussey, 1997; Ismail et al., 2012).

The survey questionnaire consists of four variables: (a) interpersonal communication was measured using three items, (b) communication openness was

measured using 3 items, and (d) academic performance was measured using 8 items that were adopted from Ismail and Khian Jui's (2010) undergraduate mentoring program scale where this questionnaire was used in studying undergraduate mentoring programs in institutions of higher learning in Sarawak, Malaysia. 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.

The population of this study is undergraduate students of a defence based university, Malaysia. The researchers had obtained an approval to conduct the study from the management of the university and were advised on the procedures of conducting the survey in the institution. Based on the information given, the researchers had distributed 300 survey questionnaires using a convenient sampling technique to undergraduate students. This sampling technique was chosen because the list of students of the organisation was not available due to confidential reasons and this constraint had not allowed the researchers to randomly select respondents for this study. From the survey questionnaires distributed, 107 usable questionnaires from the university were returned to the researchers, yielding 35.7 percent of the response rate. The survey questionnaires were answered by participants based on their consents and a 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 analysed using inferential statistics (Ismail et al., 2012; Sekaran & Bougie, 2011; Zikmund, 2000).

A Statistical Package for Social Science (SPSS) version 17.0 was used to analyse the data. Firstly, validity and reliability analyses were conducted to assess the validity and reliability of measurement scales (Nunally & Bernstein, 1994). Secondly, Pearson correlation analysis and descriptive statistics were conducted to determine the collinearity problem, and further confirm the validity and reliability of constructs (Hair et al., 2006; Nunally & Bernstein, 1994). Finally, multiple regression analysis was recommended to assess the magnitude and direction of the relationship between two independent variables and one dependent variable (Aiken et al., 1991; Baron & Kenny, 1986). In this regression analysis, standardized coefficients (standardized beta) were used for all analyses.

4. Findings

Table 1 shows the respondents' characteristics. The majority of the respondents were male (65.4 percent), their ages vary from 20 to 22 years (75.7 percent), students who registered as ROTU (49.5 percent), second year students being the majority in the respondent group (41.1 percent), and students achieving CGPA between 3.01 to 3.50 being the majority amongst the respondents (45.8 percent).

Table 1: Respondents' characteristics (n=107)

Respondents' Profile	Sub-Profile	Percentage
Gender	Male	65.4
	Female	34.6
Age	<19 years old	10.3
	20 to 22 years old	75.7
	>23 years old	14.0
Type of Student	Cadet	37.4
	ROTU	49.5
	Civilian	13.1
Current Year of Study	Second Year	41.1
	Third Year	32.7
	Fourth Year	13.4
	Fifth Year	26.2
Academic Achievement	< CGPA 2.0	.9
	CGPA 2.01-2.50	7.5
	CGPA 2.51-3.00	41.1
	CGPA 3.01-3.50	45.8
	CGPA 3.51-4.00	4.7

Note:

ROTU : Reserve Officer training Unit

CGPA : Cumulative Grade Point Average

Table 2 shows that the survey questionnaires had 14 items which refer to three variables: interpersonal communication (3 items), communication openness (3 items), and academic performance (8 items). The validity and reliability analyses were conducted based on the procedures established by Nunally and Berstein (1994) and Hair et al. (2006). A principal component factor analysis with oblique rotation using direct oblimin was first conducted to determine the possible dimensions of the constructs. Further, the Kaiser-Meyer-Olkin Test (KMO), which is a measure of sampling adequacy, was conducted for each variable.

These statistical results showed that (1) all items for each variable had factor loading values of 0.5 and above, indicating that the items met the acceptable standard of validity analysis; (2) all research variables exceeded the minimum standard of Kaiser-Meyer-Olkin's value of 0.6 and were significant in Bartlett's test of sphericity, indicating that the sample was adequate to further conduct the factor and reliability analyses; (3) all research variables had eigenvalues larger than 1 and had variance explained larger than 0.45, showing that the variables met the acceptable standard of validity analysis (Hair *et al.*, 2006); and (4) all variables had alpha values greater than 0.70, signifying that the variables met the acceptable standard of reliability analysis (Nunally and Bernstein, 1994). These statistical results showed that the measurement

scales used in this study met the standards of validity and reliability analyses as shown in Table 2.

Table 2: Results of Validity and Reliability Analyses

Measure	No. of Item	Factor Loading	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha
Interpersonal Communication	3	.82 to .89	.73	137.67	2.32	77.38	.85
Communication Openness	3	.41 to .70	.73	118.38	2.41	60.20	.75
Academic Performance	8	.66 to .87	.87	495.70	4.88	61.02	.91

Table 3 shows that the mean values for the variables are between 5.6 and 5.8, signifying that the levels of interpersonal communication, communication openness, and academic performance are ranging from high (4) to highest level (7). The correlation coefficients for the relationship between the independent variable (i.e., interpersonal communication and communication openness) and the dependent variable (i.e., academic performance) are less than 0.90, indicating the data are not affected by serious collinearity problem (Hair et al, 2006).

Table 3: Pearson correlation analysis and descriptive statistics

Variable	Mean	Standard Deviation	Pearson Correlation Analysis (r)		
			1	2	3
1. Interpersonal Communication	5.8	.79	1		
2. Communication Openness	5.8	.70	.58**	1	
3. Academic Performance	5.6	.69	.42**	.55**	1

Note: Significant at **p<0.01

Reliability estimation is shown diagonally (value 1)

Table 4 shows the results of testing hypotheses using a multiple regression analysis. It shows that the demographic variable was entered in Step 1 and then followed by entering the independent variable (i.e., interpersonal communication and communication openness) in Step 2. Academic performance was used as the dependent variable. An examination of multi collinearity in the regression analysis shows that the tolerance values for the relationship between the independent variable (i.e., interpersonal communication and communication openness) and the dependent variable (i.e., academic performance) were 0.89 and 0.94, respectively. These tolerance values were more than the tolerance value of .20 (as a rule of thumb),

showing that the variables were not influenced by multi collinearity problems (Fox, 1991).

Further, the table 3 shows the results of testing research hypothesis using a multiple regression analysis in Step 2. Firstly, interpersonal communication insignificantly correlated with academic performance ($\beta=0.19$, $p>0.05$), therefore H1 was not supported. Secondly, communication openness significantly correlated with academic performance ($\beta=0.44$, $p<0.001$), therefore H2 was supported. The inclusion of these variables in this analysis had explained 35 percent of the variance in dependent variable. This result demonstrates that interpersonal communication does not play as an important predictor of academic performance, but communication openness plays as an important predictor of academic performance in the studied organisation.

Table 4: The outcomes of multiple regression analysis

Independent Variable	Dependent Variable (Academic Performance)	
	Step 1	Step 2
<u>Controlling Variable</u>		
Gender	-.14	-.16
Age	.08	.12
Type of Student	.01	.08
Year of Student	-.15	-.11
Academic Achievement	.20	.06
<u>Independent Variable</u>		
Interpersonal Communication		.19
Communication Openness		.44***
R Square	.06	.35
Adjusted R Square	.01	.31
R Square Change	.06	.30
F	1.22	7.75***
F Square Change	1.22	22.74***

Note: Significance at *** $p<0.001$

5. Discussion and Implications

The findings of this study show that communication openness does act as an important predictor of academic performance in the studied organisation. In the context of this study, majority mentees perceive that levels of interpersonal communication, communication openness, and academic performance are highly practiced in the organisation. In this situation, the ability of mentors to actively and comfortably practice communication openness in formal and/or informal mentoring activities has enhanced mentees' academic performance in the studied organisation.

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, communication

openness has been an important predictor of academic performance. This result has supported studies by Campbell and Campbell (1997), Santos and Reigadas (2002), and Ismail et al. (2012). Secondly, interpersonal communication has not been an important predictor of academic performance. This result may be affected by different backgrounds and inconsistent views of the mentees that affect their perceptions on the implementation of interpersonal communication in mentoring activities. This situation may overrule the effectiveness of interpersonal communication on academic performance in the organisation.

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 accurate and reliable findings. In terms of practical contributions, the findings of this study may be used to improve the management of undergraduate mentoring programs in institutions of higher learning. This objective may be achieved if the management pays attentions on the following aspects: firstly, mentors need to use more activities than giving lecture in order to stimulate mentees giving ideas, sharing knowledge and actively involving in mentoring programs. Secondly, mentors need to be trained with updated andragogy methods in order to improve their abilities in teaching and guiding students. Thirdly, mentees need to be grouped according to their academic achievements in order to ease the mentors to fulfill their needs and expectations. Finally, learning activities need to be diversified in order to attract, retain and motivate students who have different interests and capabilities to commit with mentoring programs. If these suggestions are properly implemented, students might strongly motivated to improve their studies.

6. Conclusion and Future Recommendation

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 acceptable standards of validity and reliability analyses. The outcomes of multiple regression analysis showed two important findings: firstly, communication openness did act as an important determinant of academic performance. This result has also supported mentoring program literature mostly published in Western countries. Secondly, interpersonal communication did not act as an important predictor of academic performance. This result may be affected by the different backgrounds and views of the mentees that affect their perceptions on the ability of mentors to implement interpersonal communication in mentoring activities. Therefore, current research and practice within the mentoring program model needs to consider interpersonal communication and communication openness as key factors in the organizational mentoring program domain. This study further suggests that the ability of mentors to appropriately practice interpersonal communication and communication openness in mentoring activities will induce subsequent positive mentee outcomes (e.g., satisfaction, performance, commitment, psychosocial, career, leadership and

ethics). Thus, these positive outcomes may lead to achieved academic performance of higher learning institutions.

Direction for future research should consider the limitations of conceptual and methodology for this study. Specifically, future research in this area may be strengthened if the researchers consider a number of important factors as follows: firstly, the organisational and personal characteristics that act as potential variables and can influence the effectiveness of mentoring program should be further explored. If organisational and personal characteristics are used in research, this may provide meaningful perspectives for understanding the individual differences and similarities that affect individual attitudes and behavior. Secondly, the weaknesses of cross sectional research design may be overcome if longitudinal studies are used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Thirdly, the findings of this study may produce different results if this study is done in more than one organisation. The importance of these issues needs to be further elaborated in future research.

7. References

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