# Formal Mentoring, Gender Type in Mentorship and Individuals' Psychosocial: A Moderating Model Approach

Azman Ismail & Michael Kho Khian Jui
Faculty of Cognitive Sciences & Human Development.
Universiti Malaysia Sarawak. 94300 Kota Samarahan. Sarawak. Malaysia.

Tel: 60-82-581-521 E-mail: iazman@fcs.unimas.my
E-mail: mic6699@gmail.com

Muhammad Madi Bin Abdullah (Corresponding Author)

Department of Management and Services,

College of Science and Technology,

Universiti Teknologi Malaysia International Campus,

54100 Kuala Lumpur, Malaysia

Tel: 60-19-323-0223 E-mail: muhdmadi@gmail.com

#### **Abstract**

Formal mentoring is a type of training and development program and if mentors can properly implement the related activities, may lead to increased individuals' psychosocial. More importantly, recent studies in this area have revealed that the effect of formal mentoring on individuals' psychosocial has not been consistent if gender type played an active role in organizations. The aim of this study is, therefore, to examine the effect of formal mentoring and gender type on individuals' psychosocial based on information derived from 153 usable questionnaires administered to employees who have worked in the selected public university in Sarawak, Malaysia (SRWKUNIV). The outcomes of hierarchical regression analysis showed that interaction between same-gender and formal mentoring, and interaction between cross-gender and formal mentoring positively and significantly correlated with individuals' psychosocial. The results confirm that gender type does act as a full moderating variable in the formal mentoring model of the organizational sample. In addition, implications and discussions are elaborated.

Keywords: Formal Mentoring, Gender type, Individuals' Psychosocial, Malaysia

#### 1. Introduction

In 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; Merriam, 1993). Based on this story, mentoring is traditionally viewed as an important field of education (Johnson et al., 1991) and/or counseling (Gregson, 1994) where mentors are old men who have wisdom and can be trusted to educate young men who have little experience (Johnson et al., 1991; Kram, 1985; Russell & Adams, 1997; Wanguri, 1996). Hence, it has inspired organizational development (OD) scholars to generally interpret the concept and practice of mentoring programs in line with the development of the current organizational practice (Dennison, 2000; Northcott, 2000; Oliver & Aggleton, 2002).

In an organizational context, mentoring is often viewed as a method of training and development program that can be used to increase group and/or individuals' potentials to carry out particular duties and responsibilities, familiarize with new techniques, and care for all aspects of mentees (Johnson et al., 1991; Long, 2002; Zey, 1989). Moreover, according to Cummings and Worley (2009), mentoring in an organization involves establishing a reltionship between a manager or someone more experienced with another member who is less experienced. Mentoring models vary according to different organizational context 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, orientations, stresses, strengths and weaknesses (Hawkey,1997; Irving et al., 2003; Ritchie & Conolly, 1993; Ritchie & Genoni, 1999). These factors have

strongly affected the implementation of mentoring type in formal and/or informal mentoring activities in organizations (Chao et al., 1992; Murray, 1991; Ragins, 1997, 1999; Ragins & Cotton, 1993, 1999).

A formal mentoring program is often viewed as the structured and coordinated relationship between mentor and mentee, using standard norms, continuous action plans, time frame, and particular objectives (Bahniuk & Hill, 1998; Hansford et al., 2003; Noe et al., 2002). Specifically, this mentoring program has salient characteristics: first, a mentor is defined as a more knowledgeable and experienced person (e.g., senior staff) whereas mentee is defined as a less knowledgeable and experienced person (e.g., junior staff) (Kram, 1985; Dreher & Cox, 1996; Noe et al., 2002). Second, mentors should act as role models, teachers, sponsors, encouragers, counselors and friends to mentees in order to increase individuals' new knowledge, up to date skills and positive attitudes (Anderson & Shannon, 1988; Kram, 1985; Levinson et al., 1978). Third, they are regularly assigned to encourage group and/or individual activities within a defined period of time (Ritchie & Connolly, 1993; Ritchie & Genoni, 1999). Conversely, informal mentoring is often seen as the process and systems of relationship between mentors and mentees to achieve specific demands, spotaneous and adhoc. This mentoring program is widely implemented to complement and strengthen formal mentoring programs (Goldstein & Ford, 2002; Ragins, 1997, 1999). Both mentoring programs are important to achieve organizational strategies and goals (Friday & Friday, 2002; Ismail et al., 2007; Lindenberger & Zachary, 1999).

The extant research in this area shows that the ability of managers to properly design and implement formal mentoring programs may have a significant impact on individuals' advancement, especially psychosocial (Whitely et al., 1991; Scandura, 1992; Turban & Dougherty, 1994). According to Noe (2008), past research has suggested that mentoring could provide career and psychosocial support to their protégés. Psychosocial is often seen as helping individuals by building confidence, overcoming pressures and strains, assisting their personal life, opinions heard and valued, sharing dreams, providing feedback, awareness of contribution to relationship, and teaching with examples (Kram, 1985; Noe, 1988, 2008; Noe et al., 2002; Lyon et al., 2004). In a mentoring program context, the ability of mentors to establish and sustain good interactions with mentees will provide mutual benefits and this may lead to an increased individuals' psychosocial (Cox & Nkomo, 1991; Ismail et al., 2007; Scandura, 1992; Chao et al., 1992; Ragins & Cotton, 1993, 1999).

Interestingly, a thorough review of such relationships reveals that the effect of formal mentoring on individuals' psychosocial is not consistent if gender type plays active roles in mentorship (Ragins & Cotton, 1993, 1999; Scandura & Williams, 2001). Many scholars, such as Ragins, (1997, 1999), Ragins and Cotton (1993, 1999), and Young et al. (2006) state that gender type refers to the interaction between same-gender in mentorship and the interaction between cross-gender in mentorship. Same-gender in mentorship is viewed as the interaction between male mentor-male protégé and the interaction between female mentor-female protégé (Allen & Eby, 2004; Hegstad & Wentling, 2005; Lyon et al., 2004). Cross-gender in mentorship is seen as the interaction between male mentor-female protégé and female mentor-male protégé (Allen et al., 2005; Gaskill, 1991; Lyon et al., 2004). Interaction between the same and cross genders in formal mentoring programs is often done through building good contacts, exchanging personal and work problems in friendly situations, and supporting the advancement of individuals' psychosocial (Baugh & Scandura, 1999; Hansford & Ehrich, 2006; Hansford et al., 2003; Lyon et al., 2004).

In a mentoring system framework, many scholars think that formal mentoring, gender type and individuals' psychosocial are distinct constructs, but highly interrelated. For example, properly implemented formal mentoring programs will improve individuals' psychosocial if gender types can implement good interaction styles (e.g., communication openness and active participation) in the mentoring programs (Halgasn & Stonrnn, 2007; Lyon et al., 2004; Ragins & Cotton, 1993, 1999).

Even though numerous studies have been carried out, little is known about the moderating role of gender type in formal mentoring program literature (Allen et al., 2005; Scandura & Williams, 2001). Many scholars reveal that gender type in mentorship has been less emphasized because previous studies had focused on a segmented approach and the direct-effect model in analyzing formal mentoring programs, as well as given less attention on the significance of gender perspective in developing formal mentoring program models. As a result, findings from such studies have not captured the views of gender in explaining or helping relationships in formal mentoring activities (Allen et al., 2005; Hegstad & Wentling, 2005; Niehoff, 2006; Okurame & Bologun, 2005). Therefore, this study was primarily conducted to examine the effect of formal mentoring and gender type in mentorship on individuals' psychosocial that occurs in the target public university in Sarawak, Malaysia (SRWKUNIV). For confidential reasons, the name of the organization is kept anonymous.

#### 2. Literature Review

First, this section presents studies, which found a link between formal mentoring, gender type relationship and individual advancement. Second, according to this review, a theoretical framework and the related hypotheses are proposed.

# 2.2 Relationship between Formal Mentoring, Gender Type, and Individuals' Advancement

Most previous studies used a direct-effect model to investigate general mentoring programs in Western organizations using different samples, such as 510 first-line bank managers (Okurame & Balogun, 2005), and 194 practising veterinarians (Niehoff, 2006). These studies found that properly implemented mentoring relationships (e.g., friendship, social support, role modelling, acceptance and participation) had increased individuals' advancement, especially psychosocial (Okurame & Bologun, 2005; Niehoff, 2006).

The moderating effect of gender type in mentorship of the SRWKUNIV is consistent with formal mentoring research literature mostly published in Western countries. For example, several recent studies used an indirect-effect model to examine formal mentoring programs in Western organizations using different samples, such as fortune 500 companies in US (Hegstad & Wentling, 2005), and 600 members of a professional women's business association in US (Allen & Eby, 2004). The outcomes of these studies revealed that the ability of gender type (i.e., same gender and cross gender) to implement good interaction styles in formal mentoring programs (e.g., match, no communication barriers and active participation) had been a major determinant of individuals' advancement, especially psychosocial (Allen et al., 2005; Hegstad & Wentling, 2005).

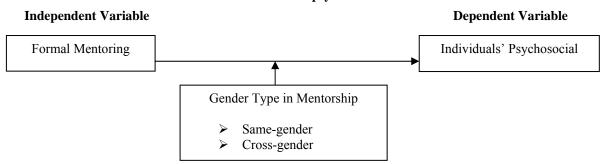
These findings are consistent with the notion of organizational behaviour theory, similarity-attraction paradigm (Byrne and Griffitt, 1973), and attachment theory (Bowlby, 1969). In general, these theories explicitly posit the interaction styles among individuals who have different backgrounds in doing activities that may affect individuals' advancement (Bowlby, 1969; Byrne & Griffitt, 1973; Turban et al., 2002; Young et al., 2006). Specifically, similarity-attraction paradigm (Byrne & Griffitt, 1973) is often viewed from a social psychology emphasizes more on the integration of similarity, attractiveness, and liking in human relationship (Berscheid, 1994; Sprecher, 1998). The application of this theory in a mentoring program shows that individuals often work together, communicate with one another, and interact more on social issues. This practice will motivate individuals to adapt with gender differences in terms of perceptions and values. If such relationships are properly implemented it may lead to advanced psychosocial (Turban et al., 2002).

Attachment theory (Bowlby, 1969) states that, our ability to develop and maintain relationships begin at a very early age based on our attachment to a parent or primary caretaker (Ainsworth, et al., 1978). This theory may add to the explanation of why some mentors and mentees may feel more comfortable to keep a professional relationship and develop a personal bond (Young et al., 2006). Application of this theory in a mentoring program shows that comfortable and active interaction between same and different gender types in formal mentoring activities may lead to improved individuals' advancement, such as psychosocial (Allen et al., 2005; Scandura &Williams, 2001; Young et al., 2006).

#### 3. Conceptual Framework and Hypotheses

The above literature has been used as a basis to develop a new structural conceptual framework for this study as shown in Figure 1.

Figure 1. Gender type in mentorship moderates the relationship between formal mentoring and individuals' psychosocial



Based on the framework, it seems reasonable to assume that the properly implemented formal mentoring programs will influence employees as this practice has with Western employees. Organizational behavioral theory suggests that properly implemented formal mentoring programs may increase individuals' psychosocial

if same and different gender types comfortably and actively interact in formal mentoring activities. Therefore, it is hypothesized that:

- H1: Same-gender positively moderates the relationship between formal mentoring and individuals' psychosocial
- H2: Cross-gender positively moderates the relationship between formal mentoring and individuals' psychosocial

#### 4. Methodology

# 4.1. Research Design

This study used a cross-sectional research design that allowed the researchers to integrate literature review, indepth interviews, pilot study and survey questionnaires as the main procedures to gather data for this study. As supported by many researchers, the use of such methods may gather accurate and less bias data (Cresswell, 1998; Sekaran, 2000) and it allows the researcher to create differences among variables being studied. At the initial stage of data collection, in-depth interviews were first conducted involving four experienced employees, namely two from the human resource department and two from the academic sector of the target public university in Sarawak, Malaysia (SRWKUNIV). The candidates were selected based on a purposive sampling technique where each of them had chalked more than seven years of working experience in the organization. Information gathered from such interviews show that the studied organization had consistently and continuously implemented a formal mentoring program since 1993. This mentoring program was implemented to support the organization's vision, that is, to become an exemplary university of an internationally acknowledged stature and a scholarly institution of choice through human capital development programs, such as this formal mentoring program. For confidential reasons, the name of the organization is kept anonymous.

A formal mentoring program is implemented at non-academic division and academic division in the studied organization. In order to understand the nature of formal mentoring program, in-depth interviews were conducted involving two members of the human resource staff and two from the academic staff during and before the pilot study. Information gathered from the interviews show that mentors are management employees and senior employees whereas mentees are supporting staff and junior staff. Interviews between mentors and mentees are often done through formal and/or informal group discussions (i.e., department/teamwork meetings) and/or individual discussions (i.e., individual assignment, counseling and performance appraisal). Mentors frequently use communication openness and participation style as major instruments/avenues to deliver message, share knowledge and experience, encourage teamwork and promote collective decisions in mentoring programs.

A majority of employees perceive that properly implemented mentoring activities can increase their psychosocial in the workplace. Furthermore, a careful investigation /perusal of such interview results have revealed that the effect of formal mentoring activities on mentees' psychosocial is not direct; its impact is indirectly affected by gender type. For example, properly implemented formal mentoring activities will increase mentees' psychosocial if the same gender and cross gender practice is carried out in comfortable interaction styles (i.e., communication openness and participation style) in planning and implementing organizational functions, such as human resource, finance, academic program and physical facilities. Although numerous studies have been done, the moderating effect of gender type in the mentoring program model of the organization is less emphasized (Ismail et al., 2007). Although the nature of this relationship is interesting, little is known about the moderating effect of gender type in the mentoring program model of the organization because of the paucity of research literature in this country (Khian Jui, 2008).

Information gathered from such employees was refined, categorized and compared with the related literature review. Outcomes of the triangulated information were used as a guideline to develop the content of survey questionnaires for a pilot study. Next, a pilot study was conducted by discussing pilot questionnaires with four employees who worked in the organization. Finally, the information gathered from the literature, the in-depth interviews and the pilot study was considered to verify the content and format of questionnaires for an actual survey. Back translation technique was used to translate the content of questionnaires in Malay and English in order to increase the validity and reliability of the instrument (Van Maanen, 1983).

#### 4.2. Measures

The survey questionnaires had three sections. The first section, formal mentoring, had 4 items that were modified from mentoring management literature (Bisk, 2002; Hansford & Ehrich, 2006; Hansford et al., 2003). The next section, same gender type in mentorship, had 4 items and cross gender type in mentorship had 4 items that were modified from mentoring program literature (Gaskill, 1991; Ragins & McFarlin, 1990). Finally the

last section, individuals' psychosocial, had 4 items that were modified from career development and psychosocial literature (Noe, 1988, 2008; Levesque et al., 2005). These items were measured using a 7-item scale ranging from "very strongly disagree/dissatisfied" (1) to "very strongly agree/satisfied" (7). Demographic variables were used as controlling variables because this study focused on employee attitudes.

#### 4.3. Unit of Analysis and Sample

The unit of analysis for this study was 1456 employees who work in one public university in Sarawak, Malaysia. During the data collection, the human resource (HR) manager did not provide the list of registered employees and did not allow the researchers to directly distribute survey questionnaires to employees who worked in the organization. After considering this situation, a quota sampling was used to determine the number of samples based on the duration of study and budget constraints, which are 200 employees. Besides that, a convenient sampling technique was chosen to distribute survey questionnaires to employees because the researchers could not choose the respondents randomly. Therefore, 200 survey questionnaires were distributed to employees who were willing to answer the survey questionnaires through contact persons (i.e., assistant HR manager, supervisors and/or heads of department/unit) in the organization. Of the number, 153 usable questionnaires were returned to the researchers, yielding a response rate of 76.5 percent. The survey questionnaires were answered by participants based on their consent and on a voluntary basis. A Statistical Package for Social Sciences (SPSS) version 15.0 was used to analyze the results and research hypotheses of the study.

#### 4.4 Data Analysis

A statistical package for social science (SPSS) version 15.0 was used to analyse the questionnaire data. Firstly, exploratory factor analysis (EFA) was used to assess the validity and reliability of measurement scales (Hair et al, 1998; Nunally & Bernstein, 1994). Relying on the guidelines set up by these statisticians, a factor analysis with direct oblimin rotation was first done for all items that represented each research variable, and this was followed by other tests, that is, Kaiser-Mayer-Olkin Test (KMO), Bartlett's test of sphericity, eigenvalue, variance explained and Cronbach alpha. The value of factor analysis for all items that represent each research variable was 0.5 and more, indicating the items met the acceptable standard of validity analysis. All research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6 and were significant in Bartlett's test of sphericity, showing the measure of sampling adequacy for each variable was acceptable. All research variables had eigenvalues larger than 1, signifying the variables met the acceptable standard of validity analysis (Hair et al, 1998). All research variables exceeded the acceptable standard of reliability analysis (Nunally & Bernstein, 1994). Variables that meet the acceptable standard of validity and reliability analyses will be used in testing hypotheses.

Secondly, Pearson correlation analysis and descriptive statistics were conducted to determine the collinearity problem and the usefullnes of the data set. Finally, a hierarchical regression analysis, as recommended by Cohen and Cohen (1983), was used to measure the moderating effect of gender type in mentorship in the hypothesized model. Moderating effect is an interaction that shows the degree of relationship between the independent variables and dependent variables will change if other variables exist in the relationship (Cohen & Cohen, 1983; Jaccard et al., 1990). Results of an interaction are evident when the relationship between interacting terms and the dependent variable is significant. The fact that the significant main effects of predictor variables and moderator variables simultaneously exist in analysis it does not affect the moderator hypothesis and is significant to interpret the interaction term (Baron & Kenny, 1986).

## 5. Findings

#### 5.1. Sample Profile

Table 1 shows that the majority respondent characteristics were female (57.5 percent), male supervisors (56.9 percent), aged between 21 to 30 years (46.4 percent), STPM/Diploma holders (33.3 percent), staff who served less than 5 years (54.9 percent), non-academic staff (58.2 percent), and employees who worked in academic department (53.6 percent).

Table 1. Respondent characteristics (N=153)

Gender (%)	Age (%)	Length of Service (%)
Male=42.5	21 to 30 years old=46.4	0 to 5 years=54.9
Female=57.5	31 to 40 years old=39.2	6 to 10 years=22.2
	41 to 50 years old=9.8	11 to 15 years=13.7
	More than 51 years old=4.6	More than 16 years=9.2
Supervisor's Gender (%)	Academic Qualification (%)	Position (%)
Male=56.9	PMR=0.7	Academic Staff=41.8
Female=29.4	SPM=22.9	Non-Academic Staff=58.2
Male and Female=13.7	STPM/Diploma=33.3	
(More than one Supervisor)	Degree/Bachelor=15.0	Division (%)
	Master Degree=18.3	Academic Department=53.6
	PhD/Doctor of Philosophy=9.8	Non-Academic Department=46.4

Note:

PMR : Lower Certificate of Education

SPM/MCE : Sijil Pelajaran Malaysia/ Malaysia Certificate of Education STPM : Sijil Tinggi Pelajaran Malaysia/ Higher School Certificate

5.2. Validity and Reliability Analyses for Measurement Scales

Table 2 and Table 3 show the results of validity and reliability analyses for measurement scales. These statistical analyses confirmed that the measurement scales met the acceptable standard of validity and reliability analyses.

**Table 2: Item validity** 

Variable	Item		Com	ponent	onent	
		1	2	3	4	
Same Gender	1.Enhance contact with senior executives		.872			
	2.Increase work performance		.856			
	3.Become a role model for others by setting good attitude, value and behavior		.865			
	4.Enhance enjoyable informal work exchange and other outside experiences		.957			
Cross Gender	1.Be propose for promotion			.773		
	2.Enhance enjoyable informal work exchange and other outside experiences			.833		
	3.Enable the exploration of personal concerns			.923		
	4.Feel supported and encouraged through positive interaction			.763		
Formal Mentoring	1.I prefer to have a say in formal discussion	.782				
	2.Participation in formal discussion is a good     mechanism for overcome daily job problems	.849				
	3.Participation in formal discussion helped to improve my confidence while working	.836				
	4.Participation in formal discussion is important for sharing ideas	.818				
Psychosocial	1.My immediate boss/supervisor encouraged me to try new ways of behaving in doing my job				.552	
	2.I respect and admire my immediate boss/supervisor				.842	
	3.I agree with my immediate boss's/supervisor's attitudes and values				.823	
	4.My immediate boss/supervisor conveyed feelings of respect for me as an individual				.851	

Table 3. The validity and reliability analyses for measurement scales

Measure	Items	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha (α)
1.Formal	4	.7885	.80	389.78	2.95	73.79	.88
Mentoring							
2.Individuals'	4	.5585	.84	380.94	3.08	77.08	.90
Psychosocial							
3.Same-	4	.8696	.85	494.00	3.32	82.97	.94
gender							
4.Cross-	4	.7692	.79	383.68	3.04	76.04	.89
gender							

Table 4 shows the results of Pearson correlation analysis and descriptive statistics. Mean scores for all variables are between 4.77 and 5.56, signifying the levels of formal mentoring, individuals' psycosocial, same-gender, and cross-gender ranging from high (4.0) to highest level (7.0). The correlation coefficients for the relationship between the independent variable (i.e., formal mentoring) and the moderating variable (i.e., same-gender and cross-gender), and the relationship between the dependent variable (i.e., individuals' psychosocial) were less than 0.90, indicating the data were not affected by any serious collinearity problem (Hair et al., 1998).

Table 4. Pearson correlation analysis and descriptive statistics

Variable	Mean	Standard Deviation	Pearson Correlation Analysis			
			1	2	3	4
1. Formal Mentoring	5.56	.98	(1)			
2. Individuals' Psychosocial	4.88	1.14	.34**	(1)		
3. Same-gender	4.77	1.14	.19*	.47**	(1)	
4. Cross-gender	5.17	1.14	.48**	.48**	.45**	(1)

Note: Significant at 0.01

# 5.3. Outcomes of Hypothesis Testing

The results of testing research hypotheses are shown in Table 5 and Table 6.

Table 5. Result for multiple regression analysis 1

	Dependent Variable  (Individuals' Psychosocial)				
Variables					
	Step 1	Step 2	Step 3		
Control Variables Gender	.11	.08	.16*		
Supervisor's Gender	.16	.10	.06		
Age	27*	22*	16		
Academic Qualification	.03	.10	.15		
Length of Services	.28	.16	.14		
Position	.06	.10	.06		
Division	15	14	12		
Independent Variable Formal Mentoring		.45***	.12		
Moderating Variable					
Same-gender x Formal Mentoring			.48***		
$\mathbb{R}^2$	.09	.27	.37		
Adjusted R <sup>2</sup>	.05	.23	.33		
R <sup>2</sup> Change	.09	.18	.10		
F	2.02	6.69***	9.26***		
F Change R <sup>2</sup>	2.02	36.00***	22.01***		

Note: Significant at \*0.05; \*\*0.01; \*\*\*0.001

The first regression analysis in Table 5 shows that the interacting terms (same-gender x formal mentoring) are positively and significantly correlated with individuals' psychosocial ( $\beta$ =.48, p<0.001) in Step 3, therefore H1 was supported. In terms of explanatory power, the inclusion of this same-gender in the Step 3 had explained 37 percent (37%) of the variance in individual psychosocial. This result confirms that interaction between same-gender in mentorship does moderate the effect of formal mentoring on individuals' psychosocial in the organizational sample.

Table 6. Result for multiple regression analysis 2

	Dependent Variable  (Individuals' Psychosocial)				
Variables					
	Step 1	Step 2	Step 3		
Control Variables					
Gender	.11	.08	.11		
Supervisor's Gender	.16	.10	.09		
Age	27*	22*	18		
Academic Qualification	.03	.10	.17		
Length of Services	.28*	.16	.13		
Position	.056	.10	.14		
Division	145	14	14		
Independent Variable		.45***	.15		
Formal Mentoring		.15	.13		
Moderating Variable			.47***		
Cross-gender x Formal Mentoring			. 7/		
$\mathbb{R}^2$	.09	.27	.39		
Adjusted R <sup>2</sup>	.09	.27	.39		
R <sup>2</sup> Change	.09	.18	.12		
F	2.02	6.69***	10.05***		
F Change R <sup>2</sup>	2.02	36.00***	27.23***		

Note: Significant at \*0.05; \*\*0.01; \*\*\*0.001

The second regression analysis in Table 6 shows that the interacting terms (cross-gender x formal mentoring) were also positively and significantly correlated with individuals' psychosocial ( $\beta$ =.47, p<0.001) in Step 3, therefore H2 was supported. In this sense, the inclusion of a moderator variable had increased the effect of formal mentoring on individual psychosocial. In terms of explanatory power, the inclusion of this cross-gender in the Step 3 had explained 39 percent (39%) of the variance in individual psychosocial. This result confirms that interaction between cross-gender in mentorship does moderate the effect of formal mentoring on individuals' psychosocial in the target organization used in the sample.

# 6. Discussion and Implications

This study used the measurement scales that meet the acceptable standard of validity and reliability analyses in hypothesis testing. The outcomes of hypothesis testing have confirmed that gender type does act as a full moderating variable in the relationship between formal mentoring and individuals' psychosocial in the studied organization. In the organizational context, formal mentoring program is done according to the university's policy and procedures. A majority of employees perceive that mentors and mentees are actively involved in formal mentoring programs. Besides that, they also feel that interaction styles between gender types in

mentorship are done comfortably and actively. This situation shows that properly implemented formal mentoring activities may increase individuals' psychosocial because mentees perceive that interaction styles between same and different gender backgrounds are done comfortably and actively in the organization where the study was carried out.

The implications of this study can be divided into three categories: theoretical contribution, robustness of research methodology and practical contribution. In terms of theoretical contribution, the findings of this study show that interaction between same-gender and cross-gender in mentoring programs will create caring and comfortable environments to discuss, seek clarification, and encourage sharing knowledge and experiences, as well as make decisions for improving job performance and solving work problems. As a result, it may lead to advanced individuals' psychosocial in the organization. This result is consistent with studies by Byrne and Griffitt (1973), Bowlby (1969), Allen et al. (2005), and Hegstad and Wentling (2005). In sum, this investigation which is a case-based exploratory study conducted in a situation that is different from that in Western countries. However, its outcomes had supported and recognized the importance of gender's perspective as stated in mentorship literature published mostly in Western countries.

With respect to the robustness of research methodology, the survey questionnaires that were developed based on the information gathered from the compensation literature, the in-depth interviews and the pilot study have exceeded a minimum standard of validity and reliability analysis. Thus, it has resulted in the production of accurate and reliable findings.

In terms of practical contributions, the findings of this study can be used as a guideline by the management to improve the design and administration of mentoring programs in the target organization. These suggestions are: first, update learning content and method. For example, continuously training programs should focus on up to date knowledge, relevant skills and good moral values. If this training program is properly implemented it can upgrade the capability of mentors to use proper treatments in handling the mentees' needs, expectations and demands. Second, encourage informal and formal participation styles. For example, mentees should be allowed to provide suggestions, comments and take part in planning and managing mentoring activities. If this aspect is given due and proper attention it will increase mentees' feelings of satisfaction, trust and acceptance about the programs. Third, improve mentoring activities. For example, mentoring activities should be diversified to cater mentees' needs and preferences, such as sports and camping. Willingness of mentors and mentees to properly implement such activities beyond office hours and outside the office may strengthen brotherhood, accountability and job motivation in the workplace. If these suggestions are seriously considered it may increase the capability of the mentoring program to maintain and increase organizational competitiveness in a global economy.

## 7. Limitations

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 developmental issues or causal connections between variables of interest. Second, this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Third, the outcomes of multiple regression analysis have only focused on the level of performance variation explained by the regression equations (Tabachnick et al., 2001), but there are still a number of unexplained factors that need to be incorporated to identify the causal relationship among variables and their relative explanatory power. Finally, the sample for this study was taken from one organization that allowed the researchers to gather data via survey questionnaires. These limitations may decrease the ability to generalize the results of this study to other organizational settings.

#### 8. Directions for Future Research

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 this may provide meaningful perspectives for understanding how individual similarities and differences affect 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. Third, to fully understand the effect of formal mentoring programs on individual attitudes and behaviors via its impact upon gender type, more organizations need to be used in future study. Fourth, other specific theoretical constructs of gender type, such as gender ethnic, gender age, gender position and gender culture to be considered because it has widely been recognized as an important link between mentoring program and many aspects of individuals' advancement (Dreher & Cox, 1996; Young et al., 2006; Young & Perrewé, 2000; Whitely et al., 1991). Finally, other personal outcomes of formal mentoring (e.g., leadership, personality development, satisfaction, performance and commitment) should be considered given

their prominence in mentoring research literature (Kram & Bragar, 1992; Lyon et al., 2004; Scandura & Schriesheim, 1994). The importance of these issues needs to be further explained in future research.

### 9. Concluding Comments

This study has confirmed that gender type in mentorship does act as a full moderating role in the relationship between formal mentoring and individuals' psychosocial. This result has supported the findings of previous studies and extended mentoring research literature mostly published in Western organizational settings. Therefore, current research and practice within mentoring program models needs to consider gender type in mentorship as a critical aspect of organizational mentoring program where properly implemented interaction styles between cross gender and same gender in mentoring programs may strongly induce positive subsequent attitudinal and behavioural outcomes (e.g., satisfaction, commitment, performance, trust, and good moral values). Thus, these positive outcomes may lead mentees to sustain and support organizational and departments' strategies and goals.

# Acknowledgements

The authors gratefully acknowledge the contributions of Mr. Sebastian Koren Francis for editing and perfecting the English of the final version.

#### References

Ainsworth, M. D. S., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Hillsdale, New Jersey: Lawrence Erlbaum.

Allen, T. D., & Eby, L. T. (2004). Factors related to mentor reports of mentoring functions provided: Gender and relational characteristics. *Sex Roles*, 50, 129-139.

Allen, T. D., Day, R., & Lentz, E. (2005). The role of interpersonal comfort in mentoring relationships. *Journal of Career Development*, 31, 155-169.

Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education*, 39, 38-42.

Bahniuk, M.H., & Hill, S.K. (1998). Promoting career success through mentoring. Review of Business, 19, 4-7.

Baron, R. M & Kenny, D. A (1986). This moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Baugh, S.G., & Scandura, T.A. (1999). The effect of multiple mentors on protégé attitudes the work setting. *Journal of Social Behavior and Personality*, 14, 503-522.

Berscheid, E. (1994). Interpersonal relationships. Annual Review of Psychology, 45, 79-129.

Bisk, L. (2002). Formal entrepreneurial mentoring: The efficacy of third party managed program. *Career Development International*, 7, 262-270.

Bowlby, J. (1969). Attachment and loss: Vol. 1. Attachment. New York: Basic Books.

Byrne, D., & Griffitt, W. (1973). Interpersonal attraction. Annual Review of Psychology, 24, 317-336.

Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with non mentored counterparts. *Personnel Psychology*, 45, 619-636.

Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioural sciences. Hillsdale, New Jersey: Erlbaum.

Cox, T. H., & Nkomo, S. M. (1991). A race and gender-group analysis of the early career experience of MBAs. *Work and Occupations*, 13, 431-46.

Cresswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: SAGE publications.

Cummings, T.G., & Worley, C.G. (2009). *Organization Development & Change*. (9th ed.). Masan: South-Western Cengage Learning.

Dennison, S. (2000). A win-win peer mentoring guidebook: A practical manual for designing and managing a mentoring program. Clemson, SC: National Droput Prevention Center.

Dreher, G. E, & Cox, T. H., Jr. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, 8, 297-308.

Edlind, E.P., & Haensly, P.A. (1985). Gifts of mentorship. Gifted Child Quarterly, 29, 55-60.

Friday, E., & Friday, S.S. (2002). Formal mentoring: Is there a strategic fit? *Management Decision*, 40, 152-157.

Gaskill, L. R. (1991). Same-sex and cross-sex mentoring of female protégés: A comparative analysis. *Career Development Quarterly*, 40, 48-64.

Goldstein, I.L., & Ford, J.K. (2002). Training in organizations. Wadsworth: Thomson Learning.

Gregson, K. (1994). Mentoring. Employee Counseling Today, 6, 26-7.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (5th ed.). New Jersey: Prentice Hall International.

Halgasn, J. T. L., & Stonernn, M. R. (2007). Partnership in practice: Fostering a mentoring relationship to meet the challenges of a large legal environment of business class. *Journal of Legal Studies Education*, 24, 109-127.

Hansford, B., & Ehrich, L. C. (2006). The principalship: How significant is mentoring? *Journal of Educational Administration*, 44, 36-52.

Hansford, B., Tennent, L., & Ehrich, L. (2003). Educational mentoring: Is it worth the effort? *Educational Research & Perspectives*, 30, 42-75.

Hegstad, C. D., & Wentling, R. M. (2005). Organizational antecedents and moderators that impact on the effectiveness of exemplary formal mentoring programs in fortune 500 companies in the United States. *Human Resource Development International*, 8, 467-487.

Hawkey, K. (1997). Roles, responsibilities, and relationships in mentoring: A literature

Irving, E.S., Moore, W. D., & Hamilton, R. J., (2003). Mentoring for high ability school students. *Education and Training*. 45, 100-109.

Ismail, A., Abu Bakar, R., Abg Abdullah, S.N.M., Maja, A., Guatleng, C.O., & Abdullah, M.M. (2007). Peranan Program Mentoring Dalam Pembangunan Pelajar: Satu Kajian Di Sebuah Universiti Awam Di Malaysia Timur. This paper was published in the proceeding of *ASEMAL5*, 18-19 August 2007, The Legend Hotel, Kuala Lumpur

Jaccard, J., Turrisi, R., & Wan, C.K. (1990). *Interaction effects in multiple regression*, 72. Newsbury Park, California: SAGE Publications, Inc.

Johnson, S.K., Geroy, G.D., & Griego, O.V. (1991). The mentoring model theory: dimensions in mentoring protocols. *Career Development International*, 4, 384-391.

Khian Jui, M. K. (2008). The relationship between mentoring types and individuals' advancement: Gender differences in mentorship as a moderator. *Unpublished Final Year Project Report*. Kota Samarahan: Universiti Malaysia Sarawak, Malaysia.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott Foresman.

Kram, K. E., & Bragar, M. C. (1992). *Development through mentoring: a strategic approach*. In Montross, D., & Shinkman, C. (Eds.), Career Development: Theory and Practice, Jossey-Bass, San Francisco, CA, 221-254.

Levesque, L. L., O'Neill, R. M., Nelson, T., & Dumas, C. (2005). Sex differences in the perceived importance of mentoring functions. *Career Development International*, 10, 429-443.

Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H. & McKee, B. (1978). Seasons of a man's life. Englewood Cliffs, NJ: Prentice-Hall.

Lindenberger, J.G., & Zachary, L.J. (1999). Play "20 Questions" to develop a successful mentoring program. *Training & Development*, 53, 12-14.

Long, S. (2002). Mentoring: A personal reflection. New Library World, 103, 94-97.

Lyon, J. M., Farrington, P., & Westbrook, J. (2004). Mentoring of scientists and engineers: A Comparison of gender. *Engineering Management Journal*, 16, 17-25.

Merriam, S. (1993). Mentors and proteges: A critical review of the literature. *Adult Education Quarterly*, 33, 161-73.

Murray, M. (1991). Beyond the myths and magic of mentoring: How to facilitate an effective mentoring program. San Francisco, CA: Jossey-Bass.

Niehoff, B. P. (2006). Personality predictors of participant as a mentor. *Career Development International*, 11, 321-333.

Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41, 457-479.

Noe, R. A. (2008). Employee training and development (4th ed.). Boston: McGraw-Hill.

Noe, R. A., Greenberger, D. B., & Wang, S. (2002). *Mentoring: What we know and where we might go.* New York: Elsevier Science.

Northcott, N. (2000). Mentoring in nursing. Nursing Management, 7, 30-2.

Nunally, J. C. & Bernstein, I. H. (1994). Psychometric Theory. New York: McGraw Hill.

Okurame, D. E., & Balogun, S. K. (2005). Role of informal mentoring in the career success of first-line bank managers. *Career Development International*, 10, 512-521.

Oliver C., & Aggleton, P. (2002). *Mentoring For Professional Development in Health Promotion: A Review of Issues Raised By Recent Research*, Institute of Education, UK. Universiti of London. 102, 30-38.

Ragins, B. R. (1997). Diversified mentoring relationships in organizations: A power perspective. *Academy of Management Review*, 22, 482-521.

Ragins, B. R. (1999). Gender and mentoring relationships. Thousand Oaks, CA: Sage.

Ragins, B. R., & Cotton, J. L. (1993). Gender and willingness to mentor in organizations. *Journal of Management*, 19, 97-111.

Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84, 529-550.

Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, 37, 321-339.

Ritchie, N., & Connolly, M. (1993). Mentoring in public sector management: Confronting accountability and control. *Management Education and Development*, 24, 253-71.

Ritchie, A., & Genoni, P. (1999). Mentoring in professional associations: Continuing professional development for librarians. *Health Libraries Review*, 16, 216-225.

Russell, J.E.A., & Adams, D.M. (1997). The changing nature of mentoring in organizations: An introduction to the special issue on mentoring in organizations. *Journal of Vocational Behavior*, 51, 1-14.

Scandura, T. A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior*, 13, 169-174.

Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange (LMX) and Supervisor Career Mentoring (SCM) as complementary constructs in leadership research. *Academy of Management Journal*, 37, 1588-1602.

Scandura, T. A., & Williams, E. A. (2001). An investigation of the moderating effects of gender on the relationships between mentorship initiation and protege perceptions of mentoring functions. *Journal of Vocational Behavior*, 59, 342-363.

Sekaran, U. (2000). Research methods for business: A skill building approach. New York: John Wiley & Sins, Inc.

Sprecher, S. (1998). Insiders' perspectives on reasons for attraction to a close other. *Social Psychology Quarterly*, 61, 287-300.

Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37, 688-702.

Turban, D. B., Dougherty, T. W., & Lee, F. K. (2002). Gender, race and perceived similarity effects in developmental relationships: The moderating role of relationship duration. *Journal of Vocational Behavior*, 61, 240-262.

Van Maanen, J. (1983). Qualitative Methodology. Beverly Hills, CA: SAGE Publications.

Wanguri, D.M. (1996). Diversity, perceptions of equity, and communicative openness in the workplace. *The Journal of Business Communication*, 33, 443-57.

Whitely, W., Dougherty, T. W., & Dreher, G. F. (1991). Relationship of career mentoring and socioeconomic origin to managers' and professionals' early career progress. *Academy of Management Journal*, 34, 331-351.

Young, A. M., Cady, S., & Foxon, M. J. (2006). Demystifying gender type in mentoring: Theoretical perspectives and challenges for future research on gender and mentoring. *Human Resource Development Review*, 5, 148-175.

Young, A. M., & Perrewé, P. L. (2000). An examination of the exchange relationship between mentors and protégés: The development of a framework. *Human Resource Management Review*, 10, 177-209.

Zey, M.G. (1989). The mentor connection. Homewood, IL: Dow Jones Irwin.