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Goal Orientation of Adult Students Towards Learning Strategies: The Malaysian Context

Choon Hee Ong*[a]

[a] College of Business, Northern University of Malaysia (UUM), Sintok, Malaysia.

Abstract

The purpose of this study is to identify the goal orientation of adult students in the Malaysian context. The finding of this study shows that mastery goal orientation registered the highest mean among the adult students. Therefore, the adult students were found to have adopted mastery goal orientation in their learning process. The analysis of *t*-Test and One-Way ANOVA indicates that there were no significant group differences in the mean scores of mastery goal orientation among gender, age group and years of experience of the respondents. In addition, this study also attempts to offer the higher education institutions to understand the students' learning strategies by knowing their goal orientation. It provides information on how deep learning strategies can be integrated with mastery goal orientation so that they are in line to produce better learning outcomes. It is recommended in this study that deep learning methods such as flexible learning and problem-based learning can be used to encourage students to take greater responsibilities for their learning outcomes. In this respect, they will be able to interact with the facilitator on the course material in a more practical and analytical manner. In terms of future research, this study provides validated measures of goal orientation which can be used by future researchers in the similar research setting.

Keywords: adult students, learning strategies, mastery goal orientation, performance-approach goal orientation, performance-avoidance goal orientation

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*Corresponding author at: College of Business, Northern University of Malaysia (UUM), 06010 Sintok, Kedah, Malaysia. E-mail: ongchoonhee@gmail.com

Introduction

The introduction of National Higher Education Strategic Plan (2007-2020) (NHESP) (Ministry of Education Malaysia, n.d.) in Malaysia has addressed the importance of lifelong learning with the aim of achieving knowledge-based economy. The objective of the NHESP is to drive each and every sector in the country to develop first class human capital to face the knowledge-based economy challenges ahead. Owing to the fact that adults in the nation are contributing actively towards the country economy, they have been regarded as the most potential participants in the creation of knowledge-based economy. In order to achieve the targets set by NHESP, higher education institutions and universities were encouraged to provide continuing education to adult students to enhance their skills and knowledge. Many educational funds and subsidies were allocated by the government and private sectors to promote lifelong learning. Among the allocations were the Human Resources Development Fund (2014), National Higher Education Fund (2014) and various financial supports from the private sectors. These financial supports encourage most of the Malaysian adult learners to seek continuing education and to further equip

themselves with professional skills. However, goal orientation plays an important role in directing the students towards lifelong learning. In order to understand how adult students perceive upon acquisition of new knowledge and their learning strategies, this study intends to identify their goal orientation. Different goal orientations indicate different types of learning strategies they use in the process of learning. By knowing their goal orientation, learning strategy can be identified. For this purpose, the researcher has selected the trichotomous goal orientation framework developed by Elliot and Church (1997) to examine the adult students' goal orientation.

Goal Orientation

According to Dowson and McInerney (2001), goal orientation is conceptualized as different ways an individual may adopt in pursuing goals and competence in achievement situations. It is a motivational orientation which can influence their learning behavior over time. Educational research has described goal orientation as individuals' disposition on how they oriented themselves in responding to task difficulty (Elliott & Dweck, 1988; VandeWalle, 1997). It is believed that these goals will foster their response patterns to specific tasks (Dweck & Leggett, 1988). Past researchers (e.g. Elliot, 1999; Elliot & Church, 1997; VandeWalle, 1997) have used a trichotomous framework in their study where they divide goal orientation into three different dimensions, namely mastery, performance-approach and performance-avoidance goal orientation.

Mastery goal orientation refers to individuals who are intrinsically motivated and seek to develop their skills and competence through mastering challenging situations. Difficulties and setbacks are treated as opportunities for learning with the belief that their ability and competency can be enhanced with mastery responses (Dweck, Hong, & Chiu, 1993). They possess lower task anxiety and are able to evaluate levels of task to demonstrate their achievement (Sujan, Weitz, & Kumar, 1994). Adult students who own mastery goal orientation persevere in the development of competence and view errors as part of their learning process. They are keen to understand the course material well and able to conduct self-learning assessment throughout their study. They extend their commitment towards academic assignments and invest considerable efforts and time in learning new knowledge. Generally, adult students with mastery goal orientation tend to analyze the subjects in detail and seek information on the issues they face for solution. They have a strong desire in improving personal competence, mastering new experience and acquire new skills (VandeWalle, 1997). They persist in the wake of failure and use the obstacles they encounter to further improve their performance (Elliot, 1999).

Performance-approach goal orientation is related to one's desire to prove his or her competence and intends to obtain favorable judgment for it (VandeWalle, 1997). Individuals who possess performance-approach goal orientation have the tendency to outperform others. They accomplish performance goals that demonstrate their superiority. However, they believe that their ability is fixed and cannot be changed for better (Dweck, Hong, & Chiu, 1993). When they encounter setbacks and difficulties, they tend to reduce their effort and demonstrate unwillingness to engage in a task when mistakes are likely to occur. They prefer to achieve high performance with little effort and pursue opportunities that gain positive evaluations (DeShon & Gillespie, 2005). Adult students with performance-approach goal orientation prefer to choose tasks that maximize the opportunities to make them look competent and avoid tasks that make them look incompetent (Elliot, 1999; Nicholls, 1984; Somuncuoglu & Yildirim, 1999). They will participate actively in the subjects they know well and tend to show in the class that they do not know less than others. At times, they like to compare their performance with others and gain recognition in the class. They enjoy the feeling of being regarded as smart students.

Adult students with performance-avoidance goal orientation focus on effort minimization to avoid situations where they are incompetent and less capable than their peers. They tend to avoid demonstrating their incompetence and receiving negative judgment about it (VandeWalle, 1997). They exhibit withdrawal behavior to disengage in the tasks or situations that lead to negative evaluation on their competence. In general, they conceive challenging situations as threat that could reveal their self-handicapping behavior and incompetence (Elliot, 2005). These students have the tendency to withdraw themselves from participating in group presentation on subjects that they do not know well. They try to keep others from thinking they are not smart in the class or have trouble in doing their assignment. In other words, they prefer to avoid the disproving of one's competence and avoid gaining unfavorable judgments from others. In summary, the students possessing performance-avoidance goal orientation engage in knowledge acquisition only to the extent that it will not cause them to lose their reputation or display their inadequacy of ability in the class.

Underpinning Theory

Studies on academic motivation by using goal orientation theory have evolved since the last several decades (Dweck, 1986; Maehr, 1984; Nicholls, 1984). Goal orientation theory has provided verified principles on student's motivation in school and become an important theoretical perspective in the educational practice (Anderman & Wolters, 2006; Elliot, 2005; Meece, Anderman, & Anderman, 2006). Goal orientation theory guides educators in examining the achievement behavior of students in relation to their academic objectives (Anderman & Maehr, 1994). From an academic perspective, it provides a framework to explain the students' direction of engagement behavior in achieving academic goal and also to identify their patterns of engagement. A trichotomous framework developed by Elliot and Church (1997) was used in this study to identify the motivational orientations that lead to student's adaptive or maladaptive behaviors. Initially, the two main motivational orientations that contribute to these behaviors were labeled as mastery and performance goal orientation. However, Elliot and Church (1997) have further divided the performance goal orientation into two dimensions (i.e. performance-approach and performance-avoidance) in their study. The trichotomous framework intends to explain why and how students achieve their academic objectives by embracing their experience, emotion and behavior (Elliott & Dweck, 1988). According to Dweck and Leggett (1988), students adopting different goal orientation will produce different quality of engagement and different emotional experiences in their academic studies. Hence, based on the above rational, this study attempts to identify the goal orientation among adult students to determine their pattern of engagement in relation to learning strategies. This study is guided by the theoretical model developed by Elliot and Church (1997).

The Present Study

This study intends to identify the goal orientation of adult students during the first launch of the Executive Diploma Program in one of the public universities in Malaysia. This study also attempts to examine whether there are any significant group differences in the mean score of goal orientation in the survey.

Method

The relevant unit of analysis in the present study is individual adult students enrolled in the Executive Diploma Program. Survey method with questionnaire was used in this study.

Sample Selection

The first batch of the Executive Diploma Program consisted of 45 students. Thus, this study selected every student in the program to participate in the survey. Table 1 denotes the demographic profile of the respondents. Based on Table 1, it was found that 18 (40%) of the respondents were males and the remaining 27 (60%) were females. The higher number of female respondents shows that female adults have higher interest in pursuing continuing education. Among the respondents, majority of them were in the age of 26-35 (N = 18, 40%) and 36-45 (N = 17, 37.8%). This indicates that they are matured students and are able to handle their career and education with equal importance. Most of the respondents have worked for 11-15 years (N = 27, 60%) followed by 6-10 years (N = 10, 22.2%) and 3-5 years (N = 8, 17.8%). None of them has worked for 1-2 years. During the survey, the researcher realized that most students have experiences in their works but lack of academic qualification to assist them to become professionals. Therefore, continuing education is essential in enhancing their professional knowledge as well as developing new skills that may bring positive outcomes in return.

Table 1

Profile of Respondents

Item	Description	Frequency	Percentage (%)
Gender			
	Male	18	40.0
	Female	27	60.0
	Total	45	100.0
Age			
	18-25	9	20.0
	26-35	18	40.0
	36-45	17	37.8
	46-55	1	2.2
	Total	45	100.0
Years of Experience			
	1-2	0	0.0
	3-5	8	17.8
	6-10	10	22.2
	11-15	27	60.0
	Total	45	100.0

Instrument and Procedures

The researcher used administered on-site method by Miller, Kets de Vries, and Toulouse (1982) for data collection. Respondents were required to indicate their level of agreement on a Likert scale ranging from 1 (Never true) to 5 (Always true) with regard to their goal orientations. Items deployed in the questionnaire were adapted from Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 2000). The questionnaire comprises 14 items which classified the goal orientation into mastery (5 items, α = 0.85), performance-approach (5 items, α = 0.89) and performance-avoidance (4 items, α = 0.74) respectively. Some items in the PALS have been rephrased to measure the intended goal orientations of the adult students. For example, Item no.1 of the mastery goal orientation scale has been rephrased from “It is important to me that I learn a lot of new concepts this year” to “It is important to me that I learn a lot of new concepts in the class”. Further, some words such as “skills”, “teacher” and “work”

have been replaced with “knowledge”, “lecturer” and “assignment” in the questionnaire for better understanding during the survey.

Data Analysis

Factor analysis and reliability test were used to examine the construct validity and the measures’ reliability. Although the Patterns of Adaptive Learning Scales had been validated and tested by Midgley et al. (2000), it is necessary to re-examine its validity and reliability because the research is conducted in the Malaysian context where it has different cultural perspectives from the previous research. This is to further ascertain that the items in the questionnaire are measuring the concept the researcher intends to measure. Descriptive analysis was employed to determine the mean and standard deviation of the study variables. Findings from the descriptive analysis were used to determine the type of goal orientation adopted by the adult students. In addition, test of significant differences was used to explore whether goal orientation differs significantly among gender, age and years of working experience of the respondents. Statistical Package for the Social Sciences (SPSS) was used to conduct data analysis in this study.

Results

Factor Analysis

Table 2 depicts the results of the factor analysis. The results indicate that the value of Kaiser-Meyer-Olkin for Measuring of Sampling Adequacy (KMO/MSA) was 0.731. According to Hutcheson and Sofroniou (1999), values of KMO/MSA between 0.7 and 0.8 are good for factor analysis. Next, the Bartlett’s test of sphericity was found statistically significant at $p < .001$ and thus supported the factorability of the correlation matrix. Principal component analysis revealed that there were 3 factors with strong loadings. Factor 1 was labeled as mastery goal orientation (5 items), Factor 2 was named as performance approach goal orientation (5 items) and Factor 3 was referred to as performance avoidance goal orientation (3 items). One item of the Patterns of Adaptive Learning Scales was discarded due to cross loadings. Based on the factor analysis results in Table 2, mastery goal orientation, performance approach goal orientation and performance avoidance goal orientation contributed 39.990%, 31.167% and 9.780% of the common variance respectively with Eigenvalues of 5.199, 4.052 and 1.271. The three factors cumulatively captured 80.936% of the variance. The factor loading values of the scale were in the range of 0.783 to 0.922.

Reliability Test

The reliability test results were indicated in Table 2. The reliability coefficient (Cronbach’s Alpha) for Factor 1 (mastery goal orientation), Factor 2 (performance-approach goal orientation) and Factor 3 (performance-avoidance goal orientation) was rated 0.939, 0.931 and 0.845 respectively. Since the reliability coefficients have surpassed the minimum value of 0.7 as suggested by Nunnally (1978) and DeVellis (2003), all the measures were deemed reliable and consistent throughout the study.

Table 2

Factor Analysis and Reliability Test for the Goal Orientation Scales (The items are adapted from Midgley et al., 2000)

Item	Description	Factor Loading		
		1	2	3
M1	It's important to me that I learn a lot of new concepts in the class.	0.861		
M2	One of my goals in class is to learn as much as I can.	0.914		
M3	One of my goals is to master a lot of new knowledge in the class.	0.922		
M4	It is important to me that I thoroughly understand my class work.	0.914		
M5	It is important to me that I improve my knowledge in the class.	0.871		
PAP1	It is important to me that other students in my class think I am good at my class work.		0.870	
PAP2	One of my goals is to show others that I am good at my class work.		0.913	
PAP3	One of my goals is to show others that class work is easy for me.		0.808	
PAP4	One of my goals is to look smart in comparison to the other students in my class.		0.849	
PAP5	It is important to me that I look smart compared to others in my class.		0.783	
PAV1	It is important to me that I don't look stupid in my class.			0.822
PAV3	It is important to me that my lecturer does not think that I know less than others in my class.			0.788
PAV4	One of my goals in class is to avoid looking like I have trouble doing the assignment.			0.856
Eigenvalue		5.199	4.052	1.271
Percentage of Common Variance (%)		39.990	31.167	9.780
Cumulative Percentage (%)		39.990	71.156	80.936
Reliability Coefficient (Cronbach's Alpha)		0.939	0.931	0.845

Note. KMO = 0.731. Bartlett's Test of Sphericity: $\chi^2(78) = 515.034$, $p < .001$.

Mean and Standard Deviation of the Study Variables

Mean and standard deviation were used in the descriptive analysis to analyze the level of responses from the respondents. Five-point Likert scale was used as the measurement scale in the present study. In order to interpret the level of score, it is recommended that scores of less than 2.33 (4/3 + 1 (lowest value)) are low, 2.33 – 3.66 are moderate and more than 3.67 (5 (highest level) – 4/3) are high. The mean and standard deviation for the study variables were tabulated in Table 3.

Table 3

Mean and Standard Deviation of the Study Variables

Variable	*N*	*M*	*SD*
Mastery Goal Orientation	45	3.9956	0.8837
Performance-Approach Goal Orientation	45	2.1733	1.0069
Performance-Avoidance Goal Orientation	45	2.4815	1.1068

Referring to Table 3, mastery goal orientation ($M = 3.9956$, $SD = 0.8837$) has recorded the highest mean whereas the lowest mean was registered by performance-approach goal orientation ($M = 2.1733$, $SD = 1.0069$). The mean of performance-avoidance goal orientation ($M = 2.4815$, $SD = 1.1068$) was slightly higher than performance-approach goal orientation. As the values of standard deviation were small ($SD = 0.8837$ to 1.1068), it indicates that the distance of all values is not far from the mean and the group of respondents is considered homogeneous. From Table 3, it was found that the mean of mastery goal orientation ($M = 3.9956$, $SD = 0.8837$) is the highest among the adult students. It denotes that they are adopting mastery goal orientation in their study.

Table 4 shows the mean and standard deviation for each item of the mastery goal orientation measures. It is able to further explain the response patterns from the students in relation to their mastery goal orientation. The values of standard deviation in Table 4 indicate that the data were not positioned far from the mean. The table reveals that M1 (M = 4.04, SD = 0.878) and M2 (M = 4.04, SD = 1.043) registered the highest mean among the items. The students responded in such a way that it was important for them to learn a lot of new concepts in the class where learning is the goal in their study. Their learning behavior is consistent with Pintrich's (2000) study that mastery goal oriented students are characterized by satisfaction upon greater persistence in learning. On the other hand, M3 (M = 3.96, SD = 1.086), M4 (M = 3.87, SD = 0.991) and M5 (M = 4.07, SD = 0.915) also have a high rated mean where their values were above 3.67. This indicates that acquiring new knowledge, understanding class work and improving existing knowledge were among the students' goals when it comes to learning process.

Table 4

Mean and Standard Deviation of Mastery Goal Orientation Measures

Item	Description	*M*	*SD*
M1	It's important to me that I learn a lot of new concepts in the class.	4.04	0.878
M2	One of my goals in class is to learn as much as I can.	4.04	1.043
M3	One of my goals is to master a lot of new knowledge in the class.	3.96	1.086
M4	It is important to me that I thoroughly understand my class work.	3.87	0.991
M5	It is important to me that I improve my knowledge in the class.	4.07	0.915

In contrast with mastery goal orientation, performance-approach oriented students tend to gain favorable judgments in their academic involvement. They emphasize on the attainment of competence relative to others. They focus on demonstrating that one is more capable than others. Referring to Table 5, it denotes that all the performance-approach items were rated low (average M < 2.33) by the students and the values of standard deviation were small. Based on the statistics, it can be explained that the students were unlikely to engage with performance-approach goals.

Table 5

Mean and Standard Deviation of Performance-Approach Goal Orientation Measures

Item	Description	*M*	*SD*
PAP1	It is important to me that other students in my class think I am good at my class work.	2.44	1.289
PAP2	One of my goals is to show others that I am good at my class work.	2.27	1.176
PAP3	One of my goals is to show others that class work is easy for me.	2.13	1.014
PAP4	One of my goals is to look smart in comparison to the other students in my class.	1.89	1.027
PAP5	It is important to me that I look smart compared to others in my class.	2.13	1.160

Table 6 depicts the mean and standard deviation of the items related to performance-avoidance goal orientation. There were three items in this dimension. The items represent the avoidance behavior that is central to the effort minimization in avoiding unfavorable judgment and protecting self-worth. Those who possess performance-avoidance goal orientation construe academic achievement as threats and try to avoid facing it. They are worried of being disproved in one's competence. The mean values (average M = 2.48) of the three items in Table 6 were relatively low compare with mastery goal orientation. Therefore, it can be explained that the students were unlikely

to adopt performance-avoidance goals. They are unlikely to use surface learning strategies in their study. On the contrary, they are willing to excel and invest considerable efforts in understanding the course comprehensively.

Table 6

Mean and Standard Deviation of Performance-Avoidance Goal Orientation Measures

Item	Description	*M*	*SD*
PAV1	It is important to me that I don't look stupid in my class.	2.56	1.423
PAV3	It is important to me that my lecturer does not think that I know less than others in my class.	2.31	1.125
PAV4	One of my goals in class is to avoid looking like I have trouble doing the assignment.	2.58	1.234

Test of Significant Differences

As the descriptive statistics indicate that mastery goal orientation registered the highest mean in the survey, test of significant differences was used to examine whether there are any significant group differences in the mean scores of mastery goal orientation among gender, age and years of experience of the respondents. Independent *t*-Test and one-way ANOVA were selected to use in this analysis. Table 7 indicates the *t*-Test results for gender and mastery goal orientation. It shows that there were no significant differences between male (M = 4.13, SD = 0.417) and female (M = 3.90, SD = 1.089) in the mean scores of mastery goal orientation. The t value was not statistically significant at the 0.05 level with $t(43) = -0.851$, $p = .399$. On the other hand, one-way ANOVA was employed to test whether the mean scores of mastery goal orientation in the age group and years of experience were significantly different. Table 8 denotes the results of one-way ANOVA for the age group (i.e. 18-25, 26-35, 36-45, 46-55) and mastery goal orientation. The analysis was not significant at the 0.05 level with $F(15, 29) = 0.684$, $p = .779$. Hence, there were no significant differences in the mean scores of mastery goal orientation among the respondent groups classified by their age. Table 9 indicates the results of one-way ANOVA for years of experience (i.e. 1-2, 3-5, 6-10, >10) and mastery goal orientation. The F statistic, $F(15, 29) = 1.509$, $p = .166$ was also found not statistically significant at the 0.05 level. In summary, it can be concluded that there were no significant group differences in the mean scores of mastery goal orientation among gender, age group and years of experience of the respondents.

Table 7

t-Test for Gender and Mastery Goal Orientation

				Levene's Test		*t*-Test	
Gender	***N***	***M***	***SD***	***F***	***p***	***t***	***P***
Male	18	4.13	0.417	16.842	0.000	-0.851	0.399
Female	27	3.90	1.089				

Table 8

One-Way ANOVA for Age Group and Mastery Goal Orientation

Age Group	Sum of Squares	*df*	Mean Square	*F*	*P*
Between Groups	7.261	15	0.484		
Within Groups	20.517	29	0.707	0.684	0.779
Total	27.778	44			

Table 9

One-Way ANOVA for Yeas of Experience and Mastery Goal Orientation

Years of Experience	Sum of Squares	*df*	Mean Square	*F*	*P*
Between Groups	11.828	15	0.789	1.509	0.166
Within Groups	15.150	29	0.522		
Total	26.978	44			

Discussion

From the research results, it was found that the adult students were adopting mastery goal orientation in their learning process. Generally, it is perceived that those who possess mastery goal orientation are moving towards personal growth with achievement related behavior (Ames & Archer, 1988). They are associated with adaptive characteristics such as self-regulated learning, persistence, self-efficacy and preference for challenge (Elliot, 1999; Midgley, 2002; Urdan, 1997). They are motivated and committed to their study. They employ deep learning strategies and are willing to cooperate with their classmates in academic assignments (Elliot & McGregor, 1999). Those who are mastery goal-oriented tend to use deep learning strategy to make a greater effort to learn and involve extensively in self-regulation of learning (Ames, 1992; Dweck & Leggett, 1988). In relation to the research findings, a study of Zimmerman and Martinez-Pons (1990) concurred that mastery goal oriented students maintain persistence in academic activities when they encounter difficulties and distracting events in their study. In short, high level of mastery goal orientation indicates that students are willing to grow and develop new skills and competencies by exhibiting achievement-related behavior and perform better in academic activities. Students who adopt mastery goal orientation may apply motivational, cognitive and deep learning strategies towards their lifelong learning over time. This will ultimately result in good attainment in their academic undertakings.

Generally, adult students engage in lifelong learning or continuing education for many reasons. They may aim to acquire knowledge for personal development, career advancement, job promotion, salary increment and etc. They may also intend to improve their skills to become professionals. Despite all the reasons for adults to enroll in lifelong learning and continuing education program, goal orientation remains a vital component that represents their direction in pursuing the program. By knowing their goal orientation, we are able to understand their learning strategies, achievement behavior and patterns of cognition (Elliott & Dweck, 1988). Therefore, the findings of this research provide suggestion to the higher education institutions to design curriculum that incorporates deep learning strategies in relation to their mastery goal orientation. With this integrative approach, it is optimistic that

the adult students will have more autonomy to interact with the facilitator on the course material in a practical and analytical manner.

Conclusion and Implications

The present study has successfully conducted a survey on adult students' goal orientation in the Malaysian context. It has identified the level of mastery, performance-approach and performance-avoidance goal orientation among the students. The findings indicate that mastery goal orientation had the highest mean and thus it is directing the students towards developing new skills and competencies in their study. This research suggests that mastery goal orientation can be integrated with deep learning strategies so that they are in line to produce better learning outcomes. According to Chan and Lai (2002), students who scored higher on mastery goal orientation were more likely to engage in deep learning strategies. Therefore, it is recommended that adult classes should be conducted in curriculum assessments with deep learning methods. Learning methods such as flexible learning and problem-based learning can be used in the learning process. Wade (1994) stated that flexible learning will provide opportunity to the students to engage in learning activities that meet their own needs and at the same time taking greater responsibilities for their learning outcomes. On the other hand, problem-based learning emphasizes on the understanding and resolution of real-life problems in a real context (Barrows & Tamblyn, 1980). A study of Biggs (1991) stated that deep learning methods satisfy curiosity of the students when they personally involve in the learning situation that relates to their experience and other interesting items. Additionally, adult students' involvement in the learning process should be of sufficient duration and intensity to ensure positive learning outcomes and excellent knowledge acquisition. The findings of this study serve as a guideline for the higher education institution to incorporate its curriculum with deep learning approach towards the creation of knowledge-based economy. For future research, this study provides validated measures of goal orientation which can be used by future researchers in the similar research setting.

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Competing Interests

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About the Author

Choon Hee Ong has received his Doctorate in Business Administration from Northern University of Malaysia (UUM). His research interest is related to educational psychology. His current research focuses on goal orientation and learning approach of adult students.