

A preliminary study on gender and learning style in Malaysian higher learning institutions: Evidence from a cultural perspective

Mohd. Haniff Jedin

Universiti Utara Malaysia, Alor Star, Malaysia
mdhaniff@uum.edu.my

Norsafinas Md. Saad

Universiti Utara Malaysia, Alor Star, Malaysia
safinas@uum.edu.my

Abstract: Many researchers show interests in cross-cultural studies within various scopes such as business, management, leadership and education. Some of them even actively search answers regarding Asian cultural values and most of them found that generally, Asian societies are clearly tied with collective characteristics. Specifically, Asian men are argued as individualists, while the women are categorized as collectivists. To verify the arguments on Asian culture, thus, this study is intended to examine the influence of cultural values on male and female students' learning styles, particularly individualistic and collective learning styles. The target population for this study consists of undergraduate students in Universiti Utara Malaysia (UUM), Universiti Teknologi MARA (UiTM) and Kolej Universiti Kejuruteraan Utara Malaysia (KUKUM). From the findings, it is concluded that there are significant differences between male and female students in terms of individualistic and collective learning. It is also proven that Asian people truly value collective approach. Specifically, the female students characterized themselves as collective learners, but simultaneously they were also slightly inclined towards individualism, whereas the male students partly viewed themselves as collective learners.

Keywords: Culture, Gender, Learning Style

Introduction

The people who we socialize with, the environment that we live in and all things that we experience can eventually shape our culture and directly affect our behaviors, beliefs and thoughts. Culture is passed from generation to generation because it is a society's legacy and way of life. It is also learned that perceptions and judgments are influenced in various ways such as, where we are born and raised, the language we learn and the social status we encounter. Consistent with this statement, Schein (1985) pointed out that a culture was a set of basic assumptions – shared solutions to universal problems of external adaptation (how to survive) and internal integration (how to stay together) – which had evolved over time and were handed down to the younger generation. Culture is also one of the factors that highly influence all aspects of our lives, including personal characteristics, work behaviors and learning styles. Geert Hofstede is one of the researchers, who extensively studied the influence of culture on various perspectives. In a study on culture and the workplace, Hofstede (1980) compared cultural values of different nations and the comparison was made based on four main cultural dimensions: individualism-collectivism, masculinity-femininity, uncertainty avoidance and power distance.

Many studies highlighted learning style as one of the aspects that affect a student's academic performance, class participation and self-esteem. It was also being studied on how it brings different results to different students. According to Kolb (1984), learning styles are categories developed by educational researchers to classify learners based on their customary approach to perceiving and processing information. Different learners or students use different learning styles – namely studying with friends, working alone at home or getting assistance from the Internet. Their preferences on the learning styles are influenced by many factors including their personal characteristics, backgrounds, environments and cultural values. This is why some students prefer to study in groups or collectively, while the others prefer to study alone or individually. With these interesting facts, this study then goes further to examine the differences between males and females in terms of their learning styles and to identify which cultural value is more dominant than the other on gender perspective.

Literature review

Individualism and collectivism: A cultural value

Cultural individualism and collectivism, is one of the major dimensions of culture and their influence on behavior have been widely discussed. Hofstede (1980) had developed a framework for evaluating the cultural similarities and differences across nations. He identified four important cultural dimensions: power distance, uncertainty avoidance, individualism-collectivism and masculinity-femininity. However, for the purpose of this study, only individualism-collectivism will be discussed. In brief, individualism refers to the tendency to be more concerned with the consequences of one's behavior for one's own needs, interests and goals, whereas collectivism refers to the tendency to be more concerned with the consequences of one's own behavior for in-group members, and to be more willing to sacrifice personal interest for the attainment of the collective interests (Smith, Dugan, Peterson and Leung, 1996). In individualist societies, the group connection and network are less important because personal goals and individual needs are highly valued. While in collectivist societies, group harmony and shared beliefs are more appreciated. According to Hofstede (2001), in collectivist cultures, people are interdependent within their group members, give priority to the goals of their in-groups, shape their behavior primarily on the basis of in-group norms and behave in a similar way. On the other hand, in individualist cultures, people are independent, they give priority to their personal goals over the goals of others and they behave primarily on the basis of their own attitudes rather than the norms of their in-groups. In summary, a collectivist works and shares common values with others, whereas an individualist works by himself and lives by his personal standards or principles. However, a collectivist has the tendency to shift to individualism depending on personal circumstances, for instance age, marriage and travel (Triandis, 1995).

Asian countries, including Malaysia, are highly characterized as collectivist societies. Previous studies showed that Asian communities preferred to work in groups, and the collectivism or group loyalty was deep rooted within many Asian societies (Burns, 1998). Hofstede (1984) stated that the Chinese majority countries like Taiwan, Hong Kong, and Singapore scored considerably higher through collectivism than countries of the western world, which scored higher through individualism. Chaney and Martin (2000) also stated that the Chinese and Malaysians valued the group and family approach. To a great degree, Schermerhorn and Bond (1997) specified that in collectivist plus high power distance Malaysia, actual group process was more likely practiced, but with less interaction and limited expressed harmony. On top of everything else, search for public consensus should be acknowledged by an authority figure. It described that Malaysian societies practiced

collective cultural values and at the same time, considerably valued power. Therefore, although Malaysians would consider to working in groups, they would have less control over their opinions and actions. This is due to the fact that most decisions should be approved by the in-charge persons or endorsed by the superiors.

Individualism and collectivism: A gender perspective

Gender and culture cannot be separated as two different perspectives. This is due to the fact that when people discuss the issue of culture, gender will be considered as one of the sub-topics. A view from Connell (1987), gender is a very complex interplay of personal and social forces. According to Babayan (2001), it is difficult to imagine any description of reality without the gender analysis because gender is one of the inalienable constructing parts of any society and sometimes it is not easy to extract a person out of his or her general cultural context. Hofstede and Hofstede (2005) mentioned that the word culture could also be applied to the genders. It means that gender and culture were closely associated when explaining the influence of both in a person's perception and behavior. They explained that men had been programmed with tougher values and women with more tender values, but the gap between genders varies by country. They further emphasized that at school level, individualism and collectivism behavior was clearly visible in the classroom. In another study that applied Hofstede's dimension of individualism and collectivism to test on gender differences, Stedham and Yamamura (2004) pointed out that Japanese women were ranked lower in terms of individualism behavior if compared to the Japanese men. Similarly, American women were also observed with lower individualism than the American men.

In a study of collaborative learning style and team learning performance, Yacizi (2005) discovered that participant or collective style was a significant predictor of female students' performances, while the independent and competitive styles were significant in predicting the performance of male students. In another study, which compared Australian and American students' preferences for learning either competitively (individualistic) or cooperatively (collective), Owens (1995) had verified that the female students showed stronger cooperative preferences, whereas the male students showed stronger competitiveness and individualized preferences. These findings then could explain why the male students had more competitive qualities and that they would prefer to study hard independently, in order to win and stay competitive. In contrast, the female students were more dependent on their in-group members and also they would try to help and complement each other to perform well in their academic performances.

Individualistic and collective learning styles

There are a few learning styles or strategies that students can apply to perform efficiently in their studies. Two of the basic ways are either the students study individually on their own to achieve the best result without any help or attention from other students, or they work collectively and cooperatively with other students. Both ways are deemed practical to the students when achieving the best in their academic performances. However, individuals can shift to either collectivism or individualism based on external cues and prompts (Eisenberg, 1999). Roger and David Johnson (1997) highlighted the difference between individualistic and collectivist learning styles. An individualistic student is independent of one another and works to meet the criteria in fulfilling his own academic goal. It explains that a student will work alone to succeed in his academic performance. Needless to say then, some students perform better when they work on their own. On the other hand, a collective student will depend on his collective peers and they will assist each other to score good results in their studies. It shows that each individual in the group must contribute, based on his acknowledge

ability in a particular academic subject or area. He would then use this knowledge to make others in the group understand better a particular concept or theories on a subject matter being discussed. Slavin (1991) clarified that cooperative or collective learning was a set of alternative instructional methods where students worked in small groups to help one another learn academic materials. This proven method could give positive impact to the students' performances. Johnson and Johnson (1989) listed more than 400 studies, which argued that collective learning actually had a positive outcome on students' achievement, interest in the subject matter, self esteem, attendance and ability to work effectively with others. In business education, it was found that team learning contributed to favorable attitudes toward learning and group project performance in marketing, accounting, and management courses (Hampton and Grudnitski, 1996; Deeter-Schmeltz and Ramsey, 1998; Miglietti, 2002). These studies also reported that team-learning improved their problem-solving and communication skills, increased student involvement and enhanced their achievements.

Methodology

A total of 2,000 questionnaires were distributed to undergraduate students of Universiti Utara Malaysia (UUM), Universiti Teknologi MARA (UiTM) and Kolej Universiti Kejuruteraan Utara Malaysia (KUKUM). As a result, a total of 1,230 questionnaires were collected from the 2,000 questionnaires distributed. Then, 37 incomplete questionnaires were discarded. Therefore only 1,193 questionnaires were used for data analysis, thereby giving a response rate of 59.7%. As mentioned earlier, this research concentrated on undergraduate students only, although some of these institutions run mixed programs and degrees. For example, UiTM and KUKUM also conduct diploma-level programs. Specifically, the questionnaires were given out to undergraduate students in semester four, five and six. The data for the whole population was gathered according to the student enrollment in November 2004/2005 session. Table 1 breaks up the numbers of questionnaires divided among the three institutions.

Table 1: Number of questionnaires distributed

No.	Higher learning institutions	Numbers of questionnaires distributed
1.	Universiti Utara Malaysia (UUM), Kedah	1,160
2.	Universiti Teknologi MARA (UiTM), Perlis	720
3.	Kolej Universiti Kejuruteraan Utara Malaysia (KUKUM), Perlis	120
Total		2,000

This study used probability sampling technique, in which stratified random sampling was specifically applied. Whereas the questionnaire used in this study was set in close-ended structure. It was developed based on the studies by Hutchison and Gul (1997) and Johnson and Johnson (1989). The questionnaire was sub-divided into two sections. The first section consisted of ten questions, where the respondents were asked to give some demographic information such as gender, age, ethnicity, academic background, university and program of studies. The second section comprised of 18 questions pertaining to individualistic and collective learning styles. All questions in section 2 were rated using five-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree).

Findings and discussions

As shown in Table 1, the total respondents in this study were 1,193 students. Based on the statistics, the number of female respondents in UUM was almost three times higher than the male respondents, registering at about 74% of the total respondents. In terms of the figure, they read at 658 female and 233 male respondents respectively (see Figure 1). In comparison, UiTM registered the lowest number of male respondents, which was about 13% (34), while KUKUM's male respondents doubled that of its female respondents at about 67% (26). These findings revealed that females dominated in all participating universities, except KUKUM. The reason being, KUKUM was not a priority choice of the females since the programs offered there were mainly engineering-based. This could explain why female dominated in numbers in UUM and UiTM, which offered mainly business and management programs. Needless to note, in general, all universities in Malaysia were dominated by females rather than the males.

Table 2: Percentage of gender among the three universities

GENDER (Total=1193)	UUM (N=891)	UiTM (N=263)	KUKUM (N=39)
MALE	233 (26.2%)	34 (12.9%)	26 (66.7%)
FEMALE	658 (73.8%)	229 (87.1%)	13 (33.3%)

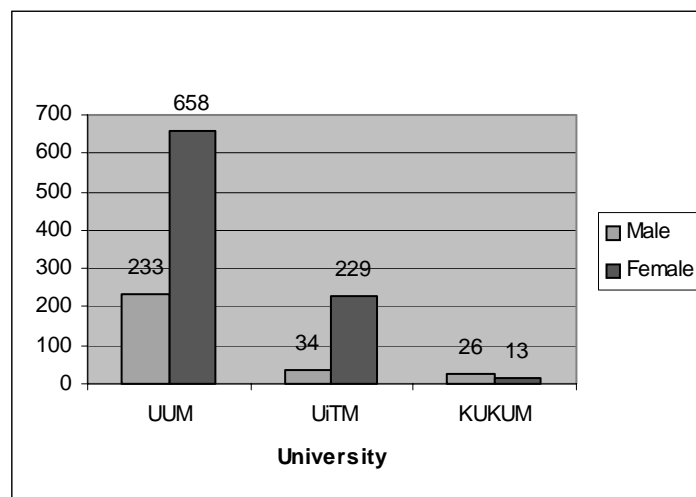


Figure 1: Comparison of the number for male and female respondents

Referring to Table 2, the t-test on the two dimensions showed that there was a significant difference ($p < 0.05$) between the genders with regards to the individualistic learning style, in which it had a significant value of 0.028. Similarly, the collective learning style showed a significant value of 0.001, which indicated that there was also a significant difference between male and female in terms of collective learning style. This could point to the fact that the degree of individualism and collectivism varies among male and female students and both genders possibly had different levels of individualism and collectivism.

Table 2: Comparison between male and female

VARIABLE	MEAN	N	SIG. (2 TAILED)
Individualism			
Male	2.5047	293	0.028*
Female	2.4190	900	
Collectivism			
Male	2.3299	293	0.001**
Female	2.1556	900	

Note: * Indicates significance at 0.05, ** indicates significance at 0.01
Likert scale: 1- Strongly Agree to 5 - Strongly Disagree

Regarding the learning style, both male (mean=2.3299) and female (mean=2.1556) scored higher means in collective learning style compared to individualistic learning style, of which lower means indicated higher values. It revealed that both genders agreed that they viewed themselves as collective learners, who practised collective learning style and preferred to study with their in-group member rather than studied alone. This finding was consistent with several researchers (Schermerhorn and Bond, 1997; Burns, 1998; and Chaney and Martin, 2000), who argued that Asian societies preferred to work in groups and collectivism was highly correlated with the type of culture typically associated with Asian countries.

On the other hand however, this study identified a contrasting result if compared to other studies, in which it revealed that the male students (mean=2.5047) ranked low in terms of individualistic learning style as compared to the female students (mean=2.4190). In addition, the females were observed to have attached to both individualistic and collective learning styles as they scored higher means in both methods when compared to the males. All these findings showed a different point of view when compared to other researches such as Owens (1995) and Yacizi (2005), which indicated that generally the male students were associated with individualistic learning style, whereas the female students were clearly associated with collective learning style. However, this study and those two researches shared a common similarity, whereby they reported that female students highly characterized themselves as collective learners. Nevertheless, even though they prefer collective learning style, at the same time, they also tended to be individualistic in certain situations that wanted them to think and act for the purpose of their individual needs and satisfaction.

Conclusions

This study basically achieved its objectives, which was to examine the differences between the males and females in terms of their learning styles, either individualism or collectivism, and to identify which cultural value was more dominant than the other on gender perspective. Generally, this study found significant differences between male and female students in terms of individualistic learning style and collective learning style. In contrast to the findings of other studies, which indicated that Asian men were highly regarded as individualists, the findings of this study revealed that the male respondents obviously characterized themselves more as collectivists. On the other hand, in terms of female preferences on learning styles, this study showed that the female students preferred to study collaboratively with their circle friends. This was similar with the findings of other studies, which they agreed that the female students could be classified as collectivist learners. However, it was also found that the female respondents were slightly inclined towards individualism because along with the priority of the group's objectives, they were also concerned with their own personal interests.

The contradictions and changes found in this study were due to the fact that any given culture evolved over time. Triandis (1996) highlighted a number of personal reasons, such as marriage, age, living abroad, occupation and participation in sports, which could probably change a person from an individualist to a collectivist or vice versa. Eisenburg (1999) emphasized that even though people and cultures were highly associated with these two dimensions, the degree of individualism and collectivism was different in each individual. He went on further to say that no society could be exclusively individualistic or collective. These then explained that not all individuals and societies would continuously remain the same within the inherited cultural dimensions of individualism and collectivism. Furthermore, most undergraduate programs required course works, such as assignments, case projects, class discussions and presentations, to be done in groups. This could possibly influence male students who are individualists to become collectivists. Connell (1987) stated that the role of a gender can be influenced by the family class situation which could be extended to future research.

As with any other studies, this study also had its limitations. Firstly, the stratified random sampling used in this study could not generalize the results. Secondly, the sample of this study only covered students in three Malaysian higher learning institutions. Thus, their views might not be reflecting the views of all Malaysian students. Thirdly, the samples were not distributed evenly in numbers since UUM represented a bigger population, which comprised of 13 faculties with more than 30 undergraduate programs, while UiTM had only four undergraduate programs and KUKUM consisted of only two undergraduate programs. This could probably lead to biases and lower response rates, especially from UiTM and KUKUM. Fourthly, this study was mainly geared to identify the respondents' learning styles, either individualistic or collectivist, and it was not based on the success or failure of each learning style. In conclusion, this study stressed only on one of Hofstede's cultural dimensions, as there could always still a wide area of topics to discuss on the influence of other factors and the other three cultural dimensions on students' learning styles.

References

- Babayan, S. (2001). The reconstruction of society's gender culture through higher education in Armenia. *International Journal of Sociology and Social Policy*, 21(1), 57-67.
- Burns, R. (1998). *Business Asia: A cultural perspective*. South Melbourne: Addison-Wesley Longman.
- Chaney, L. H. and Martin, J. S. (2000). *Intercultural business communication*. 2nd Edition. New Jersey: Prentice Hall.
- Connell, R. W. (1987). *Gender and power: society, the person and sexual politics*. United Kingdom: Stanford University Press.
- Deeter-Schmeltz, D. and Ramsey, R. (1998). Student team performance: A method for classroom assessment. *Journal of Marketing Education*, 20 (2) 85-93.
- Eisenberg, J. (1999). How individualism – collectivism moderates the effects of rewards on creativity and innovation: A comparative review of practices in Japan. In McFeeters, F. E. (Eds.), *The Effects of individualism vs. collectivism on learner's recall, transfer and attitudes toward collaboration and individualized learning*. (Doctoral dissertation, Virginia Polytechnic Institute and State University, 2003).
- Hampton, D. and Grudnitski, G. (1996). Does cooperative learning mean equal learning? *Journal of Education for Business*, 72. 5-7.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related Values*. Beverly Hills, CA.: Sage Publications.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, Behaviors, Institutions and organizations across Nations*. Thousands Oaks, CA.: Sage Publications.
- Hostede, G. and Hofstede, G. J. (2005). *Cultures and organizations: software of the mind*. New York: McGraw Hill.

- Hutchison, M. and Gul, F. A. (1997). The interactive effects of extroversion/introversion traits and collectivism /individualism cultural beliefs on student group learning preferences. *Journal of Accounting Education*, 15, 95-107.
- Johnson, D. W. and Johnson, R. T. (1989). Cooperation and competition, theory and research. In Buchs, C. et al. (Eds), Resource interdependence, student interactions and performance in cooperative learning. *Educational Psychology*, 24 (3), 291- 314.
- Kolb, D. A. (1984). *Experiential learning*, Englewood Cliffs, NJ: Prentice-Hall
- Miglietti, C. (2002). Using cooperative small groups in introductory accounting classes: a practical approach. *Journal of Education for Business*, 78 (2), 111-115.
- Owen, L. (1985). The learning preferences of students and teachers: An Australian-American comparison. *Teaching & Teacher Education*, 1 (3), 229-241.
- Roger, T. and Johnson. D. W. (1997). Cooperative Learning: Two heads learn better than one. Articles in Transforming Education. Available: <http://www.context.org/ICLIB/IC 18/Johnson.htm> (2005, February 16).
- Schein, E.H. (1985). *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Schermerhorn, J. R. and Bond, M. H. (1997). Cross-cultural leadership dynamics in collectivism and power distance settings. *Leadership and Organization Development Journal*, 18 (4), 187-193.
- Smith, P. B., Peterson, M. F. and Leung, K. (1998). Individualism: Collectivism and the handling of disagreement. A 23 country study. *International Journal of Intercultural Relations*, 22 (3), 351-367.
- Stedham, Y. E. and Yamamura, J. H. (2004). Measuring national culture: does gender matter? *Women in Management Review* 19, 233-243.
- Slavin, R. E. (1991). Cooperative Learning: and group contingencies. *Journal of Behavior Education*, 1(1), 105-115.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, Colorado, Westview Press.
- Yazici, H. J. (2005). A study of collaborative learning style and team learning performance. *Education + Training* 47 (3), 216-229.

Copyright © 2006 Mohd Haniff Jedin and Norsafinas Md. Saad: The authors assign to HERDSA and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to HERDSA to publish this document in full on the World Wide Web (prime sites and mirrors) on CD and in printed form within the HERDSA 2006 conference proceedings. Any other usage is prohibited without the express permission of the authors.