

E-Learning in Institute of Higher Education in Malaysia

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Abstract

This paper review to focus the relationship between Generation Y students and Malaysian cultural factors within the context of an e-learning application. E-learning is defined as the use of electronic media in learning. Meanwhile, Generation Y is defined by the internet and is a connected global generation. The results of these studies on Generation Y culture may differ from those obtained from research focusing on Generation Y and cultural nuances separately. Hofstede's multicultural model is used in this study to better understand the unique cultural nuances of Malaysian Generation Y students. Every dimension of Hofstede's cultural model has been adapted to the context of e-learning in Malaysia. This review also explores whether both Generation Y and culture influence the student usage of e-learning education. This model can be utilized as a guide for e-learning developers to create an appropriate pedagogy for Generation Y students in higher educational institutes in Malaysia.

Keywords: e-learning, generation Y, culture, Hofstede's cultural model, education.

INTRODUCTION

Education using electronic media, or popularly referred to as e-learning, has long been implemented in educational institutions in Malaysia. E-learning is especially prevalent in Higher Education Institutions (HEIs), and its introduction is in line with the nation's attempt to integrate Information Technology within its educational sector to create a seamless learning experience for its students. Demand for e-learning is expected to continue to grow as the government intends to inculcate a lifelong learning culture within Malaysians (Siddiquee, 2014). E-learning also enables students to access educational resources more broadly and is a self-directed learning mechanism that allows for collaboration with students from different generations, countries, cultures, and backgrounds (Doo, Bonk, & Heo 2021). Further, e-learning has opened up opportunities for all students to learn from wherever they are situated, regardless of time and location (Nordin & Singh, 2016). As such, to better understand the impact of e-learning on Malaysian students, this study synthesizes two key factors that influence the use of e-learning namely – student profiles and cultural nuances.

Ivanova and Smrikarov (2009) argue that each generation is shaped by different social values and cultural backgrounds. In the case of today's digital age, there are generations born and raised by digital technology and there are generations who need to actively learn digital technology to keep up. The former describe Generation Y (Gen-Y), also known as digital natives, who also coincidentally happen to make up most of the student profile in Malaysian institutions today. Hence, it is not surprising that researchers consider Gen-Y students as the generation that will impact the success of e-learning introduction in Malaysian institutions the most. This is because Gen-Y students are a technologically-savvy generation with high levels of technological literacy (Bolton et al., 2013) and often use the internet in their daily lives. These Gen-Y students were born after the microcomputer was introduced and grew up in a world dominated by the internet. They are more comfortable using keyboards and computers than writing in notebook (Black, 2009) which bodes well for the application of e-learning in their learning pedagogy.

Hence, recognizing the importance of student profiles and cultural nuances, this study aims to study the relationship between Gen-Y students and Malaysian cultural factors within the context of e-learning application. Studying this relationship is critical because it allows generational student culture to be understood, which in turn allows for proper advancement in educational technology, flourishing of the current crop of digital natives, and providing access to a plurality of information for Malaysian students. Further, this study also allows educators to understand the learning preferences and trajectory of Gen-Y students, which provides educators the opportunity to decide whether to persist with established modes of teaching pedagogy or adapt new teaching methods to cater to the needs of Gen-Y. As noted earlier, our focus on understanding generational cultural vis-à-vis e-learning implementation is geared to create a successful e-learning pedagogy that will inculcate a culture of lifelong learning within the Gen-Y student profile.

E-LEARNING AT PUBLIC UNIVERSITIES IN MALAYSIA

In general, e-learning is defined as the use of electronic media in learning. The Technology Standards further defines e-learning as an electronic device that facilitates the teaching and learning process by using a web browser to create interaction between students. Meanwhile, some researchers have argued that e-learning is a combination of tools such as online learning that involves the internet as well as CD-ROMs, DVDs, and televisions for offline learning (Nwabufo, Umoru, & Olukotun, 2010). Although there are many definitions of e-learning, e-learning is also synonymous with blended learning, network learning, online learning, and so on which uses computers and networks as a platform for learning (Wan-Tzu Wong & Neng-Tang Norman Huang, 2011).

There are 20 public universities in Malaysia which are divided into three groups namely research universities, comprehensive universities, and focused universities. Meanwhile, there are over 600 private universities also registered in Malaysia (Mustapha, 2013). Most of these public universities use e-learning to enable students to access information and learning materials such as lecture notes, assignments, and quizzes. However, the implementation of e-learning is different in every public

university (Abas, Peng, & Mansor, 2009). In Malaysia, educators play an important role in inspiring students to participate in e-learning at public universities as the university fully delegates the responsibility of e-learning to its teaching staff (Nordin & Singh, 2016).

Despite this, there are members of the HEIs teaching force that do not emphasize the use of e-learning in their pedagogy and learning, which result in students being unaware of the existence of e-learning within their universities. A possible reason for the omission of e-learning by these educators could be that the Ministry of Education (MOE) revealed that classes taught online and/or at-home are less effective as compared to face-to-face learning.

Besides e-learning's lower efficacy, some universities, though prepared with the teaching infrastructure, believe that factors like cognitive thinking and the social aspect of learning cannot be achieved fully via a digital platform. Further, not all subjects provide appropriate learning materials for e-learning such as Design and Technology subjects or Arts and Crafts classes. These modules require hands-on learning which is critical for students to improve their skills hence, doing it via e-learning is not as useful.

In addition, some public universities incorporate discussion forums as part of the subjects taught, yet many students do not participate in these forum (Abas et al., 2009). The lack of student participation could be due to the reduced importance placed upon online participation by educators, technological barriers that complicate access to the forums, or reticent students who feel apprehensive about participating in online discussions. Regardless, these behaviours result in only a minority of students fully utilizing e-learning completely within Malaysian public universities.

GENERATION Y

Generations represent groups of people within a certain age range, born at the same time, share similar history and culture, and have similar thoughts, problems, and attitudes (Shambare, Rugimbana, and Sithole 2012). In addition, "generation" as a group is often referred to as individuals who are affiliated with one another through early life experiences (Yusoff & Kian 2013). Generation Y, also known as 'Millennials' or the digital generation, were born between 1980 to 2000 (Black, 2009). Gen-Y is the first generation to spend their entire lives in a digital environment and where informational technology has had a lasting impact on their lives (Bolton et al., 2013). In essence, Gen-Y is defined by the internet and are a connected global generation (Malik & Khera, 2014).

Characteristics of Generation Y Students

The Gen-Y student is generally highly educated and tech-savvy. The emerging era of information technology has provided Gen-Y students with mottos such as 'Live for the Day' and 'Just do it' (Kårefalk, Petterson, & Zhu, 2007). A report released by UNESCO 2011 stated that Gen-Y students have many important traits that they grew up with namely strong self-confidence, intrinsic appreciation of self-worth, and a belief that they can do anything (Lorand, Duchemin, & Cornu, 2011). Table 1

shows the characteristics of global Gen-Y students that have been compiled by previous researchers.

Table 1: Characteristics of global Gen-Y students.

Characteristics of Generation Y	Researchers
• Technology savvy	
• Rationale	
• High confidence	
• Honest	
• Self-confident	
• Open-minded / optimistic	
• Responsible	
• Career orientation	
• Technology-dependent	
• Can collaborate / work in groups	Ivanova & Smrikarov (2009)
• Able to do a lot of work at once (multitasking)	Black (2009)
• Enjoy trying (trial and error)	Voller, Blass, & Culpin (2010)
• Disrespect of authority	Salamin (2011)
• Visual and kinesthetic learning	Raman et al. (2011)
• Short focus period	Eckleberry-Hunt & Tucciarone (2011)
• Lack of patience	Reilly (2006)
• Lack of commitment	Shambare et al. (2012)
• Lack of commitment	N. Kamau, M. Njau, & Wanyagi (2014)
• Isolated but social in media	
• Want quick answers	
• Like urgent but not impulsive	
• Depends on others to achieve goals	
• Likes to read and listen to talks	
• Want recognition	
• Solve problems on their own	
• Want flexible time and place	
• Hard working	

Cultural Nuances

Culture is difficult to define because of the increased usage of varying terms and definitions that describe the concept of culture. Culture is complex and broad and abstract with different meanings in different contexts and with different individuals (Armando Cortés Ordóñez, 2014). In general, culture is defined as a way of life that is developed and owned by a group and passed on from generation to generation (Uzuner, 2009). Anthropologist Hofstede defines culture as “a collective program of mind that distinguishes members of one group from another” (Hofstede, 2011). It refers to a group of people somewhere sharing beliefs, attitudes, behaviours, traditions, and values that distinguish them from other groups (Armando Cortés Ordóñez, 2014).

Hofstede (2011) also argues that culture is a form of mental programming – the software of the mind that can be learned rather than inherited, that distinguishes broader culture from intrinsic human nature, is an inherent aspect of mental programming. Hofstede’s software incorporates thoughts, feelings, and actions that have been learned since childhood and to begin learning new patterns of thinking, feeling, and acting is more difficult than learning it for the first time (George, Owoyemi, & Onakala, 2012). In addition, Edward T. Hall, also an anthropologist, says culture is a way of life of a group of people including the behaviours, beliefs, values, and symbols that they accept as shared along with

communication that is passed on from generation to generation (Mcfarlane, 2011).

There are many definitions of culture but no specific definitions about it. The above definitions submitted by previous researchers are based on the studies conducted by them, while this study focuses on the behaviour of Gen-Y students towards e-learning in Malaysia. As most of the definitions presented involve attitudes and behaviours, these definitions meet the needs of this study – they highlight the attitude, behaviour, and personality of Gen-Y students, and whether these students are influenced by generational or cultural factors.

HOFSTEDE'S CULTURAL MODEL

To assist us in better understanding the unique cultural nuances of Malaysian Gen-Y students, we adopt Hofstede's multicultural model, which has been extensively researched in recent studies detailing the culture of students in Malaysia (Figure 1). We take this research one step further by adapting every dimension of Hofstede's cultural model to the context of e-learning in Malaysia.

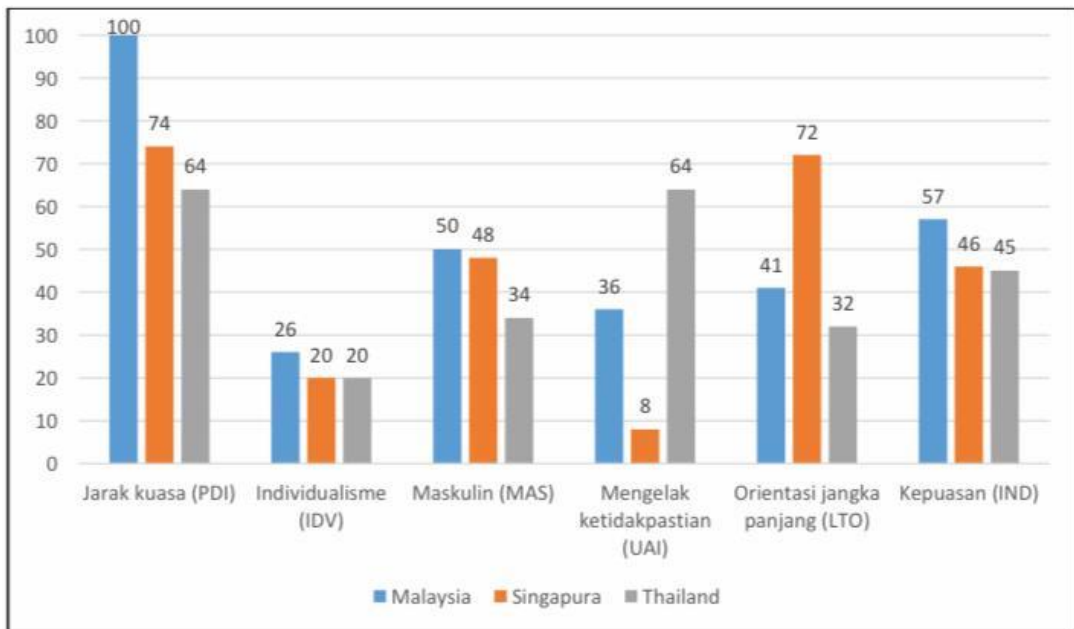


Figure 1: Comparison of Hofstede studies in Malaysia, Singapore and Thailand (Hofstede, 1991).

The descriptions below are more in-depth explanations on Hofstede's cultural dimension and how this cultural dimension plays a role in influencing student engagement in e-learning in educational institutions, with specific emphasis on the Malaysian context.

1. Power Distance (PDI)

Power distance refers to the degree to which members of an organization or society accept unequal distribution of power (Nordin & Singh, 2016) and the degree to which less-powerful members expect equal distribution of power (Hofstede, 2011). This cultural dimension looks at the extent to which a society values hierarchical relationships and respects those in power (Alamri & Cristea, 2014). Societal culture in high PDI countries such as Malaysia, tend to accept hierarchical structures and respect those who occupy high positions, the aged, and have authority (Barrett et al., 2013). The people of high PDI countries view distributed power inequality as a normal facet of their lives (Ahmed, Mouratidis, & Preston, 2009).

The teaching force in high PDI countries are seen as being more powerful and superior to their students. This promotes a culture of respect and fear among students when they interact with teachers in the classroom (Barrett et al., 2013). A study conducted by (Kårefalk et al., 2007) states that in high PDI cultures, students become passive and reluctant to participate in activities that involve communication as students do not usually speak in front of their teachers. In addition, students expect older teachers to teach them because young teachers are considered less reliable in terms of teaching acumen and mentoring capacity (Omidvar et al., 2012). Additionally, in high PDI societies, students cannot question the knowledge that teachers possess and have to view teachers as experts in their area of teaching (Masoumi, 2006).

Less student engagement in the classroom also influences student engagement when using e-learning. If students do not participate in the classroom because they are afraid to ask questions or disagree with the teacher (Nordin & Singh, 2016), these behaviours are unlikely to change during e-learning. A study conducted by (Barrett et al., 2013) states that students from high PDI are reluctant to participate in e-learning discussions without the presence of the teaching staff. This is acknowledged by (Barton, 2010), who says that students from high PDI cultures prefer to rely on the teaching staff to make learning happen, causing the weight of learning responsibility falling on the teaching staff (Signorini, Wiesemes, & Murphy, 2009) although e-learning was developed to introduce self-directed learning. This is because learning in high PDI countries is teacher-centric and not student-centric. Furthermore, students from high PDI cultural backgrounds expect knowledge to come from their teachers rather than from their own individual knowledge (Renner, Laumer, & Weitzel, 2015). As such, traditional learning is more accepted in high PDI countries rather than e-learning (Speece, 2012).

2. Individualism and Collectivism (IDV)

The cultural orientation of individualism and collectivism refers to the degree to which members of an organization act as individuals or as groups (Triandis & Hofstede, 1993). Individualism (high IDV) is defined as an individualistic culture that emphasizes the importance of individual identity, rights, and needs, while interpersonal relationships are not strong. Meanwhile, the collectivism (low IDV) cultural dimension is defined as a collective culture that emphasizes group rights, and harmony within groups,

and a spirit of cooperation is prioritized more than individual will, as well as loyalty between members of the group cannot be disputed (Speece, 2012). Based on Figure 1, Malaysia is a country that adopts a culture of collectivism. In low IDV culture, people appreciate values and practices rooted in tradition rather than new ideas (Omidvar et al., 2012).

In collectivism, students speak primarily when asked by teachers and not voluntarily (Omidvar et al., 2012) and only respond when they have something worthwhile to discuss publicly and usually speak after being encouraged to do so (Olaniran, 2009). This creates difficulty for the instructor whereby students do not participate in the discussion topic or students do not respond when their peers ask questions in the e-learning environment. In addition, students from collectivism culture emphasize group work in person rather than the virtual space (Olaniran, 2009). They feel that the harmony of relationships is more important than the tasks assigned to them and that they need to respect each other (Barton, 2010). In addition, they communicate only between their own group members (Omidvar et al., 2012). Thus, students of collectivism cultures are not interested in e-learning as the very concept of e-learning which is self-directed and requires virtual learning is contrary to their cultural norms.

The main reason students from collectivism culture use e-learning is the success they get as a result of learning within a group. In addition, students in the culture of collectivism are fond of e-learning as a group discussion rather than individually-driven, and not just in relation to the teaching force (Al-Ammari & Hamad, 2008). Therefore, the task force of educators should ensure that teamwork elements are maintained, especially in e-learning courses, to enhance the engagement of collectivist student in e-learning classes.

3. Masculine and Feminine (MAS)

Masculine (high MAS) and feminine (low MAS) cultural orientations comprise societies where the role of emotions between men and women are different. Masculine cultures values competitiveness, assertiveness, career-orientedness, and wealth and property accumulation while feminine cultures values moderation, relationship-orientedness, familial focus, and quality of life (Omidvar et al., 2012). Based on Hofstede's research in Figure 1, Malaysia lie between a masculine and feminine cultural orientation.

In the study of feminine culture, the motivation for educational attainment is relatively low because teachers and students value interdependence, unity, social adjustment, and intrinsic interests over extrinsic rewards (Omidvar et al., 2012). Usually, feminine cultural societies associate their achievements with the establishment of close human relationships rather than material successes. Further, physical punishments like caning is unacceptable, instead a culture of mutual respect is appreciated and encouraged (Omidvar et al., 2012). Meanwhile, masculine culture emphasizes excellence in learning and promotes competition between students, where success is ascribed to the individual rather than to groups (Masoumi, 2006). In addition, teachers openly reward and recognize excellent student and set high benchmarks for student achievement. Moreover, physical punishment is a needed component of masculine cultures (Omidvar et al., 2012).

Students and educators from the feminine culture do not prioritize educational achievement so they have no desire to use e-learning in their learning practices (Al-Ammari & Hamad, 2008). Meanwhile, student engagement for e-learning in the masculine culture is high. As stated, masculine culture emphasizes student achievement and encourages competition among students to advance in their education. Therefore, e-learning is utilized as an incentive to enhance student success in their learning. Additionally, there are many uses of e-learning that can benefit students of masculine cultural orientations.

4. Avoiding Uncertainty (UAI)

Avoidance of uncertainty (UAI) refers to the extent to which members of an organization feel threatened or uncomfortable by uncertainty, the unknown, as well as vague and unstructured situations (Hofstede, 2011). This cultural dimension also has the power to measure the level of acceptance or rejection in relation to a vague or unknown future (Alamri & Cristea, 2014). Societal culture for low UAI countries like Malaysia are inclined to accept uncertainty or ambiguity in their lives. This shows that low UAI people are less concerned with uncertainty, more tolerant of a variety of opinions, less regulation-oriented, more accepting of change, and prefer to take a longer time and a riskier approach towards an issue (Ally, 1999). In addition, practices and outcomes are more important than methods and regulations in low UAI cultures (Speece, 2012).

On the other hand, for learning, teachers should be more tolerant and able to deviate from predetermined structures and students can ask questions without clear answers (Renner et al., 2019) while teachers and students are more flexible in their approach to learning (Omidvar et al., 2012). Among the characteristics of a low UAI culture is that students are comfortable with unstructured learning as long as they are satisfied with their understanding of the material (Sugahara et al., 2010) in addition to them not worrying about disagreeing with their teachers whereby their disagreement is not considered to be wrongful behaviour (Signorini et al., 2009).

Low UAI culture is more focused on students' behaviours where they do not take interest in e-learning despite just beginning to use it (Al-Ammari & Hamad, 2008). This is because students from low UAI culture can tolerate uncertainty and can handle e-learning or assignments on their own without guidance from their teachers (Nordin & Singh, 2016). In addition, students and teachers from low UAI culture often rely on e-mail or e-learning in matters involving education such as the sending of assignments and downloading lecture notes (Masoumi, 2006).

5. Long / Short Term (LTO) Orientation

Long-term orientation refers to a society that values future-oriented thinking as well as planning that focuses on future investments. Meanwhile, short-term orientation refers to societies that inculcate values associated to the past and the present (Triandis & Hofstede, 1993). According to the results of Hofstede's study in Figure 1, Malaysia is a country that adopts a culture of short-term orientation.

Students from low LTO cultures focus more on their past and not on future achievements, while also attributing their successes and failures in their learning to luck (Hofstede, 2011). Students from low LTO cultures have the perception that the e-learning environment is viewed as the source of information and in addition to the desire to obtain information and achievement while students from long-term orientation cultures focus more on practical practices and values (Al-Ammari & Hamad, 2008).

6. Satisfaction vs Constraint (IND)

Satisfaction refers to a community that enables satisfaction from desires and feelings especially related to vacations, having fun with friends, and shopping while constraints refer to a society who control contentment and where a lot of people do not enjoy their lives fully. IND is the latest dimension introduced by Hofstede in 2010 and based on Figure 1, the IND culture in Malaysia is quite high. People in high IND cultures prefer happiness and tend to create a sense of freedom, health, and control over their lives (Hofstede, 2011).

Students from high IND culture have higher tolerance in many situations such as being more receptive to alternative thoughts or where students are more receptive to different teachers' opinions in the classroom (Yasar, 2019). In addition, universities and colleges are one of the most important places where freedom of speech is better than other places. Academics tend to encourage different thoughts in their lectures, and students can ask teachers about topics that are considered important for the course (Yasar, 2019).

Students from high IND culture have an interest in attractive e-learning designs. Students love when teachers give them the option to blog, update statuses, and customize the e-learning interface to their liking (Babu & George, 2016). Furthermore, high IND students value learning beyond the scope of e-learning where they can meet face to face and practice in groups (Babu & George, 2016).

REVIEW: THE RELATION OF GEN-Y AND CULTURE

Gen-Y and culture are two distinct elements that can influence students' perception and involvement in e-learning processes within educational institutions. Gen-Y is a new generation, born and raised in the age of information technology while culture is a way of life of a group of people who share inherited traits, behaviours, and thinking patterns. As such, this review explores whether both these factors influence the student usage of e-learning education.

CONCLUSION

The purpose of this review paper is to find out the characteristics of Gen-Y and cultural nuances in the e-learning environment of Malaysia. Many Gen-Y students are still confused about whether their characteristics represent their generation or their cultural origin, or both. This is because Gen-Y students are born when the world is encountering an era of globalization but they also tend to possess

cultural values inherited from their parents and from where they grew up instead of influences from elsewhere. Looking ahead, Hofstede's cultural model can be applied in future research to further study the culture of Gen-Y students more deeply. This future study should identify the Gen-Y culture of university students born from the mid-1980s through the late 1990s. The results of these studies on Gen-Y culture may differ from those obtained from research focusing on Gen-Y and cultural nuances separately. Once the results of these studies have been obtained, the cultural characteristics of Gen-Y can be identified and we will be able to identify what Gen-Y learners desire for e-learning and thus, enhance student engagement using e-learning. Future studies could also focus on developing a cultural model of Gen-Y students. This model can be utilized as a guide for e-learning developers to create an appropriate pedagogy for Gen-Y students in higher educational institutes in Malaysia.

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