

# Cultural Background Differences of International Students Relating to Time Management

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## Research Article

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# Abstract

Poor time management is increasing among students by the day, yet it is an essential factor that helps people from all walks of life become professionals, trustworthy, and reliable in what they do. This study aims to examine the cultural background differences of international students related to time management. In addition, this study aims to determine the differences between gender, age, and nationality in time management among international students at IIUM. This study utilizes the ABC time management model to explain the differences between the study's variables. A quantitative research design using a survey method with a questionnaire as the tool for data collection was used in this research. A sample of 282 international students at a public university participated in the study chosen through simple random sampling. The study findings reveal that students have high levels of time management. The study further reveals no statistically significant differences between male and female international students, their age groups, and their nationalities in time management. Additionally, international students noted that they regard time management highly because they are always in charge of how their time is used, prioritize essential tasks, meet required deadlines, complete tasks before they are due, do their tasks according to planned schedules, prepare daily or weekly to-do lists and concentrate on doing essential tasks. Therefore, the ABC model of time management is supported in this study.

# Introduction

Time management is one of the aspects that help individuals stand out as professional, trustworthy, and reliable in what they do. However, punctuality is also very prevalent among university students the world over, and it has drawn the attention of various scholars in trying to understand how time management affects students' attitudes and behaviour while at their respective campuses (Alur, Feder & Henzinger, 2016). Thus, time management is essential in all aspects of life, although some public sections underestimate its relevance (Olsson & Haugland, 2014).

In simple terms, time management is how to effectively control or manage content and time in whatever people do (Schuler, 2014; Sultana & Rashid, 2013). Likewise, it can also be looked at as a custom growth through practice and determination, especially in the West, where organizations and individuals use it as a tool for their survival (Nonis, Teng, & Ford, 2015; Simpson, 2011). For example, when students are late to class, it is referred to as tardiness caused by several factors, one of which has been identified as cultural and background reasons (Nonkonana, 2020).

Murthy (2016) defines time-management as "a continuum in which events succeed one another from past through the present to future" (p. 65). Likewise, Oran (2019) also attributes time to be "the scarcest resource of the manager, if it is not managed, nothing else can be managed" (p.73). Both scholars note that when individuals control time, they are indeed in control of their actions, and when they are in control of their actions, it generally means that they can control and manage well the events in their lives. It is also worth noting that time is one of the many things that cannot be changed nor stopped by man; slow nor speed it up, irrespective of their position in this world.

Furthermore, in a study done in California, Simpson (2011) found out that more than half of the students sampled indicated that time management is an essential aspect of their lives because they get to manage what they will do daily through timetables and schedules. However, the same study also pointed out that 83% of the students lacked

good time management; yet it is essential for achieving ultimate success in their lives and achieving higher academic grades.

In fact, with time management that brings about self-discipline, it can be concluded that it is one of the foundations of discipline that plays a huge role in student's attainment of higher grades and quality education at higher institutions of learning (Maile & Olowoyo, 2017). Also, with the help of instructors, the school environment plays an essential role in enabling students to become good time managers (Nonis et al., 2015).

Additionally, when people keep time in everything they do, they gain utmost discipline and reach higher places because it is one of the significant aspects that need attention in our lives (Olsson, 2020). Also, time management affects an individual's attitude and self-confidence in society (Dishon-Berkovits & Koslowsky, 2012).

Students at learning institutions like International Islamic University Malaysia (IIUM) come from different cultural backgrounds and therefore have different views on time management and what it means to them. Scherer, Talley, and Fife (2017), in their survey, found out that student's family background, behaviours, and attitudes towards time management play a huge role in their academic excellence because when students tend to manage time poorly, it may be complex for them to plan their class schedules, as well as their co-curricular activities that happen after class hours. Hence, they tend to feel agitated by such hindrances due to poor time management, thus resulting in poor academic grades (Malcolm, Wilson, Davidson, & Kirk, 2013). Therefore, managing time among students is an essential factor that contributes to their punctuality, which improves their decision-making processes. Moreover, good time management skills are required for a systematic teaching process for both the instructor and the student. Hence, this study aims to determine the difference between students' cultural backgrounds and time management skills. This is because they come from different cultural backgrounds and views concerning time.

## **Problem Statement**

Various studies on students' time management have been done, and results indicate that several factors lead to their lateness in classes and poor management of their time (Maile & Olowoyo, 2017; Olsson, 2020; Onoyase, 2017). For example, Okpukpara and Chukwuone (2017) showed that factors like gender contribute a lot to one's time management. In fact, in the same study, the results showed that families headed by females breed poor time managers than those headed by their male counterparts, attributed to having efficient and effective time managers. Therefore, students' culture and family backgrounds play a huge role in being punctual in whatever they do in their daily lives.

Emore (2015) found that more than half of the female students of Abraka State, Nigeria, acknowledged arriving late in class compared to their male students. In addition, female students arrived late due to their family backgrounds, such as grooming to first attend to house chores and general cleanliness. All these factors point to the fact that gender is one of the factors that may influence the poor management of students' time, and it is essential to be explored more in an environment like IIUM, which houses international students. Also, it is crucial to understand their cultural backgrounds and the gender difference between them in terms of time management.

Time management among students remains a significant problem that various learning institutions face. This is because it has an overwhelming effect on student learning processes which may negatively affect learning institutions and the students' grades as a result of poor performances in class, being absent in classes, showing

irresponsible behaviours, and not being able to achieve their life goals because of poor time management (Adegunju, Ola-Alani & Agubosi, 2019).

Poor time management is still increasing among students (Adegunju et al., 2019; Alio, 2015; Maile & Olowoyo, 2017). In addition, Jumare, Maina, and Ankoma-sey (2015) analyzed students' lateness in classes while Malcolm, Wilson, Davidson, and Kirk (2013) analyzed the causes of absenteeism in classes and punctuality as a recurring issue in secondary schools in South Africa (Onoyase, 2017). The studies point out that being punctual is still a significant concern to the school management and the instructors who teach them. Moreover, although the studies are on students' time management and lateness, they were carried out in different parts of the world other than Malaysia. Therefore, benchmarking on the above studies and the enormous gap left out in understanding whether international students' family and cultural backgrounds have any association with their poor time management, this study is proposed to bridge that gap and add to the already existing literature on time management among students.

Furthermore, all the empirical studies done are on students in general, but never on international students specifically. Hence, this study is needed, and it seeks to address whether there are differences between international students' cultural backgrounds and time management at IIUM. In addition, this study also investigates international students' time management levels besides their cultural background differences.

## **Research Objectives**

The main objective of this study is to examine the difference between cultural backgrounds on time management among international students in Malaysia.

**Specific objectives are:**

1. To determine the level of time management among international students at IIUM; and
2. To determine the differences among international students' cultural backgrounds regarding gender, age, nationality on time management.

## **Significance of the Study**

The study will address a significant difference between international students' gender, age, and nationality on managing their time. There is a considerable gap in how time management affects international students in Malaysia. Therefore, this study will recommend how students can manage time in their daily activities irrespective of their cultural background.

Furthermore, this study will contribute to a greater body of knowledge in time management and punctuality through the application and usage of Lakein's (1973) ABC model of time management. This theory has been used in punctuality, tardiness, and time management studies not specific to international students in a foreign country like Malaysia. Therefore, the present study addresses cultural differences of international students relating to time management by finding out how international students' cultural background influences or impacts them in managing their time while at the institutions of higher learning.

The study will also be of great importance to top management organizations because time management is quickly becoming a grave area of concern in individuals' private lives and organizations from top management to operational level supervisors. Therefore, effective time management is valuable in terms of cost savings for

projects and operations in organizations. Also, time management is concerned with optimizing the use of our discretionary time. Therefore, recommendations from this study will aid organizations in streamlining their operations.

The findings from the current study will be of great importance to the university managements such as lecturers, instructors, students, and counsellors. For example, the findings will help the counsellors guide students on the possible effects of their arriving late at their respective campuses and classes at large. They could encourage students to sleep early and on time, prepare their day's activities, list the activities to be done in a day, and many other recommendations to be punctual.

The study will be able to aid lecturers and instructors understand the dynamics of their student's strengths and weaknesses through how they accomplish their tasks and assignments given, and be able to help them where they are lacking in terms of managing time and their daily activities to enable them to excel efficiently in their academics. Also, the instructors may provide an effective supporting environment to the students to allow for effective time management.

The study will also be of great importance to the international students in streamlining and prioritizing their educational activities and getting to know what is more important than the other. Proper time management is one of the many aspects that facilitate better time usage. Prioritizing important activities may help them complete their desired tasks and improve their performance.

Lastly, the study will highlight how time management helps students set individual realistic goals and deadlines regarding significant tasks and avoid putting themselves in situations where they cannot meet their deadlines on time, which may add to their stress and make tasks more challenging to complete.

## **Literature Review**

### **Time Management**

Various scholars define time management differently; Lakein (1973) suggests setting desired goals by defining, prioritizing needs and tasks to resources and time, scheduling, planning, and listing them is what is referred to as time management. In addition, Drucker (2005, as cited in Alex, 2009) affirms that "time management is the scarcest resource of the manager if it is not managed, nothing else can be managed" (p.39). Likewise, Murphy (2016) maintains that "Controlling your life means controlling your time and controlling your time means controlling the events in your life" (p.258). The above definitions indicate that time is an essential asset in individual and work performance.

Furthermore, others refer to time management as the several techniques used to accomplish one's scheduled tasks and needs and self-regulating strategies that individuals plan and execute efficiently (Davis, 2014; Eilam & Aharon, 2003; Strongman & Burt, 2000). Therefore, time is ubiquitous and should be used because it is limited in nature and uncontrollable by humanity because it is practically impossible to control time, but rather, self-management of one's self is inevitable to enable one to achieve their set out goals and tasks in a limited amount of time (Peel, 2013).

Time management is like a disease that hinders a person's development by limiting them to achieving their set out goals (Maile & Olowoyo, 2017). Scholars have investigated time management issues among students, and many

of them observe that there is an increase in the student's poor management of time, which has resulted in indiscipline on the part of the students because they do not observe punctuality as they should while going about their daily activities (Dafiaghor, 2011 and Odebode, 2019).

The concept of time management provides individuals with the ability to plan and manage or control their daily goings-on (O'Connel, 2013). For example, in a study conducted by Wang, Kao, Huan, and Wu (2011), students' efficient management of time was found to be essential because it increases the quality of life they live while at their respective campuses and can accomplish their tasks because of being good time managers.

Also, students' characteristics, such as age and family background, play an essential part in their proper management of time (Law, Sanders, Jian, & Huang, 2009). Likewise, attention-seeking, lack of self-control, lack of motivational drivers, huge assignments and coursework loads, and other challenges may hinder a student's capacity to effectively manage time (Baothman, Aljefri, Agha, & Khan, 2018).

Additionally, students who exhibit personal characteristics such as low self-esteem, stress, and anxiousness are at the risk of being poor time managers (Shapira-Lishchinsky, 2017). Other researchers attribute students' poor time management skills to their family backgrounds and income levels (Ubogu, 2004), with Tomilson (2016) also acknowledging that students' poor time management skills are positively correlated to individual factors rather than individual factors in general terms.

Nonetheless, students who can set out their goals, list down their daily activities and manage their time efficiently bring out positive self-regulatory frameworks and are employable even after they are out of school (Adams & Blair, 2019). Therefore, when time is managed efficiently, it helps attain benefits such as reducing people's stress levels attainment of balance in positive work-life, family, home, school, and self. In the end, time management allows individuals to be more productive in what they do because they can plan, execute and repeat the same process daily, hence making them productive on their workloads due to being effective and efficient time managers (Peel, 2013).

In addition, there are other benefits that time management offer to students, such as attaining discipline both to themselves and their surrounding environment (Odumeru, 2013). Also, since students lead a stressful life while attending their classes with daily assignments and as well as preparing for mid and final exams, and the fact that they also set out their daily routines that needs balancing, they often find it hard to manage their time effectively (Nakpodia& Dafiaghor, 2011). Hence, they need to be more punctual in their daily activities to remedy their ineffectiveness on time.

The need to have good time management and punctuality skills benefit students more in situations where they have to apply time management strategies to help them in stressful situations to become more productive in their academic performance and lifestyles (Cyril, 2015). In addition, having time management skills helps students to plan, arrange and list their important upcoming activities, which in the long run leads them to be organized both in their lives and academic successes.

University students' success in their education largely depends on how efficiently they manage time and its surroundings (Demirtas & Özer 2017). Therefore, students must learn how to manage their time because the same skills applied while in school concerning time are the same skills that would be required of them at their places of the workplace after school (Kaya, Kaya, Palloş, & Küçük, 2012). International students, therefore, must acquire time

management skills while at their respective learning institutions to enhance their competence in dealing with situations.

Lastly, Onoyase (2017) investigated students of Zaria State in Nigeria on their time management skills and found that there was a positive relationship between student's poor time management to their low academic grades because they were not accomplishing required tasks on time, lacked structured daily activities, attended classes late, and as a result, they were given punishments such as cleaning the school compound and other punishments for not being punctual in classes. Therefore, a lack of proper time planning may reduce students' academic excellence, cause other personal social activities, and elevate their stress but not their productivity levels (Kaya et al., 2012). Consequently, it is vital to explore the cultural background differences among students from different parts of the world and understand how they relate to time management, as discussed in the subsequent sections.

## **Gender and Time Management**

Various studies over the years have been conducted on university students concerning time management, and different significant results have emerged relating to gender where scholars intimate that female students are more skilful than their male counterparts in terms of time management (Kaushar & Mehnaz, 2013; Pehlivan, 2013; Saketi & Taheri, 2010). In addition, the findings of Trueman and Hartley's (1996) earlier study on the time management behaviours of students also confirmed that male students posted poor time management skills compared to their female counterparts.

Furthermore, Pehlivan (2013) mentions in their study that female students have more skills than male students in managing time well when it comes to time management. Accordingly, they use the skills more efficiently than the male students. This revelation may be attributed to women being more organized than men in listing and planning their daily activities. Therefore, it can be concluded that women have traditional time management skills.

Okpukpara and Chukwuone (2017) argue that factors like gender contribute a lot to one's time management. In fact, in the same study, the results showed that families headed by females breed poor time managers than those headed by their male counterparts, attributing the reasons to having efficient and effective time managers. Therefore, students' culture and family backgrounds play a huge role in being punctual in whatever they do.

In another study that examined the relationship between students' time management skills and their GPA scores, the results indicated that female students managed their time well compared to male students (Demirtas & Özer, 2007). Similarly, other researchers (Andıç, 2009; Eldeleklioglu, 2008; Misra & McKean, 2000) also came to the same conclusion that there is indeed a significant difference between males and females in terms of time management skills and that the female students can plan, and include all the tasks they want to do in their daily activities.

On the other hand, Emore's (2015) study found that more than half of the female students of Abraka State, Nigeria, acknowledged arriving late in class compared to their male students. The study found that the students arrived late due to their family backgrounds, such as being groomed with a culture of first attending to house chores and general cleanliness. However, Adegunju, Ola-Alani, and Agubosi's (2019) study disagree with Emore's (2015) study, where gender was found not to have any statistically significant effect on students' time management.

Therefore, with regards to time management and gender, the majority of the studies reviewed (Alay & Kocak, 2012; Pehlivan, 2013; Saketi & Taheri, 2010; Yilmaz et al., 2010) point out that female students have more time management skills than male students and that their accomplishments are higher in time management.

Accordingly, it can be concluded that there are notable differences between male and female students in being good time managers, and the difference is statistically significant when comparing gender to time management skills. Based on the above conclusions, the following hypothesis is formulated;

## H1

*Male international students are better than females in time management at IIUM*

## **Age and Time Management**

An individual's age contributes significantly to how effective and efficient they manage time and daily activities (Chabaya, Chiome, & Chabaya, 2009). For example, in a survey done by Trueman and Hartley (1996), findings revealed that students who are 25 years old and older tend to have better time management skills than young ones. In addition, a study by Balduf (2009) also concluded that out of the entire population sampled in their study, 67% of the African-American students who were 30 years old and younger singled out time management as their immediate problem that needed to be dealt with. The same study also concluded that students who are 35 years old and older were likely to be efficient time managers in a work environment when out of school.

Furthermore, Adams and Blair (2019) investigated the impact of time management behaviour on undergraduate engineering students' performance and compared the student's age to time management. The results, however, showed no statistically significant difference in the means of time management and the students aged 21 years old and older compared to the median categories, which are younger. Accordingly, it can be inferred that age has no significant effect on time management.

Likewise, in another study by Kaya et al. (2012), the researchers assessed time-management skills in terms of age and gender levels of nursing and midwifery students in turkey, and the results revealed that the student's age group did not statistically significantly affect their time management. Similarly, in Eldeleklioglu's (2008) study regarding the time management skills of high school students, age was not a significant factor that affected students' time management skills.

However, in a study concerning nursing students' time management skills, the researchers found out that students under the age group of 21–25 years old and older were better time managers than those who were 20 years old and younger (Basak, Uzun, & Arslan, 2018). Nevertheless, Erdem, Pirinçci, and Dikmetaş's (2015) study differ from Basak et al., (2018) study where the researchers concluded that students who are 20 years old and younger posted better time management skills compared to their counterparts who were 21 years old and older. Therefore, understanding the effect of students' age groups on their time management skills is very important, especially among the young adolescents who are still figuring out what they want to be in their lives by prioritizing what is essential and not for themselves. Therefore, hypothesis 2 is formulated;

## H2

*There is a difference in the level of the age group of international students on time management at IIUM.*

### H2.1

*There is a difference between International students' age group of 20 and younger and 21–25 years old in time management at IIUM.*



## H2.2

*There is a difference between International students' age group of 20 years old and younger and 26 years old and older in time management at IIUM*

# Nationality and Time Management

There have been numerous studies done to investigate the different groups of people and their time management skills, such as students (Adams & Blair, 2019), employees (Green & Skinner, 2015), and managers (Pološki Vokić & Mrđenović, 2018). However, few studies deal with the differences in the time management skills of the different nationalities.

Rau, Liu, Verhasselt, Kato, and Schlick's (2011) study concerning the differences in time management among Chinese, Japanese, and Germans, found out that the Germans were more skilled in managing their activities on time compared to both the Japanese and the Chinese. The study also proved that the Germans and the Japanese are more goal-oriented and prioritize their tasks more often and on time. In addition, Rau et al.'s (2011) study considered the three nationalities with entirely different cultures and studied their behaviour towards time management. As a result, the study described Germans as being very precise and consistently accurate in what they do, and Japanese from East Asia are known for being efficient time managers. Lastly, the Chinese were described as the traditional East Asian cultural country known for being relaxed in deadlines and planning their tasks (Rau et al., 2011).

Also, in a study among African engineering students at Lund University in Sweden, Swart, Lombard, and Jager (2010) found out that there was no significant difference between African students on time management. The results mean that African students were poor time managers, attributed to different cultural backgrounds. All students at a university are expected to be punctual at their respective learning institutions. Therefore, there are commitments that students have to accomplish in order to make sure that they fulfil their priorities and plans (Chandi, Ndiritu, Kidombo, Mbweza, & Keiyoro, 2013).

Still, in a survey relating to the time management differences between Thai and Chinese students, Chen, Rau, and Suriyalaksh (2017) found out that Thai students are more prioritizing, goal-centred, and carry out more tasks related to time management in their everyday lives. On the contrary, Chinese students reported having preferences for being organized, working in well-organized environments, and being better at managing time.

Therefore, considering the different cultural backgrounds of international students, such as gender, age, and nationality of Asians, Africans, and Middle Easterners, this paper explores the cultural background differences of international students relating to time management. The study differs from the above-reviewed literature because it is specific to international students and at an international university that also houses a multitude of cultures that manage time differently. This study also aims to bridge the gap in research where few studies comparing the differences of nationalities on time management exist, especially among Middle Eastern countries. The discussions above translate that an individual's cultural background has a significant effect on the way they manage time, and therefore, Hypothesis 3 is formulated;

## H3

*There is a difference in the nationality levels of international students (Asians, Middle-Eastern, and African) on time management at IIUM.*

# ABC Model of Time Management

The ABC model of time management was developed by Lakein (1973), the author of the famous book "*How to Get Control of Your Time and Your Life*." The time management ABC method is an effective and popular way of prioritizing tasks when composing daily to-do lists and is simple to implement (Mancini, 2003). The ABC method explains how tasks are distributed to manage time. The first "A" category includes critical tasks that are both urgent and important or that lie on a critical path towards long-term goals; the "B" category includes essential tasks, but they do not meet the "A" criteria yet; lastly is the "C" category which includes tasks that would be nice to do, but they are neither urgent nor essential (Raspor & Macuh, 2017).

Furthermore, to use time more effectively, a person needs to prioritize the tasks that need to be undertaken. Lakein's ABC model is often used in providing an efficient means for prioritizing tasks. For example, Mancini (2003) argues that using the ABC approach can prioritize an individual's tasks. Lakein's (1973) "*How to Get Control of Your Time and Your Life*" book focuses on principles and techniques that can be tailored to how people work while still learning things that have to be practised. The model is well-known in guiding management studies and has been used in various fields such as social sciences (Macan, 1994), management (Raspor & Macuh, 2017), time management skills (Cyril, 2019), and various other fields of research.

The ABC model of time management is built on three fundamental ideas: awareness, belief, and continuation (Lakein & Leake, 1973). For awareness, the model suggests that every moment becomes an opportunity when individuals become aware of its importance, and therefore, the categories of activities performed in a day become important the moment they become aware of them. Second is belief, where a person is aware of their time and its importance in life. Such a person is by default halfway the road to their success. Also, focusing on the quadrants discussed above enables individuals to stay on course and do their activities on time. Lastly is the continuation, which is about the required techniques to put awareness and belief into action. In short, the model assumes that the continued usage of the time management tools will ultimately bring about success in an individual's life (Chowdhury, 2013).

This study proposes the ABC time management model as most suitable to explore cultural background differences of international students related to time management at International Islamic University Malaysia (IIUM). The model assumes that the first activities that must be carried out based on the four quadrants of the ABC model are the essential and urgent ones, followed by the essential but not the urgent ones, then the pressing, though not essential tasks, and lastly, are those that are not significant, nor urgent tasks (Singh, 2018). The model implies that when an individual is conscious of time and concentrates on the above four quadrants, they start performing their tasks set out in the to-do list on time. Also, the constant usage of the tools in the ABC model of time management eventually offers the user utmost success in their time management. Thus, it is ideal and fit to guide the present study well.

## Conceptual Framework

This paper suggests differences in the cultural backgrounds of international students related to time management in Malaysia. In order to test this, the differences between the independent variables, namely; gender, age, and nationality, with time management as the dependent variable are depicted in Fig. 1, and hypotheses are developed for the study.

# Summary of the Hypotheses

Based on the model (ABC model of time management), the literature review, and the conceptual framework, the following hypotheses are formed.

## H1

Male international students are better than females in time management at IIUM.

## H2

There is a difference in the levels of the age group of international students on time management at IIUM.

### H2.1

There is a difference between international students who are 20 years old and younger and those between 21–25 years old in time management at IIUM.

### H2.2

There is a difference between international students who are 20 years old and younger and 26 years old and older in time management at IIUM.

## H3

There is a difference in the nationalities of international students on time management at IIUM.

## Research Methodology

### Research Design

The research design adopted is a quantitative research design using survey method and online survey questionnaire as the data collection instrument. The method was chosen because it helps collect large sets of data in a short time (Huyler & McGill, 2019). Therefore, this study's data was collected using a self-administered questionnaire designed as an online survey in Google form. The survey method allows gathering enough data on the target population but specifically from various demographic backgrounds such as gender, age, level of education, year of study and nationality.

### The Locality of the Study

The study was conducted at the International Islamic University Malaysia (IIUM), Gombak Campus, in Kuala Lumpur. IIUM is a public university that came into existence on May 23, 1983, through a declaration from the Organization of Islamic Conference (OIC). The University was founded on Islamic principles and values, and the primary medium of instruction is English and Arabic. Furthermore, IIUM has more than 30,000 undergraduate and post-graduate students who hail from different corners of the world. The University has fourteen Kulliyah operated in six affiliated campuses, all in Malaysia. Therefore, the data for this study was collected at IIUM Gombak campus from almost all the Kulliyah such as Ahmed Abusulayman Kulliyah of Islamic revealed

knowledge and human sciences (AHAS KIRNHS), Kulliyah of education (KOE), and the Ahmed Ibrahim Kulliyah of Laws (AIKOL).

## Population and Sampling Procedure

Responses in this study were gathered from International Islamic University Malaysia's (IIUM) international students at the Gombak campus as the target population for this study. The students were chosen because they come from different cultural backgrounds, and the study seeks to know their cultural differences related to time management, making them qualified to answer any questions related to how they manage their time in their respective cultures. Additionally, the study was conducted when students are studying online, and therefore, understanding how they manage time in such situations is fundamental and, thus, timely.

A sample of 282 respondents was acquired through a probability random sampling, where the population has an equal chance of being randomly selected to participate in the study. This type of sampling also increases the reliability of the findings, and it also has the best chance of creating a sample that is truly representative of the entire population (Creswell, 2017). Consents will be sought from the respondents before filling out the survey forms while collecting data.

## Instrument and Measurement

The data collection instrument for this study is an online survey questionnaire using Google Forms, after which the acquired responses were computed for analysis. The questionnaire for this study consists of two sections. Section 1 features the general data on the demographics of the respondents, whereas section 2 was adapted from already existing studies. Section 2, which focuses on time management (21 items), was adapted from Neill (2016). In addition, Section 1 covers the study's independent variables, whereas Section 2 is the dependent variable.

The multiple questions in this study were measured on a 5-point Likert-like scale of never to always, ranging from 1 to 5, where 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always. To calculate the overall percentage of an item, the mean score for the item was multiplied by 20, which is equivalent to 100% if based on the 5-point scale. Accordingly, Wok and Hashim (2014) contend that an overall percentage can be acquired by multiplying the mean score by 100 and dividing it by 5 to obtain the overall percentage score of an item.

Examples of items for the time management variable include "I am particular in time management."; "I manage my time according to schedule."; "I make practical plans for getting things done." And among others.

## Validity and Reliability

A pilot study ( $N=33$ ) was conducted before the actual study to measure the flow of the statements and any other problems that the respondents might have faced. First, the questionnaire was reviewed and approved by an expert in measurement and quantitative studies to validate it. An internal reliability test was then conducted using Cronbach's alpha. The data collected from the pilot study indicated that all items for the construct are significant and exceed the minimum Cronbach's alpha value of .70, indicating the reliability, internal cohesiveness, and consistency of the variables in the questionnaire (Wimmer & Dominick, 2014). In addition, the pilot study results revealed that time management construct is reliable ( $\alpha = .917$ ). Therefore, data collection proceeded to the actual study. Time management also remained reliable and significant ( $\alpha = .897$ ). In addition, face validity was also used to make sure that the scales measured the items well.

## Data Collection

A self-administered questionnaire was employed to international students of International Islamic University Malaysia (IIUM) as the research instrument, using the Google Form data collection method, after which the acquired responses were computed for analysis. Data from the self-administered questionnaire were collected for three weeks (December 16 to 31, 2021). A self-administered questionnaire ensures that respondents are free from the pressure of impressing the researcher. Also, questionnaires help save the researcher's time and cost; they are adaptable and minimize bias (Groves et al., 2011).

## Data Analysis

Data from the actual study were compiled and analyzed using Statistical Package for the Social Sciences (SPSS). Descriptive and inferential statistical analyses were carried out to test the levels and differences between the variables. The descriptive analyses included frequencies, percentages, means, and standard deviations, while the inferential analyses comprised one-sample *t*-test for testing the level of the variables; Analysis of variance (ANOVA) is performed to determine the differences of the independent variables on the dependent variable; and independent *t*-test was used to test the difference between the variables, in order to accept or reject the hypotheses of the study.

## Results And Discussion

### Demographic Characteristics of the Respondents

The study comprised 282 valid responses from the target population. Table 2 shows the detailed results of the demographic characteristics of the respondents. Seven in ten respondents (72.3%) were male, while the rest (27.7%) were female students. Regarding their age, more than half of the respondents (59.9%) were 26 years old and older, 32.3% fall in the 21–25 years old group, while those below 20 years of age (7.8%) are also represented. On their education level, nearly half of the respondents (48.2%) were at the undergraduate level, while the rests were either master's (43.8%) or PhD students (11.7%). Furthermore, more than half of the respondents were Asian students (74.8%), compared to the rest who were either African (20.6%) or Middle Eastern students (20.2%). On their Kulliyah, slightly half of the students (53.9%) came from the Kulliyah of KIRKHS, while the rest were from AIKOL (18.1%), KENMS (13.8%), KOEDD (7.8%) and KOE (6.4%). Regarding their level of study, approximately a third of the respondents were second-year students (36.9%), 35.5% were in their third year, while fourth and first-year students made up 25.9% and 1.8% of the respondents, respectively.

Overall, most of the respondents are Asian male second-year undergraduate students above 26 years old, from the Kulliyah of Islamic revealed knowledge and human sciences (KIRKHS).

#### Demographic Statistics

Table 2  
Demographic characteristics of the respondents

Demographic Characteristic	Category	Frequency	Percentage
Gender	Male	204	72.3
	Female	78	27.7
	<b>Total</b>	<b>282</b>	<b>100.0</b>
Age (years old)	20 years and below	22	7.8
	21–25 years old	91	32.3
	26 years old and above	169	59.9
	<b>Total</b>	<b>282</b>	<b>100.0</b>
Level of education	Bachelor's Degree	136	48.2
	Master's Degree	113	40.1
	PhD.	33	11.7
	<b>Total</b>	<b>282</b>	<b>100.0</b>
Nationality	Asian	167	59.2
	Middle Eastern	57	20.2
	African	58	20.6
	<b>Total</b>	<b>282</b>	<b>100.0</b>
		KOED	22
Kulliyah	KIRKS	152	53.9
	AIKOL	51	18.1
	KENMS	39	13.8
	KOE	18	6.4
	<b>Total</b>	<b>282</b>	<b>100.0</b>
Year of study	First	5	1.8
	Second	104	36.9
	Third	100	35.5
	Fourth	73	25.9
	<b>Total</b>	<b>282</b>	<b>100.0</b>

## Frequency of Time management Information

Regarding the frequency of using time, nearly half of the students (45.4%) reported that they spend less than five minutes planning how they want their day to stand and end, whereas 35.5% take 6–10 minutes, 8.2% 11–15, minutes, 6.4% 21–25 minutes and 4.5% reported taking 16–20 minutes planning their day. In addition, on-time spent by students in planning their classes, slightly more than half of the students (53.5%) reported that they use less than five minutes to plan their day's classes, 17.7% 6–10 minutes, 8.9% 16–20 minutes, 8.2% 21–25 minutes, while the rest were represented by 7.4% and 4.3% for spending 11–15 and 26 and above minutes while planning their classes respectively. Furthermore, on the frequency of how students plan their day's activities, more than half of them (56.0%) noted that they plan once a day, 18.1% twice a day, 11.3% more than five times, 7.8% thrice a day, and 6.7% plan for their activities four times in a day. In addition, the students also noted that 34.8% of them plan for their activities four times a week, 27.7% thrice a week, 14.5% once and five times respectively, while 8.5% plan their weekly activities twice a week. Lastly, half of the students (51.4%) reported that time management is an essential factor, 36.2% very important, while 12.4% regarded time management as slightly necessary.

Overall, the students spend less than five minutes planning their day and classes respectively, planning for their day's activities once a day, four times a week and regard time management as an essential aspect of their lives.

#### Time Management Information

Table 3  
Time management information of the respondents

Time Management Information	Category	Frequency	Percentage
	Less than 5 minutes	128	45.4
	6–10 minutes	100	35.5
Time spent planning your day (in minutes)	11–15 minutes	23	8.2
	16–20 minutes	13	4.5
	21–25 minutes	18	6.4
	<b>Total</b>	<b>282</b>	<b>100.0</b>
	Less than 5 minutes	151	53.5
	6–10 minutes	50	17.7
	11–15 minutes	21	7.4
Time spent planning your classes (in minutes)	16–20 minutes	25	8.9
	21–25 minutes	23	8.2
	26–30 minutes & above	12	4.3
	<b>Total</b>	<b>282</b>	<b>100.0</b>
	Once a day	158	56.0
	Twice a day	51	18.1
Frequency of planning your day's activities	Thrice a day	22	7.8
	Four times a day	19	6.7
	Five times and above	32	11.3
	<b>Total</b>	<b>282</b>	<b>100.0</b>
	Once a week	41	14.5
	Twice a week	24	8.5
Frequency of planning your day's activities in a week	Thrice a week	78	27.7
	Four times a week	98	34.8
	Five times a week	41	14.5
	<b>Total</b>	<b>282</b>	<b>100.0</b>
	Slightly important	35	12.4
Importance of time management	Important	145	51.4
	Very important	102	36.2
	<b>Total</b>	<b>282</b>	<b>100.0</b>



# Level of Time Management

The levels of students' time management are presented in Table 4. Student's views regarding time management are significantly positive (71.0%) with an overall mean of 3.553 ( $SD = 0.836$ ) and a  $t = 11.103$  ( $p = .000$ ). The item with the highest mean is "I am in control of how my time is spent" 78.9% with a mean of 3.946 ( $SD = 1.080$ ) and  $t = 10.879$  ( $p = .000$ ), while the one with the lowest means is "I make practical plans for getting things done" 62.6% with ( $M = 3.131$ ;  $SD = 1.331$ ) and  $t = 1.990$  ( $p = .048$ ) implying that, the students are in control of how they spend their time while at their respective campuses, but at the same time, they hardly make practical plans to get their things done on time. Furthermore, the students also noted that they have reasons for time management. The reasons include; meeting deadlines on time (77.6%), being good at breaking complex tasks into achievable portions (76.5%), can concentrate when doing all types of tasks (76.1%), using the calendar or diary to reorganize their time (75.9%), do important tasks on time (75.8%), complete given tasks before they are due (74.8), get essential tasks done first (74.2%), accurately predict how long tasks will take (74.1%), do their tasks according to planned schedules (74.0%), happy with the way they use their time (73.7%), have a weekly schedule on which they record fixed commitments (73.2%), prepare daily or weekly to-do lists (73.0%), concentrate in doing important tasks first (72.0%), allocate the correct amount of time to doing specific tasks (71.7%) and good at time management (71.0%). However, the same students also reported that in general, they barely manage their time according to schedule (65.1%), are hardly particular in time management (62.9%), hardly use their time effectively (62.7%) and also do not make practical plans to get things done (62.6%). The four items, including 17, 18, 19 and 20, also turned insignificant. Therefore, it can be concluded that, much as there are a few insignificant items in the entire construct, students have various factors that lead to high time management levels. Therefore, research objective one is answered in the affirmative because all items are positively rated.

One sample t-test

Table 4  
One-sample *t*-test for time management

No.	Time Management	<i>M*</i>	<i>SD</i>	%	<i>t**</i>	<i>ρ</i>
1	I am in control of how my time is spent.	3.946	1.080	78.9	10.879	.000
2	I meet deadlines on time.	3.883	1.191	77.6	11.655	.000
3	I am good at breaking complex tasks into achievable portions.	3.826	1.074	76.5	1.655	.000
4	I can concentrate when doing all types of tasks.	3.808	1.248	76.1	8.045	.000
5	I use a calendar or diary to help organize my time.	3.797	1.152	75.9	10.289	.000
6	I get important tasks done on time.	3.794	1.144	75.8	10.347	.000
7	I complete my tasks before they are due.	3.744	1.253	74.8	8.325	.000
8	I get essential tasks done first.	3.712	1.174	74.2	9.975	.000
9	I accurately predict how long tasks will take.	3.705	1.145	74.1	12.912	.000
10	I do my tasks according to the planned schedule.	3.702	1.145	74.0	1.759	.001
11	I am happy with the way I use my time.	3.687	1.254	73.7	10.190	.000
12	I have a weekly schedule on which I record fixed commitments.	3.663	1.203	73.2	12.441	.000
13	I prepare a daily or weekly "to-do" list.	3.652	1.242	73.0	11.622	.000
14	I concentrate on doing essential tasks first.	3.602	1.216	72.0	8.817	.000
15	I allocate the correct amount of time to doing specific tasks.	3.588	1.228	71.7	9.253	.000
16	I am good at time management.	3.553	0.836	71.0	9.206	.000
17	I manage my time according to schedule.	3.258	1.315	65.1	.545	.586
18	I am particular in time management.	3.148	1.256	62.9	2.187	.030
19	I use my time effectively.	3.138	1.319	62.7	3.305	.001
20	I make practical plans for getting things done.	3.131	1.331	62.6	1.990	.048
<b>Overall Time management (N = 282)</b>		<b>3.553</b>	<b>0.836</b>	<b>71.0</b>	<b>11.103</b>	<b>.000</b>
* On a 5-point Likert scale, where 1 = <i>never</i> , 2 = <i>rarely</i> 3 = <i>sometimes</i> , 4 = <i>often</i> , and 5 = <i>always</i> .						
**Test value is 3.						

Among the dominant factors that lead to the student's high levels of time management include; being in control of how they spend their time, meeting deadlines, completing tasks before they are due, doing their tasks according to planned schedules, preparing daily or weekly to-do lists and concentrating on doing essential tasks. The findings concur with O'Connel (2013), who found out that time management provides individuals with the ability to plan and manage or control their daily goings-on. In addition, such factors as found out this the present study are commensurate with Adams and Blair's (2019) study where the researchers noted that students who can set out

their goals, list down their daily activities, and manage their time efficiently bring out positive self-regulatory frameworks and are employable even after they are out of school, findings that the present study also stamps on. Lastly, the present study results also confirm a study by Cyril (2015), who deduced that having time management skills helps students to plan, arrange and list their important upcoming activities, which in the long run leads them to become organized both in their lives and academic successes as highlighted in the current study.

## Hypothesis Testing

This study aimed at determining the differences between the cultural background of international students related to time management, and the different hypotheses were formulated and are being answered in this section.

## Independent t-test

The present study suggests a difference between males and females regarding their time management. Table 5 summarizes results from an independent samples *t*-test conducted to compare whether males are better than female respondents regarding time management.

The results indicate that there were no significant differences ( $t = -.612, p = .541$ ) in the scores with mean score for female ( $M = 3.602, SD = 0.803$ ) and male ( $M = 3.534, SD = 0.850$ ). The magnitude of the differences in the means (MD) was very small.

The results imply that, even if the overall means for females are slightly higher than that of the male respondents, the difference is inconsequential, as indicated by the insignificant *p*-value. Therefore, it can be concluded that there is no significant difference between the two groups (male and female) in terms of time management. Therefore, this finding does not support H1, which states that males are better than female students in time management.

### Independent t-test

Table 5  
Independent *t*-test for time management by gender

Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>ρ</i>
Male	204	3.534	0.850	-.612	280	.541
Female	78	3.602	0.803			
* On a 5-point Likert scale, where 1 = <i>never</i> , 2 = <i>rarely</i> 3 = <i>sometimes</i> , 4 = <i>often</i> , and 5 = <i>always</i> .						
**Test value is 3.						

The findings in this study differ from the conclusions of Pehlivan (2013), who noted that female students have more skills than male students in managing time well when it comes to time management, which translates that there is a vast difference between male and female students in terms of time management. This finding is not supported by the current study as various scholars intimate that a difference exists between them, crediting either side to be better in time management. The majority of the studies reviewed (Alay & Kocak, 2012; Pehlivan, 2013; Saketi & Taheri, 2010; Yilmaz et al., 2010) seem to disagree with the findings of this study, as they all concur that

female students are better than their male counterparts in proper management of time, a conclusion that points to an existence of a difference between the two, which the present study disagrees.

## Analysis of Variance (ANOVA)

### Time Management by Age

Tables 6 and 7 summarize results from ANOVA done to determine whether there is a difference in the student's age groups on time management.

The descriptive results reveal that the mean scores for the 26 years old and above age group are higher ( $M = 3.633$ ,  $SD = 0.844$ ), followed by the 20 years old and younger age group ( $M = 3.454$ ,  $SD = 0.738$ ) and that of 21–25 years old with a mean of 3.428 ( $SD = 0.835$ ).

Table 6  
Descriptive statistics for age

Marital status	<i>N</i>	<i>M</i>	<i>SD</i>	Std Error
20 years and below	22	3.454	0.738	.15746
21–25 years old	91	3.428	0.835	.08756
26 years old and above	169	3.633	0.844	.06495

Furthermore, ANOVA results (Table 7) show no significant difference in the student's age group levels on time management  $F(2, 279) = 1.947$ ,  $p = .145$ , and Eta squared is  $\eta^2 = .014$ . Thus, the results reveal an insignificant p-value of .140, which exceeds the minimum required significance value of .05.

In a nutshell, it can be concluded that there is no statistically significant difference in the IIUM student's age groups on time management. Hence, the results imply that age is not a significant factor for international students at IIUM to become good time managers. Therefore, hypothesis 2 is rejected.

Table 7  
One-way ANOVA for time management by age

Source of Variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2$
Between groups	2.707	2	1.354	1.947	.145	.014
Within groups	193.995	279	.695			
Total	196.702	281				

The findings concur with Kaya et al. (2012), who assessed time-management skills in terms of age and gender levels of nursing and midwifery students in turkey and concluded that students' age group did not statistically significantly affect their time management. This finding has been reflected in the current study results, where no statistically significant difference was realized among the age group of international students at IIUM. However, the present study also significantly differs from Chabaya et al. (2009), who resolved that a person's age is an essential factor and significantly contributes to effective time management while carrying out their daily activities.

# Planned Contrasts

During the literature review, contrasts of time management between the different age groups were planned, and two hypotheses were generated, namely;

1. There is a difference between International students' age group of 20 and younger and 21–25 years old in time management among international students at IIUM: and
2. There is a difference between International students' age group of 20 years old and younger and 26 years old and older in time management among international students at IIUM.

## Planned Contrasts for Time Management by Age

A one-way ANOVA of planned contrast results is summarized in Table 8 with the differences between time management and students' age levels (20 years and below, 21–25 years old, and 26 years and above).

The contrast test results revealed no statistically significant differences in comparing time management on 20 years and below and 21–25 years old students ( $t = .131$ ;  $p = .896$ ). Likewise, 20 years old and younger international students did not significantly differ from their counterparts who are 26 years old and older ( $t = -.945$ ;  $p = .346$ ) in terms of time management among international students at IIUM. Notably, all the means are insignificant because they surpass the minimum p-value of .05.

Table 8  
Dunn Contrasts for time management by age

Contrasts	Group	<i>MD</i>	<i>SE</i>	<i>t</i>	<i>ρ</i>
1	Below 20 years - 21–25 years	.0260	.19811	.131	.896
2	Below 20 years - Above 26 years	-.1786	.18900	-.945	.346

In conclusion, therefore, the results imply no statistically significant difference between students who are 20 years old and younger, 21–25 years old and 26 years old and older in terms of time management among IIUM students, which translates that no age group among the three significantly affects the student's time management. Therefore, H2.1 and 2.2 are also not supported.

The results from the present study regarding the differences in the student's age groups broadly differ from the studies of Basak et al. (2018), who summarized in their study that students under the age group of 21–25 years old and older were better time managers than their counterparts who are below 20 years old. Likewise, Trueman and Hartley's (1996) study also concludes that students who are 25 years old and above post better time management skills compared to their younger ones. However, Kaya et al. (2012) study concur with the results of the current study that did not find any significant contrast between the age groups of the students on time management. Furthermore, these results agree with Kaya et al.'s (2012) study, which also did not find any statistically significant difference in the student's age groups with time management.

The initial analysis is of planned contrast between time management and student's age groups, whereas the subsequent analysis summarized in Fig. 2 is of the means plot for age and time management.

In IIUM, students who are 26 years old and older regard time management significantly very highly ( $M = 3.633$ ) compared to 20 years old and younger and 21–25 age groups ( $M = 3.454$ ) and ( $M = 3.428$ ) in managing time respectively.

Therefore, it can be concluded that the students who are 26 years old and older registered the highest number of responses in terms of managing time compared to the rest of the age groups.

### ***Time Management by Nationality***

Table 9 summarizes results from ANOVA done to determine whether there is a difference in the student's nationality levels on time management.

The descriptive results reveal that the mean scores for Africans is higher ( $M = 3.706$ ,  $SD = 0.675$ ), followed by Middle Eastern ( $M = 3.657$ ,  $SD = 0.877$ ) and Asians ( $M = 3.464$ ,  $SD = 0.865$ ). The results imply that time management is higher in African students at IIUM than Asians and Middle Easterners.

Table 9  
Descriptive statistics for nationality

<b>Marital status</b>	<b><i>N</i></b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>Std Error</b>
Asian	167	3.464	0.865	.06696
Middle Eastern	57	3.657	0.877	.11617
African	58	3.706	0.675	.08871

Additionally, Table 10 displays ANOVA results with no significant difference in the student's nationality levels on time management  $F(2, 279) = 2.396$ ,  $p = .093$ , and  $\eta^2 = .017$ . Thus, the results show an insignificant p-value of .093, exceeding the minimum value of .05.

In conclusion, therefore, it can be stated that there is no statistically significant difference in students' nationalities on time management. Hence, the findings imply that nationality does not cause better time management among the IIUM students. Therefore, hypothesis 3 is also rejected.

Table 10  
One-way ANOVA for time management by nationality

<b>Source of Variance</b>	<b><i>SS</i></b>	<b><i>df</i></b>	<b><i>MS</i></b>	<b><i>F</i></b>	<b><i>p</i></b>	<b><math>\eta^2</math></b>
<b>Between groups</b>	3.322	2	1.661	2.396	.093	.017
<b>Within groups</b>	193.381	279	.693			
<b>Total</b>	196.702	281				

The results from the current study conclude that there are no significant differences in the student's nationalities in regards to time management. This finding concurs with Lombard and Jager (2010) study, which found no differences between African students and time management at Lund University in Sweden. However, the current study results also differ from Chen et al. (2017) study in China, which concluded that Thai and Chinese students

were goal-oriented and more focused when it comes to completing their tasks, a finding that implies they are good time managers, contrary to the findings from the current study whose findings suggest that Asians, Africans and Middle Easterners have no significant effect on how time is managed.

## **Summary of the Findings of the Study**

The study comprised 282 students, and overall, the majority of the respondents are Asian male second-year undergraduate students above 26 years old from the Kulliyah of Islamic revealed knowledge and human sciences (KIRKHS). In addition, the students spend less than five minutes planning their day and classes respectively, planning for their day's activities once a day, four times a week and regard time management as an essential aspect of their lives.

Furthermore, the students have high time management levels because they are in constant control of how they spend their time, meet deadlines, complete tasks before they are due, do their tasks according to planned schedules, prepare daily or weekly to-do lists and concentrate on doing essential tasks.

Lastly, the findings reveal no significant difference between males and females, the different age groups and nationalities regarding time management. The study results imply that background factors such as gender, age and nationality are not crucial in dictating student's time management skills.

## **Conclusion**

The study's respondents consisted of 282 international students from different nationality backgrounds at International Islamic University Malaysia. The male number was considered higher than that of the female students although coming from the different Kulliyah and levels of study. In addition, almost half of the students reported spending less than five minutes planning their days and classes and making their plans once a day. Also, the students noted that they plan their activities on to-do lists four times a week because time management is important to them.

The study aimed to examine the differences in international students' cultural backgrounds related to time management in Malaysia. Specifically, the study aimed at 1) determining the level of time management among international students at IIUM and 2) examining the differences between gender, age and nationality on time management among IIUM international students. In addition, several study hypotheses were developed from the literature, upon which the findings were studied was analyzed and discussed.

In general, international students at International Islamic University Malaysia (IIUM) regard time management highly because of several factors among them include; completing essential tasks on time, getting essential tasks done first, being in control of how they spend their time, meeting deadlines, completing tasks before they are due, do their tasks according to planned schedules, prepare daily or weekly to-do lists and concentrating on doing essential tasks and among others, a finding that answered research objective 1.

The findings from this study show that there were no significant differences between the male and female respondents in terms of time management. Therefore, the findings imply that the male students were not better than female students in being good time managers. However, this finding contradicts findings from several researchers reviewed in the literature (Pehlivan, 2013; Saketi & Taheri, 2010), who noted that female students are better time managers and that their level of organization is higher than that of their male counterparts. Thus,

hypothesis one, which related to male students being better than female students in time management, was answered negatively because the study results did not support it.

Furthermore, there were also no significant differences in the age groups of international students in time management. Therefore, the result implies that age is not a significant factor that can be considered for international to become good time managers. This finding also differs significantly from scholars such as Chabaya et al. (2009), whose study revealed that an individual's age is significant in determining whether they can be good time managers or not in their daily activities. Therefore, the revelation confirms that hypothesis 2 is not supported. Likewise, the planned contrasts among the 20 years and below and 21–25 years old age groups, together with that of 26 years old and older, did not yield any significant result, and since the contrasts were not supported, hypotheses 2.1 and 2.2 were also rejected by the study.

There were no significant differences in the respondents' age groups and the users' income levels when compared to the effects of e-wallet usage. Similarly, there was no significant difference between male and female users on the effects of e-wallet usage among users in Malaysia. These findings indicate that hypotheses 1, 2, and 3 are not supported.

Lastly, there was no statistically significant difference in the nationality levels of international students at IIUM, a finding that was also not in agreement with some scholars who earlier on intimated that Asians are somewhat good organizers in everyday tasks and that African students are poor time managers (Chen et al., 2017; Lombard & Jager, 2010). Thus, since the findings conclude that there is no significant difference among the nationality levels of international students at IIUM, hypothesis 3 is also rejected.

Hence, this study reveals that there was no significant difference in the cultural background of international students on time management. Much as there were no significant differences among the background characteristics of international students related to time management, they, however, have factors that lead them to have higher levels of managing time. Therefore, the study's findings fully support the ABC theory of time management used in the current study.

The study's findings confirm the notion of the ABC model of time management (Lakein (1973) that states that; to use time more effectively, a person needs to prioritize the tasks that need to be undertaken. In addition, the ABC model is often used in providing an efficient means for prioritizing tasks, a notion that international students highlighted through the various factors that led them to have high levels of time management. Applying the theory in similar punctuality and time management studies reveals that it can explain and predict time management among individuals.

## **Limitations Of The Study**

The outbreak of COVID-19 made it hard to expand the data collection method to face to face; therefore, only online distribution of the questionnaire using google form was used. Therefore, the Pandemic affected the data collection process.

The study also considered only international students at IIUM. However, there are other local students at IIUM, as well as other institutions of higher learning, that may be facing the same problem of poor time management. Therefore, considering only international students need to be revised in future.



The study also used the ABC model of time management, which without doubt guided the study well; however, the study only utilized one dominant variable, yet other theories might help add on the number of variables that can be explored more and understand the perceptions of the students on time management.

## Suggestions for Future Research

Future studies should also try to use a different data collection method by conveniently choosing the respondents, but also try and use the face to face data collection method to have a proper understanding of the Respondent's issues while filling up the questionnaires. In addition, using another data collection method will help future researchers get more nuanced pictures of how time management affects students from different cultural backgrounds.

Furthermore, it is suggested that future studies should try to sample respondents from different universities and compare how students from different study environments manage their time.

Likewise, there is a need to expand the study population to include local students, for they also use time in their different daily activities. Therefore, future studies may explore time management more from the perspective of increasing the study population, which may also increase the sample.

Since the ABC model of time management guided the current study, future studies should endeavour to explore the phenomenon of time management using other theories such as the Decision theory, the Pickle Jar theory and the goal-setting theory. These theories have extended variables such as attitude towards time management that can be looked at and understand more the student's time management levels, as well as see if they can guide time management well and maybe get more ideas on how other theories look at the subject matter under study.

## Declarations

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## References

1. Adams, R. V., & Blair, E. (2019). Impact of time management behaviors on undergraduate engineering students' performance. *SAGE Open*, *9*(1), 1–11. <https://doi.org/10.1177/2158244018824506>.
2. Adegunju, K. A., Ola-Alani, E. K., & Agubosi, L. A. (2019). Factors responsible for students' lateness to school as expressed by Nigerian teachers in elementary schools. *Mimbar Sekolah Dasar*, *6*(2), 185–189. <https://doi.org/10.17509/mimbar-sd.v6i2.17040>
3. Alay, S., & Kocak, S. (2012). Validity and reliability of time management questionnaire. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *22*(2), 9–13.
4. Alex, K. (2009). *Soft skills: Know yourself & know the world*. New Delhi: S. Chand & Company Ltd.
5. Alio, B. C. (2015). Obstacles to effective secondary school mathematics in education: the challenge of mathematics educators. *Journal of Research Development NARD*, *1*(1), 66–71.

6. Alur, R., Feder, T., & Henzinger, T. A. (2016). The benefits of relaxing punctuality. *Journal of the ACM*, *43*(1), 116–146. <https://doi.org/10.1145/227595.227602>.
7. Balduf, M. (2009). Underachievement among college students. *Journal of Advanced Academics*, *20*(2), 274–294. <https://doi.org/10.1177/1932202x0902000204>.
8. Baothman, A., AlJefri, H., Agha, S., & Khan, M. A. (2018). Study habits of health science students at King Saud bin Abdulaziz University for Health Sciences, Jeddah, Saudi Arabia. *SAGE Open*, *8*(2), 1–6. <https://doi.org/10.1177/2158244018778092>
9. Basak, T., Uzun, S., & Arslan, F. (2018). Time management skills of nursing students. *TAF-Preventive Medicine Bulletin*, *7*(5), 429–552.
10. Chabaya, O., Chiome, C., & Chabaya, R. A. (2009). Students' failure to submit research projects on time: A case study from Masvingo Regional Centre at Zimbabwe Open University. *Open Learning: The Journal of Open, Distance and e-Learning*, *24*(3), 211–221. <https://doi.org/10.1080/02680510903201615>.
11. Chandi, J., Ndiritu, A., Kidombo, H., Mbwesa, J., & Keiyoro, P. (2013, January 1). *The effect of time management on academic performance of distance learners: A case of the University of Nairobi distance learners*. University of Nairobi Personal Websites. Retrieved December 13, 2021, from [https://profiles.uonbi.ac.ke/john\\_rugendo/john\\_rugendo\\_vs/site/publications/effect-time-management-academic-performance-distance-learners-case-u](https://profiles.uonbi.ac.ke/john_rugendo/john_rugendo_vs/site/publications/effect-time-management-academic-performance-distance-learners-case-u).
12. Chen, N., Rau, P. L. P., & Suriyalaksh, P. (2017). How Thai and Chinese young adults manage time?. *Psychology*, *8*(05), 717–727. <https://doi.org/10.4236/psych.2017.85046>.
13. Cyril, A. V. (2015). Time Management and academic achievement of higher secondary students. *i-Manager's Journal on School Educational Technology*, *10*(3), 38–43. <https://doi.org/10.26634/jsch.10.3.3129>.
14. Dafiaghor, F. (2011). Lateness: A major problem confronting school administrators in Delta State, Nigeria. *Academic Leadership: The Online Journal*, *9*(2), 1–23.
15. Davis, M. A. (2014). Time and the nursing home assistant: Relations among time management, perceived control over time, and work-related outcomes. *Academy of Management*, Toronto, Canada, 365–380.
16. Demirtaş, H., & Özer, N. (2007). Öğretmen adaylarının zaman yönetimi becerileri ile akademik başarıları arasındaki ilişkisi. *Eğitimde Politika Analizleri ve Stratejik Araştırmalar Dergisi*, *2*(1), 34–47.
17. Dishon-berkovits, M., & Koslowsky, M. (2002). Determinants of employee punctuality. *The Journal of Social Psychology*, *142*(6), 723–739. <https://doi.org/10.1080/00224540209603932>.
18. Eilam, B., & Aharon, I. (2003). Students' planning in the process of self-regulated learning. *Contemporary Educational Psychology*, *28*(3), 304–334. [https://doi.org/10.1016/s0361-476x\(02\)00042-5](https://doi.org/10.1016/s0361-476x(02)00042-5)
19. Eldeleklioglu, J. (2008). Investigation of adolescents' time-management skills in terms of anxiety, age, and gender variables. *Elementary Education Online*, *7*(3), 656–663.
20. Eldeleklioglu, J., Yılmaz, A., & Gültekin, F. (2010). Investigation of teacher trainees' psychological well-being in terms of time management. *Procedia - Social and Behavioral Sciences*, *2*(2), 342–348. <https://doi.org/10.1016/j.sbspro.2010.03.022>.
21. Emore, C. (2015). Causes of students' lateness to school in Uvwie LGA of Delta State. Delta State, University, Abraka, Nigeria. An unpublished post-grad Henry, KL (2007). Who's skipping school: Characteristics of truants in 8th and 10th grade. *Journal of School Health*, *77*(1), 29–35.
22. Erdem, R., Pirinççi, E., & Dikmetaş, E. (2015). Üniversite öğrencilerinin zaman yönetimi davranışları ve bu davranışların akademik başarı ile ilişkisi. *Manas Üniversitesi Sosyal Bilimler Dergisi*, *7*(14), 167–177.

23. Green, P., & Skinner, D. (2005). Does time management training work? An evaluation. *International Journal of Training and Development*, *9*(2), 124–139. <https://doi.org/10.1111/j.1468-2419.2005.00226.x>.
24. Groves, R. M., Fowler Jr, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2011). *Survey methodology* (Vol. 561). John Wiley & Sons.
25. Huyler, D., & McGill, C. M. (2019). Research design: Qualitative, quantitative, and mixed methods approach, by John Creswell and J. David Creswell. Thousand Oaks, CA: Sage publication, Inc. *New Horizons in Adult Education and Human Resource Development*, *31*(3), 75–77. <https://doi.org/10.1002/nha3.20258>.
26. Jumare, A. M., Maina, B. A., & Ankoma-Sey, V. R. (2015). Analysis on students' late-coming factors in selected secondary schools in Zaria: Implications for educational managers. *Journal of Education and Practice*, *6*(32), 56–61.
27. Kaushar, M. (2013). Study of the impact of time management on academic performance of college students. *IOSR Journal of Business and Management*, *9*(6), 59–60. <https://doi.org/10.9790/487x-0965960>.
28. Kaya, H., Kaya, N., Palloş, A. Ö., & Küçük, L. (2012). Assessing time-management skills in terms of age, gender, and anxiety levels: A study on nursing and midwifery students in Turkey. *Nurse education in practice*, *12*(5), 284–288. <https://doi.org/10.1016/j.nepr.2012.06.002>.
29. Lakein, A., & Leake, P. (1973). *How to get control of your time and your life* (p. 204). New York: New American Library.
30. Lakein, A. (1995). *How to get control of Your time and your life*. Gower.
31. Maile, S., & Olowoyo, M. M. (2017). The causes of late coming among high school students in Soshanguve, Pretoria, South Africa. *Pedagogical Research*, *2*(2), 1–11. <https://doi.org/10.20897/pr/80951>.
32. Malcolm, H., Wilson, V., Davidson, J., & Kirk, S. (2013). Absence from school: A study of its causes and effects in seven LEAs. *The SCRE Centre University of Glasgow*: *1*(3) 1–68
33. Mancini, M (2003) *Time management*, McGraw-Hill Professional, Canberra. Retrieved on December 10, 2021, from <https://ivypanada.com/essays/time-management-theories-and-application/>.
34. Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, *16*(1), 31–41.
35. Murthy, M. R. (2016). *Motivation and learning*. Jaipur: Pointer Publishers.
36. Nakpodia, E. D., & Dafiaghor, F. K. (2011). Lateness: A major problem confronting school administrators in Delta State, Nigeria. *International Journal of Science and Technology Education Research*, *2*(4).
37. Neill, J. T. (2016). *The university student satisfaction and time management questionnaire v.9*. Retrieved from [https://en.wikiversity.org/wiki/Survey\\_research\\_and\\_design\\_in\\_psychology/Assessment/Survey/TUSSTMQ99](https://en.wikiversity.org/wiki/Survey_research_and_design_in_psychology/Assessment/Survey/TUSSTMQ99)
38. Nonis, S. A., Teng, J. K., & Ford, C. W. (2015). A cross-cultural investigation of time management practices and job outcomes. *International Journal of Intercultural Relations*, *29*(4), 409–428. <https://doi.org/10.1016/j.ijintrel.2005.05.002>
39. Nonkonana, T. G. (2020). *Strategies used by the school management team in managing learners' late coming in a Cape Town high school* (Doctoral dissertation, Cape Peninsula University of Technology).
40. O'Connell, F. (2013). *The power of doing less: why time management courses don't work and how to spend your precious life on the things that really matter*. John Wiley & Sons.
41. Odebode, A. A. (2019). Causes of indiscipline among students as viewed by primary school teachers in Nigeria. *Mimbar Sekolah Dasar*, *6*(1), 126–140. <https://doi.org/10.17509/mimbar-sd.v6i1.15217>.

42. Odumeru, J. A. (2013). Effective time management. *Singaporean Journal of Business, Economics and Management Studies*, 2(1), 9–17. <https://doi.org/10.12816/0003837>.
43. Okpukpara, B. C., & Chukwuone, N. A. (2001). Child schooling in Nigeria: The role of gender in urban. Rural, North and South Nigeria, Nairobi: African Economic and Research Consortium, 10(1), 21–43. <https://doi.org/10.4314/ajep.v10i1.24246>.
44. Olsson, N. O. (2020). Train punctuality analysis in a rolling stock perspective. *Transportation Research Procedia*, 47, 641–647. DOI: 10.1016/j.trpro.2020.03.142.
45. Olsson, N. O., & Haugland, H. (2014). Influencing factors on train punctuality result from some Norwegian studies. *Transport Policy*, 11(4), 387–397. DOI:10.1016/j.tranpol.2004.07.001.
46. Onoyase, A. (2017). Lateness: A recurrent problem among secondary school students in Akoko South East Local Government Area of Ondo State Nigeria, implications for counseling. *Higher Education Studies*, 7(1), 107–113. <https://doi.org/10.5539/hes.v7n1p107>.
47. Oran, A. F. (2009). Time management in higher education: Reforming the credit hour system in Jordan's universities. *Education, Business and Society: Contemporary Middle Eastern Issues*, 2(1), 32–43.
48. Peel, J. (2013) *Time management*. Retrieved December 7, 2021, from: .
49. Pehlivan, A. (2013). The effect of the time management skills of students taking a financial accounting course on their course grades and grade point averages. *International Journal of Business and Social Science*, 4(5).
50. Pološki Vokić, N., & Mrđenović, R. (2018). Razlike u upravljanju vremenom hrvatskih menadžera s obzirom na spol i hijerarhijsku razinu. *Economic research-Ekonomska istraživanja*, 21(1), 35–47.
51. Rau, P. L. P., Liu, J., Verhasselt, S., Kato, T., & Schlick, C. M. (2011, March). Different time management behaviors of Germans, Chinese and Japanese. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work* (pp. 701–704).
52. Saketi, P., & Taheri, A. (2010). The relationship between time management and academic achievements among bachelor and master students of Shiraz University and Shiraz University of Medical Sciences. *Iranian Journal of Medical Education*, 10(3), 293–300.
53. Scherer, S., Talley, C. P., & Fife, J. E. (2017). How personal factors influence academic behavior and GPA in African American STEM students. *SAGE Open*, 7(2), 1–14.
54. Schuler, R. S. (2014). *Managing stress means managing time*. New York, NY: Free Press.
55. Shapira-Lishchinsky, O. (2017). Israeli teachers' perceptions of lateness: A gender comparison. *Sex Roles*, 57(3–4), 187–199. <https://doi.org/10.1007/s11199-007-9246-9>
56. Simpson, B. G. (2011). Effective time management. *Parks & Recreation*, 13(9), 61–63.
57. Sultana, A. M., & Rashid, S. N. M. B. (2013). A study on time management and punctuality issues among students at secondary school, Kedah. *American Journal of Economics*, 3(5), 52–56.
58. Swart, A. J., Lombard, K., & de Jager, H. (2010). Exploring the relationship between time management skills and the academic achievement of African engineering students—a case study. *European Journal of Engineering Education*, 35(1), 79–89.
59. Tomlinson, J. (2016). Routes to part-time management in UK service sector organizations: Implications for women's skills, flexibility, and progression. *Gender, Work and Organization*, 13(6), 585–605. <https://doi.org/10.1111/j.1468-0432.2006.00326.x>

60. Trueman, M., & Hartley, J. (1996). A comparison between the time-management skills and academic performance of mature and traditional-entry university students. *Higher education*, 32(2), 199–215.
61. Ubogu, R. E. (2004). The causes of absenteeism and dropout among secondary school students in Delta Central Senatorial District of Delta State. *Unpublished PhD. Thesis, Delta State University, Nigeria: Abraka*.
62. Wang, W.-C., Kao, C.-H., Huan, T.-C., & Wu, C.-C. (2010). Free time management contributes to a better quality of life: A study of undergraduate students in Taiwan. *Journal of Happiness Studies*, 12(4), 561–573. <https://doi.org/10.1007/s10902-010-9217-7>.
63. Wimmer, R. D., & Dominick, J. R. (2014). *Mass media research an introduction*. Wadsworth, Cengage Learning.
64. Wok, S., & Hashim, J. (2014). Communication networks, organizational contacts, and communication power in grooming professionals for career success. *Jurnal Komunikasi, Malaysian Journal of Communication*, 30(Special Issue), 219–242. <https://doi.org/10.17576/jkmjc-2014-30si-13>.

## Figures

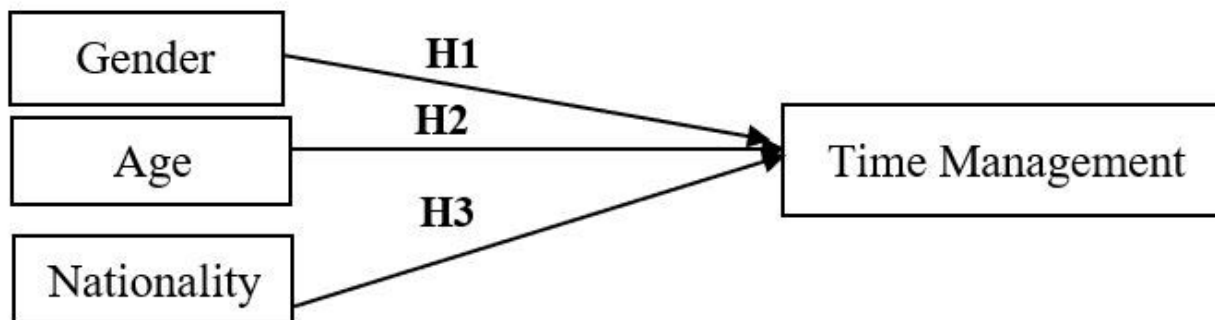


Figure 1

Conceptual framework for cultural background differences and time management.

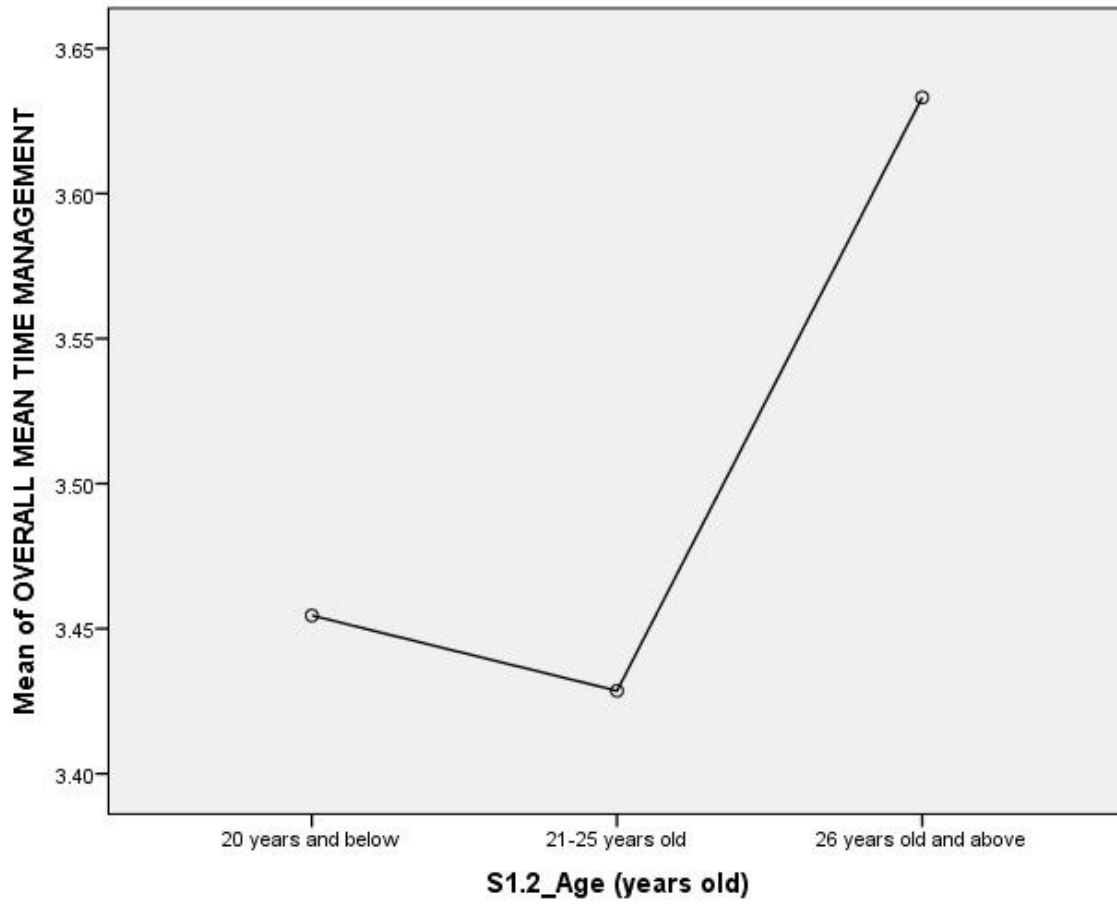


Figure 2

Mean plots for time management by age