INFLUENCE OF UNIVERSITY STUDENT DEMOGRAPHICS ON THEIR ATTITUDE TOWARDS DANCE AS A PHYSICAL ACTIVITY

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ABSTRACT

The status of dance is intangible in Malaysia. The inadequate empirical findings specifically in Malaysia had led the need for deep understanding of students' attitudes towards dance at university. The present study examined the university students' attitude domains which are cognitive, affective and behavioral domain towards dance as physical activity based on their demographic factors, such as gender, ethnic group, age group and years of dance experience. The causal-comparative research design was used in this study. A total of 310 students participated in this study. A questionnaire was developed and a pilot study was administrated to assess the validity and reliability of the questionnaire. Descriptive analysis and one-way MANOVA were performed to answer the research questions. Prior to inferential testing, the assumptions of one-way MANOVA was achieved. Descriptive statistics revealed that cognitive domain obtained the highest mean score, followed by affective domain, and lastly behavioral domain. One-way MANOVA results revealed that there are significant differences on students' attitude domains towards dance between males and females, F (3,306) = 3.598, p = .014; partial eta squared = .034, female students significantly showed better attitude in cognitive domain compared to male students. Besides that, there are significant differences on attitude domains based on ethnic groups, F (9,740) = 2.009, p = .036; partial eta squared = .019; Malay students significantly showed better attitude than other ethnic groups in cognitive domain. The results revealed that there are significant differences in attitude domains based on years of dance experience F (6,610) = 3.024, p = .006; partial eta squared = .029, students with more than six years of dance experience showed a better attitude in the affective and the behavioral domain than students with less than six years of dance experience. However,

the results showed that there were no significant differences between students in age groups. Thus, it can be concluded that there are inequivalent in attitude domains towards dance based on students' gender, ethnic group and years of dance experience. The findings of this present research will be served as an important reference for parents, dance teachers or educator, individual, society and Ministry of Education.

Keywords: Demographic Factors, Attitude Domains, Dance, Physical Activity, Higher Learning Education

PENGARUH DEMOGRAFI PELAJAR UNIVERSITI KE ATAS SIKAP MEREKA TERHADAP TARIAN SEBAGAI AKTIVITI FIZIKAL

ABSTRAK

Status tarian di Malaysia menghadapi masalah kekurangan data statistik. Kekurangan data empirikal mengenai tarian di Malaysia telah menyebabkan keperluan pemahaman yang mendalam tentang sikap pelajar terhadap tarian di universiti. Kajian ini bertujuan bagi mengetahui domain sikap pelajar universiti, iaitu kognitif, afektif dan tingkah laku terhadap tarian sebagai activiti fizikal berdasarkan faktor demografi pelajar, iaitu jantina, kumpulan etnik, kumpulan umur dan tahun pengalaman dalam tarian. Reka bentuk *causal-comparative* telah digunakan dan sebanyak 310 orang pelajar mengambil bahagian dalam kajian ini. Soal selidik telah direka dan kajian perintas telah dikendalikan untuk menentukan kesahan dan kebolehpercayaan soal selidik. Analisis deskriptif dan MANOVA satu hala telah digunakan untuk menjawab soalan kajian. Andaian-andaian MANOVA satu hala telah tercapai sebelum ujian inferensi. Statistik deskriptif menunjukkan bahawa domain kognitif memperoleh skor min tertinggi, diikuti domain afektif dan akhirnya domain tingkah laku. Dapatan MANOVA satu hala menunjukkan bahawa terdapat perbezaan yang signifikan pada domain sikap pelajar terhadap tarian antara lelaki dan perempuan, F (3,306) = 3.598, p = .014; partial eta squared = .034, pelajar perempuan menunjukkan sikap yang lebih positif dalam domain kognitif berbanding dengan pelajar lelaki. Selain itu, terdapat perbezaan yang signifikan pada domain sikap berdasarkan kumpulan etnik, F (9,740) = 2.009, p = .036; partial eta squared = .019, pelajar Melayu menunjukkan sikap yang lebih positif berbanding dengan etnik lain dalam domain kognitif. Hasil dapatan juga mendedahkan bahawa terdapat perbezaan

yang signifikan pada domain sikap berdasarkan tahun pengalaman tarian, F (6,610) = 3.024, p = .006; partial eta squared = .029, pelajar yang mempunyai lebih dari enam tahun pengalaman tarian menunjukkan sikap yang lebih positif dalam domain afektif dan tingkah laku berbanding dengan pelajar yang kurang daripada enam tahun pengalaman tarian. Walau bagaimanapun, keputusan menunjukkan bahawa tiada perbezaan yang signifikan antara pelajar dalam kumpulan umur. Oleh itu, dapat disimpulkan bahawa terdapat ketidakseimbangan dalam domain sikap terhadap tarian di kalangan pelajar berdasarkan jantina, kumpulan etnik dan tahun pengalaman tarian. Hasil kajian ini akan dijadikan sebagai rujukan yang penting kepada pihak ibu bapa, guru atau pendidik tarian, individu, masyarakat dan juga Kementerian Pendidikan.

Kata Kunci: Faktor Demografi, Domain Sikap, Tarian, Aktiviti Fizikal, Pendidikan Pengajian Tinggi

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LIST OF ABBREVIATIONS

EFA	: Exploratory factor analysis
CFA	: Confirmatory factor analysis
KMO	: Kaiser-Meyer-Olkin
PCA	: Principle component analysis
GFI	: Goodness-of-fit index
TLI	: Tucker-Lewis index
CFI	: Comparative fit index
RMSEA	: Root mean square error of approximation
CR	: Composite reliability
AVE	: Average variance extracted
MANOVA	: Multivariate analysis of variance
ANOVA	: One-way analysis of variance

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Dance serve numerous purposes and can be presented in diverse forms; it can be in the form of art, recreation, competition, entertainment and physical activity (Wright & Hernandez, 2014). In other words, dance can be categorized into: "dance as an expression", "dance as a cultural preserver", and "dance as a bodily exercise" (Mattsson & Lundvall, 2015).

"Dance as an expression" refers to a dance that serves as a tool to express feelings and ideas through bodily movements that are related to aesthetic discourse. Dance as a creative art form is used to express ideas, thoughts and feelings (Wright & Hernandez, 2014). Besides that, based on Yoncalik, Demirel, and Yoncalik (2017), creative dance is a unique self-expression art form which mingles rhythmic movement and aesthetic expression to communicate with ideas, thoughts, and feelings. Moreover, a recent research also suggested that creative dance plays a crucial role to stimulate students' self-expression through body language (Anderson, Leyland, & Ling, 2017).

Furthermore, "Dance as a cultural preserver" emphasizes on the creation of a multicultural identity that is associated closely to various types of cultures, that reflects different backgrounds and contexts of people (Mattsson & Lundvall, 2015). More specifically, it refers to a cultural dance, traditional dance, folk dance or social dance that reflects its own countries, cultural context, belief, religion, community and identity. According to Ratanakarn (2011), extra and co-curricular activities will enhance multi-cultural awareness in a university campus. For example, a Thai dance

workshop was conducted for the visiting and exchange students to learn about different cultural dances. Additionally, Chernotsky and Hobbs (2006) also pointed out that dance as an extra and co-curricular activities in a university will help in fostering an appreciation of multi-cultural awareness.

"Dance as a bodily exercise" emphasizes on dance as a tool or dance that serves as a physical activity in promoting a healthy lifestyle through bodily movement or exercise (Mattsson & Lundvall, 2015). From this perspective, dance is referred to as a physical activity, recreational activity or fitness exercise with the purpose of improving the quality of life and pursuit of worthy leisure time activities (Wuest & Bucher, 2006), developing fitness and promoting health (Huang, Hogg, Zandieh, & Bostwick, 2012; Mavrovouniotis et al., 2016). Furthermore, based on Wuest and Bucher (2006), dance as a form of recreation provides the chance for enjoyment, self-expression, and relaxation.

However, dance is difficult to discrete individually to only certain forms, such as physical activity, recreation, exercise and sport, because it is intertwined among each other with its multiple functions and purposes. Dance existed as a form of exercise which appears in a variety of features (Koutedakis & Sharp, 2004; Maraz, Király, Urbán, Griffiths, & Demetrovics, 2015). Based on Wuest and Bucher (2006) , dance is frequently considered to be associated closely with physical education, exercise, and sport. Dance and sport are both physical activities that require skills that are domain-specific, flexibility, strength, endurance, practice and training, as well as the involvement motives of participants (Nieminen, 1998). Moreover, from the perspective of aesthetics, many researchers review dance as a composition of sports and art (Zagorc, Lasan, & Ambrož, 2000). Furthermore, according to the American Alliance for Health (1999), Dance is a prominent creative activity that is exceptional

for processing basic skills and movement in a non-competitive way. In short, dance in the context of physical activity, is closely intertwined with a priestly function to bring about multiple health benefits.

Consequently, there are many types of dance that differs in their functions and purposes. Classical dance, traditional dance, folk dance, cultural dance, fitness dance and social dance are different based on their historical origin, development and function. According to Nieminen (1998) different type of dance will attract different people.

Physical activity is an important part of the university life which can enhance both physical and mental benefits (Swanepoel, Surujlal, & Dhurup, 2015). Dance serves as a co-curricular activity for students in many universities. Co-curricular activities are crucial even though it is not part of the core curriculum, it is vitally important due to its multiple benefits for university students. Co-curricular activities is important in bringing all-round development to each and every aspect of the students, also, dance as a co-curricular activity helps to enhance physical, social, aesthetic and emotional development (Das, 2016). According to Kerr-Berry (2016), engagement in co-curricular activity is of benefit to the students' academic performance, skills, attitudes and knowledge. Thus, conclusions can be made as to the fact that the personal characteristics of students such as satisfaction, self-confidence, emotional management and leadership can be enhanced by participating in any extra and co-curricular activities, regardless of the activities that are related to academic, performing arts or sport. Dance as one of the co-curricular activities, ought to be put into consideration to enhance the university life of students.

Attitude is one of the most important variable in psychology. Allport (1935), the founder of attitudes research asserted that, "The notion of attitude is perhaps the most indispensable and distinctive notion in the present-day American social psychology" (p.198). Based on Maio and Haddock (2014), peoples' thoughts and behaviors are extremely influenced by their own attitude. Many psychologists have put a great effort to observe the establishment of an attitude with regards to a certain object, the impact of the attitude toward one's lifestyle, and also the changes of attitude. Besides that, attitude is considered as an essential part in all aspects of human endeavors, which affect our responses towards certain activities and also our achievement in certain fields (Silverman & Subramaniam, 2000). In short, attitude makes a great impact on peoples' perception and responses towards the world.

The model of attitude as proposed by Rosenberg and Hovland (1960) defined that the component of attitude were independent which comprised of the behavioral, affective and cognitive components. With reference to Rosenberg and Hovland (1960), cognitive is about the beliefs and perception towards a certain object; affective describe as the expressions of emotion and feelings towards an attitude's object; behavioral component refers to the expressions of behavioral intentions or the overt behaviors. An empirical study had demonstrated that these three attitude component are distinct and individual (Leelarungrayub et al., 2011). In other words, attitude structure is concerned about the relations among elements within and between the cognitive, affective and behavioral components (Ajzen, 2005). Attitude component is also known as the attitude domain. The consistency among attitudes, affects and cognitions about single objects is crucial to predict behavior.

There are many researchers who have studied about attitude in physical activities (Colquitt, Walker, Langdon, McCollum, & Pomazal, 2012; Esslinger,

Grimes, & Pyle, 2016; Fengjuan, Junjun, & Baker, 2014; Janauskas, 2013; Lazarević, Orlić, Lazarević, & Janić, 2015; Petkova, Kudlácek, & Nikolova, 2012; Silverman & Subramaniam, 2000; Stivaktaki, Mountakis, & Bournelli, 2010; Swanepoel et al., 2015; Weiyun & Hypnar, 2015). According to Swanepoel et al. (2015), students' attitude towards physical activities may invariably influence self-esteem and life satisfaction. Meanwhile, students' major motivational factors such as having fun, obtaining benefits, and being with friends, contributed to positive attitudes towards physical activities (Weiyun & Hypnar, 2015).

The fundamental importance of positive attitudes in obtaining an appropriate knowledge is acknowledged (Sanderson, 2001). However, resources on attitude of dance were limited. With reference to Vlašić, Oreb, and Bosnar (2014), positive attitude is essential for dance activities' engagement. Conversely, Cohen (1983) indicated that a vital factor that causes an incompetence to engage in a dance activity is by reason of negative attitudes towards dance. Marginalization of dance within a school's curriculum is coursed by the conventional beliefs and prejudices towards dance (Björling, 2005; Brennan, 1996). Thus, dance is considered less important in Physical Education (PE) lessons, dance is also less preferred as sports or recreational activity. According to Burt (2007), in consideration to increase the acceptance and favorableness of dance, the changes of the conventional prejudice towards male dancers is important. Besides that, an experimental research revealed that exposure to various local dances were effectively in developing a positive attitude towards folk dance course (Altun & Atasoy, 2019). Thus, the attitude of dance among university students should be taken into consideration by examining their attitude components or domains and identifying the consistency among attitudes, cognitive, affective and behavioral factors in order to predict their behavior.

1.2 Problem Statement

Dance is a form of physical activity that brings multiple benefits on the well-being of people in various aspects, such as social, psychological, physical fitness and health (Maraz et al., 2015; Quiroga Murcia, Kreutz, Clift, & Bongard, 2010). Besides that, dance also plays different roles and serves diverse purposes. It should be promoted at schools especially at the tertiary education level.

Although dance has served as part of the PE curriculum in some other countries for over many years now, however, dance is placed in a challenging situation and not much attention has been paid to dance lessons with limited time allocated to dance activities (Mattsson & Lundvall, 2015). Moreover, according to Amado, Sánchez-Miguel, and Molero (2017), the existence of dance education in Malaysia primary and secondary curriculum is inconsiderable. Thus, dance serves as a non-mandatory subject in schools. It is an elective for those who are passionate or financially supported to explore dance in both formal and informal ways. Moreover, the status of dance as part of arts education in Malaysia was intangible as stated by Gonzales (2011):

> Arts education is barely present in the Malaysian education system, and is generally not treated with esteem. The pursuit of all things artistic is generally considered frivolous and never completely encouraged by families in a society that privileges mainstream, stable, and more lucrative careers and see little material gain, status (Gonzales, 2011, p. 147).

Besides that, the hierarchy of the education system tremendously influences the status of dance education within arts education, as educationist Robinson (2006),

points out that art and music are habitually given a higher status in schools compared to drama and dance.

In Malaysia, dance usually serves as an extra-curricular activity, which is practiced after the schools formal program and presented as an optional activity in primary and secondary schools. Meanwhile, dance activities are generally presented as elective courses or co-curriculum courses in universities. There are only few universities that offers dance program as a major course, such as University of Malaya, Sultan Idris Education University (UPSI) and *Akademi Seni Budaya Dan Warisan Kebangsaan* (ASWARA).

Based on Gonzales (2011), dance education at the university level plays a crucial role with regards to the constructing and performativity of the Malaysian identity but there is a lack of knowledge, expertise, resources and teaching aids to facilitate dance formally. Although the development of dance is slow in our country, it should be widely promoted like many other physical activities in university campuses. Unfortunately, there are insufficient arts scholars, and resources for dance research are still tremendously limited (Gonzales, 2011).

Furthermore, from previous studies, physical activity was found to be gradually less preferred from the younger population to the older adults (Nicholson, 2004). According to Maraz et al. (2015), the problem of the lack of physical activity and negative psychological wellbeing among students were challenging for many health experts. Conversely, dance is favored by the population now (Lopez Castillo et al., 2015; Mihaela & Sabina, 2015; Sanderson, 2001). It serves as a way to stimulate the participation of physical activity and hence, enlarge the physical activity rates in young people (Robertson-Wilson, Reinders, & Bryden, 2016). Furthermore, dancing is a pleasurable activity that can enhance a healthy and active lifestyle by increasing

the fitness level (Maraz et al., 2015). An investigation on students' psychology perspective, particularly their attitude towards dance is essential so as to predict their behavior of dance.

The role of attitude is very important in the effectiveness of learning as it can predict behavior. There are plenty of researchers studied on students' attitudes and their effectiveness of learning towards certain subject (Al-Fahad, 2009; Chatzara, Karagiannidis, Stamatis, 2010; Chao, Chen, Chuang, 2015). Thus, negative attitude towards a certain subject could seriously affect their effectiveness of learning or participating in that subject. Cognitive, affective and behavioral are different domains of attitude that are related to people's cognitions, feelings, and behaviors. Based on previous researches, the attitude of dance should deal with the study of the discrimination between domains, due to the fact that the change in one psychological domain might not change on other domains in a parallel order (Breckler, 1984; Neal & Fortin, 1986).

So, it's important to study university students' attitude domains towards dance. It is unsurprising that only limited information is available on students' attitude domains towards dance, especially in the Malaysia context. Thus, the examination of students' attitudes domains towards dance based on various demographic variables in the present study would fill the gap of the research knowledge.

Taken together, this study attempts to determine the students' attitudes domains towards dance in the university. Demographic factors are important variables that may differ based on the students' attitudes domains towards certain subjects. It is also necessary to take into consideration the improvement of students' attitude of dance and increase their participation in dance activities. Thus, this study is concerned

with the university students' age group, gender, ethnic group, and years of dance experience in three attitude domains which are cognitive, affective and behavioral.

More specifically, this study attempts to obtain research evidences concerning the attitude domains of dance among university students in cognitive, affective and behavioral contexts. Besides that, it also identifies the demographic factors that are associated with the attitude domains of dance.

1.3 Purpose of Study

This study purposes to identify university students' attitude toward dance as a physical activity in three attitude domains; cognitive, affective and behavioral domain. This study also examines whether differences exists in the dance attitude domains among university students based on their gender, ethnic group, age group and years of dance experience.

1.4 Research Objective

1. To identify the attitude domains towards dance as a physical activity among university students.
2. To examine the differences in the attitude domains towards dance between male and female students.
3. To examine the differences in the attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students.
4. To examine the differences in the attitude domains towards dance among students in different age groups.
5. To examine the differences in the attitude domains towards dance among students with different years of dance experience.

1.5 Research Question

1. What are the attitude domains towards dance as a physical activity among university students?
2. What are the significant differences in the attitude domains towards dance between male and female students?
3. What are the significant differences in the attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students?
4. What are the significant differences in the attitude domains towards dance among students in different age groups?
5. What are the significant differences in the attitude domains towards dance among students with different years of dance experience?

1.6 Research Hypothesis

This study is concerned with investigating the attitude domains of university students towards dance as a physical activity. Following the hypotheses in the null form:

Ho1: There are no differences in the attitude domains towards dance between male and female students.

Ho2: There are no differences in the attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students.

Ho3: There are no differences in the attitude domains towards dance among students in different age groups.

Ho4 There are no differences in the attitude domains towards dance among students with different years of dance experience.

1.7 Conceptual Framework

The conceptual framework of this study is a composition of a schematic conception of attitude domains towards dance based on students' demographic data as shown in Figure 1.1. This study would raise a number of very significant points concerning both our understanding of demographic variables and attitude domains of dance.

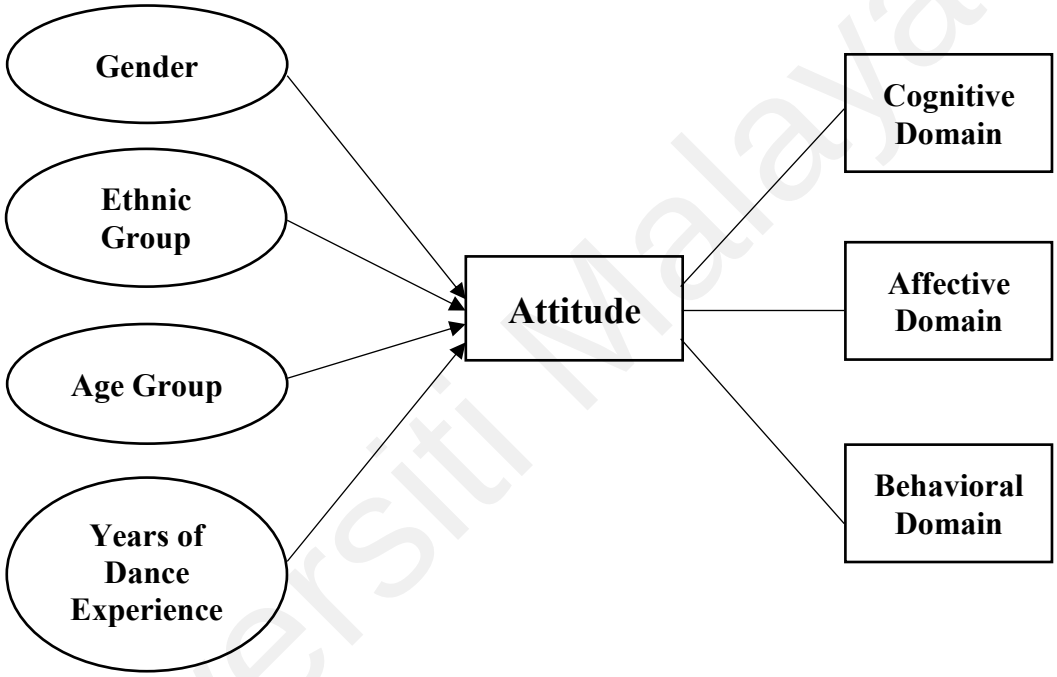

Figure 1.1. Conceptual framework of the university students' demographic factors and their attitude domains towards dance.

Figure above shows that the independent variables are demographic factors that included gender, ethnic, age group and years of dance experience. Meanwhile, the dependent variables are attitude domains, which comprised of the cognitive, affective and behavioral domain. This current study goes beyond attitude as a general evaluative disposition by considering the structure of the attitude domains. The conception of attitude is based on the Rosenberg and Hovland (1960) model, which

discussed about three attitude domains, namely: cognitive, affective and behavioral domain. This model was widely accepted by researcher in the study of attitude and behaviors (Solomon, 2010). It argued that the three attitude domain should measure separately due to examine attitudes in more precise and accurate way.

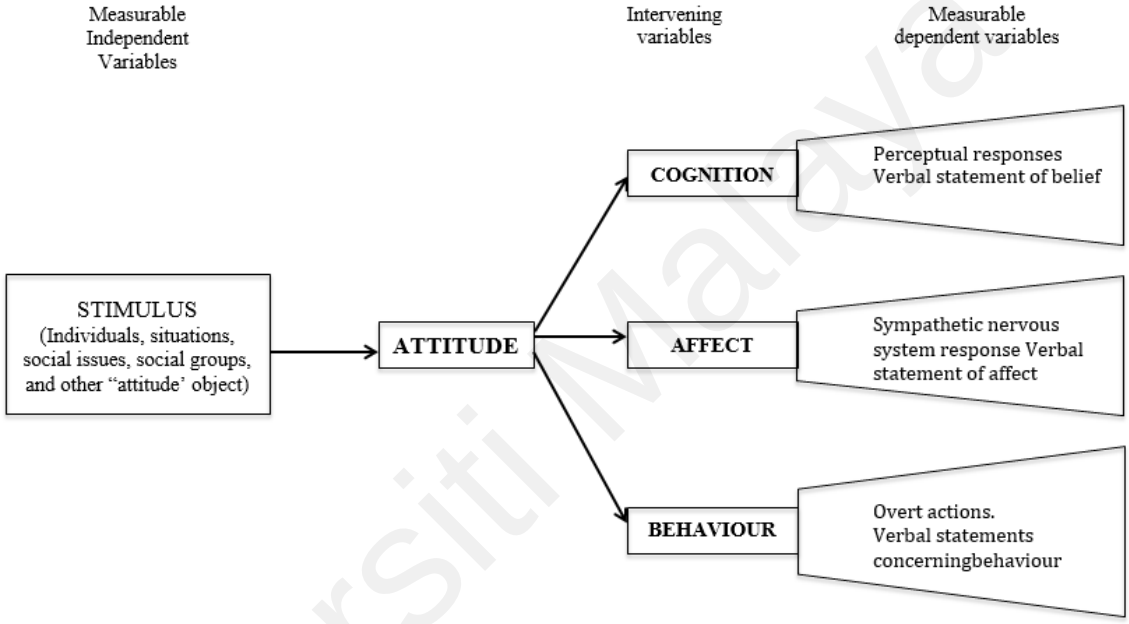

Figure 1.2. A schematic conception of attitudes. References cited from *Social psychology: Attitudes, cognition and social behaviour* (p.54).

Figure 1.2 shows more detail on the stimulus to attitude in three domains, which are cognitive, affective and behavioral domain. Each attitude domains was examined based on students' demographic factors, which served as a stimulus to attitude. Based on the schematic conception of attitudes, stimulus may dawn from individuals, situation, social issues, social group, and other "attitude" object. Previous researchers indicated that the attitude towards a physical activity differed based on

demographic factors (Behera & Rangaiah, 2014; Cruz-Ferreira, Marmeleira, Formigo, Gomes, & Fernandes, 2015; Tabachnick & Fidell, 2007).

Furthermore, previous research has shown how certain demographic variables were related to dance attitude (Neal, 1985; Neal & Dineur, 1991; Neal & Fortin, 1986; Nieminen & Varstala, 1999; Sanderson, 2001; Vlašić et al., 2014; Vlašić, Ored, & KatoviĆ, 2012). However, research on students' attitude towards dance has received no empirical attention in Malaysia. In this present study, students' gender, ethnic group, age group and years of dance experience are examined for generating greater understanding and awareness of how such variables differ in the students' attitude towards dance. In short, this current study intended to fill the gap in the dance education research by looking at selected demographic factors that are more related in the context of Malaysia and its differences on the attitude domains.

1.8 Limitation

There were limitations in the process of conducting this study. This study aims to examine students' attitude domains towards dance based on their demographic backgrounds. Despite that, it was important to interpret the findings according to some limitations in this study which described the states and conditions that limit and influence the procedures and analysis of the data that is out of the control of the researcher. The first limitation was related to the resources and references. There were extremely limited resources and references related to dance, especially in Malaysia. Furthermore, there were finite researchers concerned about students' dance attitude in three discriminated domains, which were cognitive, affective and behavioral domain.

The second limitation was with regards to the research design. Causal comparative research design was utilized in this study. It was beneficial as it enabled the researcher to examine the group differences. However, the limitation of this

research design was that the inability to manipulate the independent variables caused a lack of control of the extraneous variables. Hence, it provided a limited indication of the cause and effect relationship.

The third limitation was related to the sampling method. Simple random sampling method was used. This sampling method was advantageous in the representativeness of the population as every individual was given the same likelihood of being chosen. It was an equitable way of selecting the sample. However, it was challenging and time consuming to gain access to the list of the members of the population. Besides that, the subject of the study were students who had enrolled in co-curriculum courses and had participated in physical activity. Thus, it was limit the possibility to indicate the attitude of students who are not interested in dance or did not participate in dance activity.

Lastly, another limitation was regarding the students' physiology and mental condition. Students were randomly given the questionnaire after they finished their class. The condition of the students' overloaded works or practice, fatigue might affect the results that were obtained from the questionnaire.

1.9 Delimitation

There are certain delimitations placed in this study. According to Baumgartner and Hensley (2006), delimitations refer to the field of the study which places a boarder for the research. Delimitations includes the characteristics of the study, some of which are: the number of research participants, the type of research participants, utilization of the instrument in the study, the study's duration as well as time, which are controllable by the researchers. Delimitations were established as the researcher narrowed the question down to the researchable problem.

The first delimitation in this quantitative study was with regards to the subject of the study. This study was delimited to the subject of students in University of Malaya. Besides that, this study was also delimited to students who had enrolled in co-curriculum courses that were offered by the university. The second delimitation is related to the questionnaire that was utilized in this study. Students' attitude domains towards dance are being assessed by questionnaires developed by the researcher. Furthermore, this study is delimited to a narrower scope by only investigating dance as a physical activity. Lastly, the researcher also experienced a delimitation in the time and duration of data collection. All questionnaires were distributed and collected in the academic year of 2017/2018, Semester 1.

1.10 Significance of the Study

Previous studies had examined the domain of attitude in general. Due to the inconsistency among the three attitude domains, this current research aimed at investigating the attitude domains which are cognitive, affective and behavioral domain of dance based on students' demographic data, such as gender, ethnic group, age group and years of dance experience at a university by narrowing dance as a physical activity.

This study is apparently the first attempt to explore on the university students' attitude domains towards dance in Malaysia. The attitude domains of dance are examined based on students' demographic factors. The research finding has the potential to further the prevalence of dance education by providing some empirical data for future research in this field.

It is necessary to enlarge our knowledge and comprehension of the association between the attitude towards dance and personal demographic factors. Demography is concerned with the growth and distribution of a population**.** Demographic factors

play a vital role in educational planning. It is important for educators, planners and decision-makers to know the structure and distribution of the population. Each student is composed and stimulated by variety of features. Every student has been influenced by these demographic characteristics in order to be effective in their learning. Thus, demographic variables are important to take into consideration when planning to observe students' attitudes towards dance. The independent variables in this study are students' demographic factors. While, the dependent variables are the attitude towards dance in the cognitive, affective and behavioral domain.

This study would not only make contributions to the development of the curriculum, but also to the meager body of knowledge contemporarily available in the topic's domain in general. Another justification of this study is the information gathered about what students think, feel, and know about dance. Thus, it has contributed to an increased understanding of the students' participation based on their demographic characteristics.

Besides that, the acquisition of knowledge about students' attitudes can provide valuable insights to both teachers and students in the learning process. It would enable the dance educators to address the issue of the lack of interest on dance participation in the university. These relevant authorities would be able to outline strategies to improve students' attitude towards dance.

This study would provide useful information to the university as well as faculty and residential college administrators who plan or organizes dance activities by reviewing their objectives, so as to improve students' attitude towards dance. This study would also provide information for administrators to ponder on the factors that may influence students' attitudes towards dance. Thus, this study would expose ideas

that are able to encourage them to participate in dance. Also, it would promote dance in the university.

Lastly, this research should serve as a starting point in the field of research on the attitude domains of students towards dance based on their individual demographic factors.

1.11 Definition of Terms

To avoid unrelated interpretations that will confuse readers, it is necessary to clarify some significant terms based on the content of this study. Besides that, dependent variables are defined operationally.

1.11.1 Dance

Dance is defined as the expression through the human body movement which includes peoples' thought and emotion that is hardly expressed rationally by people (Copeland & Cohen, 1983). According to Mattsson and Lundvall (2015), there are three different perspectives within dance were explored, which are: "dance as an expression", "dance as a cultural preserver", and "dance as a bodily exercise". In this study, the researcher focuses on dance from the perspective of physical activity that is related to a healthy lifestyle with a bit of aesthetic or artistic values. It used the human body as a medium to move and normally follow, by the rhythmic of music with the purpose to promote physical and mental health. In short, dance in this study is defined as a physical activity.

1.11.2 Physical activity

Physical activity refers to the systematic and unsystematic gross motor skills that is created by an individual, and normally demonstrated in dynamic games, sports or dance (Lloyd, 2014). In short, it is interpreted as all types of movement created by humans with their body as a medium to create the action. However, in this study, physical activity refers to all activities that are related to gross muscular skills, which focuses on the health related aspects, inclusive of bodily physical fitness, social and emotional health. More specifically, dance activity is interpreted as one kind of physical activity in this study. Thus, the discussion of dance is connected with psychical and mental health aspects.

1.11.3 Attitude

Attitude is defined as the judgment about certain objects which is dependent on cognitive, affective and behavioral information (Maio & Haddock, 2014). In this study, attitude refers to an evaluation of dance according to students' perception of dance, interpretation, knowledge; emotional responses and their behavioral responses towards dance. Operationally, the students' attitudes towards dance in the cognitive, affective and behavioral domains were measured by a 4 Likert scale questionnaire, Students' Dance Attitude.

1.11.4 Cognitive

Cognitive domain of attitude refers to the person's beliefs, thoughts, perceptions, stereotypes and attributes of the object that describes its characteristics (Maio & Haddock, 2014). In this study, cognitive domain refers to the attitude of dance that is based on the university students' belief, ideas and knowledge. In other words, it refers to what they think, perceive, and interpret about dance based on their own belief, ideas and knowledge. For example, some people hold a positive attitude towards dance in

the cognitive domain, which believes that dancing is good for health, and that dance is a good exercise. Whereas, other people might have stereotypes towards dance and think that dance is only suitable for girls, feeling that men who dance are gays or that dance is a waste of time. A total of nine items in the Students' Dance Attitude questionnaire was used to measure the students' attitudes towards dance in the cognitive domain.

1.11.5 Affective

Affective domain of attitude is about the feeling or emotional response to an attitude object (Maio & Haddock, 2014). In other words, it shows the tendency and disposition of an individual's judgment. It is a tendency to act in a certain manner towards the attitudinal object. In this study, affective domain refers to university students' feelings or emotions when they participate in a dance activity. For example, some people feel comfortable when they move their body to the music. Conversely, other people express a negative attitude in the affective domain, such as feeling disliking, discomfort or lazy to move their body. Operationally, it is the emotional response, such as liking or disliking, comfortable or unease, happy or unhappy, love or hatred toward dance. A total of eight items in the Students' Dance Attitude questionnaire was used to measure the students' attitudes towards dance in the affective domain.

1.11.6 Behavioral

Behavioral domain denotes to past behaviors or experiences towards a certain object (Maio & Haddock, 2014). The behavioral domain consists of explicit actions or aimful action, and uttered statements regarding future behavior (Neal & Dineur, 1991) . In this study, the behavioral domain refers to the university students' physically reaction, intention, and ways of behaving and acting that is associated to dance. For example, students who showed positive attitude in behavioral domain will always be punctual

in attending all dance classes, like to dance regularly, behave actively and will encourage their peers to join dance activities as well. Conversely, students who showed negative attitude in the behavioral domain will try to avoid participating in dance activities, behave passively or only involve in a dance activity when it is required. A total of nine items in the Students' Dance Attitude questionnaire was used to measure students' attitudes towards dance in the behavioral domain.

1.11.7 Demographic variables

Demographics are related to the structure of the population. It refer to the characteristics of a population. Demographic variables in this study are the independent variables, which included gender, ethnic group, age group and years of dance experience. Gender refers to the state of being male or female based on socially constructed roles and behaviors. Ethnicity refers to the classification of humans based on cultural factors, which is inclusive of: language, nationality, regional culture, and ancestry. Dance experience defined as the number of years a student had been involved in dancing. All dependent variables are measured by the students' responses to the session A of the Students' Dance Attitude questionnaire.

1.11.8 University students

University students in this study refer to the sample in this research. They are students from University of Malaya, who are participating in dance as a physical activity. More specifically, they are students who enrolled dance as a co-curriculum course for the academic year of 2017/2018, Semester 1.

1.12 Summary

Attitude is one of the most significant variable in psychology. There are many researchers who have studied about the attitude of physical activities. Conversely, there are still very limited studies have been done on the attitude of dance. Moreover, most of the studies of attitude are in general, without examining deeper on each of the attitude domain, which are cognitive, affective and behavioral domain. The investigation on each attitude domain is important, as the inconsistency of attitude domains will affect people's behavior towards certain subjects. Furthermore, there is still no evidence on students' attitude of dance based on the Malaysia context. Thus, this current study on students' attitude domains towards dance based on their demographic factors, would serve as the foundation for studies regarding dance attitude domains. Therefore, this study adds new data to the research knowledge on students' attitude domains towards dance among university students.

This research aims to study the students' attitude domains towards dance in the cognitive, affective and behavioral domains based on gender, ethnic, age group and years of dance experience. The findings of this current research will contribute some knowledge in the subject area as a whole, by increasing the understanding of the attitude domains based on the students' demographic factors. The acquisition of knowledge about the students' attitude domains will be able to give useful insights to the teachers or educators, co-curriculum courses' program planners and administrators. In conclusion, this study can serve as a pioneering attempt to give insight on students' attitude domains towards dance based on demographic factors in the Malaysia context.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A review of literature related to students' dance attitudes have been stated in this chapter. The literatures were arranged according to the following themes: (a) The importance of dance, (b) Concept of attitude, (c) Theoretical framework, (d) The measurement of attitude towards dance, (e) Related literatures of attitude towards physical activity, (f) Related literatures of attitude towards dance, (g) Related literatures of attitude towards independent variables.

This chapter will begin with general information regarding the importance of dance, which includes the benefits, advantages and significance of dance activity from different perspectives. Next, the concept of attitude will be introduced as well as the attitude structure, the functions of attitude, formation of attitude and theories on the change in attitude. In addition, the Tripartite Theory of Attitude and the Theory of Planned Behavioral (TPB) will be emphasized in the sub topic of the theoretical framework. Furthermore, previous relevant studies that are associated with the attitude of physical activity, dance and independent variables will be mentioned in this chapter.

2.2 The Importance of Dance

Dance is a form of physical activity that brings about multiple benefits for all stages of life. Dance has a wide range of health benefits in terms of physical, physiological as well as mental and emotional benefits. According to Alpert (2010), the benefits of dance includes the improvement in flexibility, muscle strength and tone; increase in endurance, balance, spatial awareness, and well-being, which can be beneficial as other physical activities. Moreover, dance has been proven qualitatively and

quantitatively, as a potential physical activity that brings about multiple well-being benefits in the physical, emotional, social and spiritual aspects (Quiroga Murcia et al., 2010).

According to Lloyd (2014), creative dance reaches all the three domains of learning which includes the cognitive, affective and psychomotor domains. The psychomotor domain can be referred to as the physical skills in dance such as non-locomotor and locomotor movements. The cognitive domain refers to the engagement in critical thinking skills and problem solving while learning dance. The affective domain involves attitude, social, and emotional learning. Besides that, previous results revealed that the instructional program in creative dance, enhances preschool children's social competence and behavior problems (Lobo & Winsler, 2006). According to Cruz-Ferreira et al. (2015), creative dance also brings about diverse positive impacts in various aspects, particularly in the aspects regarding health.

Moreover, there are previous researchers who have studied on the relation of students' dance participation and their achievement or performance in academics. Besides health-related physical fitness, dance characteristic is also associated to learning, memory, mental, imagination and creativity, which are associated to cognitive development (Bläsing et al., 2012; Karpati, Giacosa, Foster, Penhune, & Hyde, 2015). Based on Higueras-Fresnillo, Martínez-Gómez, Padilla-Moledo, Conde-Caveda, and Esteban-Cornejo (2016) , there are positive relationships between students' participation in dance and the academic performance among younger female students. As informed by the scholars listed above, aerobic dance served as an intervention program for one year and academic performance was assessed through grades indicators, which included Mathematics and Language courses. Therefore,

improving academic outcomes is also considered as one of the benefits from the implementation of dance into the curriculum. According to Bebetsos (2015), dance education presents another way to reach various learners educational needs.

Dance for health, a program designed for the African American and Hispanic students by providing an enjoyable aerobic program, that is able to improve aerobic capacity, control body weight, and help in improving the attitudes towards physical activity and physical fitness (Flores, 1995). Besides that, dance also serves as an intervention to reduce weight gain (Robinson et al, 2003). Based on Burkhardt and Brennan (2012), recreational dance is able to enhance cardiovascular fitness, bone health of people, and also to avoid obesity. Furthermore, contemporary dance serves as an intervention on secondary school females students in the United Kingdom, past findings have also revealed that dance statistically improves the aspect of physical fitness and psychological well-being as well as demonstrates positive attitudes towards dance (Connolly, Quin, & Redding, 2011).

Research have discovered that there was a significant improvement in elderly adults via dancing, with regards to their gait, aerobic power, lower endurance of body muscle, flexibility and strength, balance, and agility (Keogh, Kilding, Pidgeon, Ashley, & Gillis, 2009). More specifically, aerobic dance as an intervention program was administrated to older adults which comprised twenty-three (23) dance sections within a period of 12 weeks that showed a significant difference of mean in 6-min timed walking test, composition of the body, flexibility, strength and endurance of the lower limb, blood pressure, the up and go timed test, balance, and resting heart rate (Hui, Chui, & Woo, 2009). Research also showed that a dance-based aerobic exercise

might lead to the improvement of balancing, agility and locomotion, thereby causing a reduction in the rate of falls particularly in older women (Shigematsu et al., 2002).

Apart from the physicality aspects, a three month modern dance program was known to have significantly reduced students anxiety (Lesté & Rust, 1990). Furthermore, dance also served as a part of the movement therapy (Levy, 1988). Through dance, patients with breast cancer surgery experienced the freedom in the overall movement of their body that enhanced their adjustment to a new body image (Molinaro, Kleinfeld, & Lebed, 1986). In Brazil, the ballroom dance was used as a therapy for the elderly in augmenting their mental, emotional and physical well-being as well as to counteract social isolation (Lima & Vieira, 2007). Based on the study of Jeong et al. (2005), dance movement therapy (DMT) brings about improvement in the emotional responses and psychological distress in mild depression-based adolescents.

According to Monte (2017), dancing is observed as one of the popular activities that easily appeal to adolescents. In her research, students from University of Philippines Los Banos, who were involved in a line dance, expressed that line dance is a health-promoting physical activity which improves one's posture and cardiovascular endurance as well as deals with psychological distresses. Besides that, results also revealed that line dance class boosts one's self-esteem and self-confidence.

Moreover, a previous research on the effect of traditional dance program on the Health-Related Quality of Life was examined by Lykesas, Ioannis, Olga, Chatzopoulos, and Koutsouba (2018). The notion of: "Quality of Life" refers to a person's psychological status, physical state, independence level, social interactions and environmental relationships. Traditional dance has also been discovered to serve

as an intervention program between fifth and sixth grade students from public primary schools, whereas the control group was with the PE curriculum program. The research finding revealed that traditional dance presented higher perceived Health-Related Quality of Life values. In other words, traditional dance provides multiple benefits to students, which in return helps to contribute to the betterment of the value of life.

To sum up, this sub topic constitutes the important of dance with its wide range of psychological and physical benefits. So, dance needs to be promoted as a form of physical activity for all stages of life, especially university students. Thus, it is important to imprint a positive attitude domain towards dance and hence hold a strong intention to participate in dance.

2.3 Concept of Attitude

The term *attitude* has been defined in many ways. Attitude refers to people's evaluations of any object, such as one's self, other people, concepts, issues, possessions, and so on. Meanwhile, Allport (1935) defined attitude as *"*...a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon individual's response to all objects and situations with which it is related" (p.810).

According to Zanna and Rempel (1988), attitude as "the categorization of a stimulus object along an evaluative dimension" (p.319). Eagly and Chaiken (1993) interpreted attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (p.1). Thurstone (1928) described attitude as "…the sum total of man's inclinations and feeling, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specified topics"(p.530).

In conclusion, attitude involves expressing an evaluation to a particular person, object and situation. In clearer terms, it is the tendency of a person to respond either in a positive or negative manner towards a specific object. It is a psychological and neutral state of readiness which comes via experience and the exerting of influence upon the person's response to stimulus.

2.4 Attitude Structure

Attitude structure refers to the underlying foundation, components or domains, and organization of a person's evaluation. Rosenberg and Hovland (1960) advocated that an attitude is formed by three domains; cognitive, affective and behavioral as shown in Figure 1.2. A schematic conception of attitudes includes measurable independent variables, stimulus, and measurable dependent variables, which are cognitive, affective and behavioral domain.

The most prominent model of attitude has been the multicomponent model; cognitive, affective and behavioral components (Breckler, 1984; Morris & Stuckhardt, 1977). These attitude components are also known as attitude domains (Neal & Fortin, 1986).

2.4.1 Cognitive Domain

Cognitive domain refers to the way an object is perceived and conceptualized (Lemon, 1973). In other words, it refer to an individual's thoughts and beliefs which varies from favorable to unfavorable. Fishbein and Ajzen (1975) expressed that belief is a person's information about an object, and information that specifically links an object and attribute.

2.4.2 Affective Domain

Affective domain is refer to the emotion and feeling towards the attitude object (Lemon, 1973). Thus, affective domain is the emotional response; liking or disliking, comfortable or unease, happy or unhappy, feeling good or feeling bad, love or hatred towards an attitude object. In short, affective domain refers to the responses that varies from pleasurable to un-pleasurable (Breckler, 1984). Based on Petty, Fabrigar and Wegener (2003), the affective factor plays a crucial role in forming people's attitude. Many researchers emphasize on the importance of the affective domain. In a study, the role of affect in the attitude structure were examined to reflect both continuity and change of attitude (Petty et al, 2003).

2.4.3 Behavioral Domain

Behavioral domain is refer to the individual's intention to behave or people's actual behavior (Lemon, 1973). Thus, it is a behavior responses in favorable or unfavorable way.

Previous studies specifically tested on the three attitude domains by measuring each of these domains (Breckler, 1984; Kothandapani, 1971; Ostrom, 1969). These studies generally found out that although the three attitude domains were positively correlated with each other, in fact, they were separable constructs. In short, an attitude of a certain object is comprised of three distinguished domains, such as the cognitive, affective and behavioral domain. Moreover, some theorists have contended that attitudes are distinct psychological entities that are associated but separable from the cognition, affect, and behavior relevant to the attitude object (Cacioppo, Petty, & Geen, 1989; Crites Jr, Fabrigar, & Petty, 1994; Zanna & Rempel, 1988). Taken from this current study as an example, cognitive domain refers to the belief and perception towards dance. For example, dance considered as a healthy activity. Affective refers

to the comfort feeling or emotion when participating in dance. Whereas, the behavioral domain refers to actions or responses towards dance, such as the action to participate in dance regularly and attend the dance classes punctually. However, some researchers view the affect domain in a more different way, that is, attitude-relevant affect is viewed as consisting of individual and qualitatively distinct emotions.

2.5 The Function of Attitudes

The reasons for which different persons possess attitudes differ. Scholars of Attitude have devoted considerate focus on understanding the functions or needs that are fulfilled by attitudes. Katz (1960) proposed four attitudes functions. Attitudes performed with respect to personality are grouped according to their motivational basis as below.

2.5.1 The Knowledge Function

The knowledge function refer to the organization of information towards attitude objects (Maio & Haddock, 2014). It helps people in attributing causes to events, and directs attention towards the characteristics of people or conditions that probably might be of use in making reasonability of them. Consequently, it helps the world to be more predictable and comprehensible, as well as assists in enhancing the efficacy of the processing of information.

2.5.2 The Adjustive Function

The adjustive function also known as utilitarian or instrumental function which exists in attitudes that maximizes rewards and minimizes punishment that are obtained from attitude objects (Maio & Haddock, 2014). In other words, people hold attitudes that are rewarding and avoid punishments. Some attitudes helps in enabling people to achieve specific, desired goals or avert circumstances that are not desirable.

2.5.3 The Value-expressive Function

The value-expressive function described as an expression of a a person's centric values and self-notion (Maio & Haddock, 2014). The attitude presents who the person is, and the expressiveness of the attitude communicates vital things regarding that fellow to the rest of the people.

2.5.4 The Ego-defensive Function

The ego-defensive function performs as a way of protecting an individual's self-esteem (Maio & Haddock, 2014). This inescapably might consist of a bias level or misrepresentation in the manner of which the world is being interpreted, nevertheless people would be ready to do this so as to help in preserving a specific view of themselves or the world.

2.6 Attitude Formation and Changes

According to Petty, Wegener, and Fabrigar (1997), attitudes get formed via behavioral, affective and cognitive processes, which could be comprise of the change in attitude as well. Furthermore, to some extent, the attitude of people gets influenced by their feelings as well as their emotions. Thus, a number of ways exists in which the affective domain can be in association with the attitude object. Consequently, classical conditioning and operant conditioning are the affective processes that forms attitude and influences the attitude change. Classical conditioning is said to have occurred in instances whereby a stimulus that is neutral, elicits a reflective response at periods when it undergoes a repetitive pairing alongside with a stimulus that have produced such response already. In such cases, behavior hence has a higher likelihood of occurring or less so, however this depends on its consequences in an operant conditioning. Therefore, reinforcement enhances behavior, whereas punishment weakens behavior. Besides that, ordinary effects takes place when an object's

repetitive exposure, results to the increase in the liking of such object. In other words, when people are exposed to something over and over again, they tend to desire such things more. Furthermore, based on Petty et al. (2003), emotional factors are seen as one of the main roles in attitude formation, attitudinal processes and attitude change. Moreover, based on van Giesen, Fischer, van Dijk and van Trijp (2015), affect is more powerful to influence unfamiliar attitude object compared to cognition.

Previous studies have also shown that the cognitive processes can be responsible for the formation of attitudes (Wegener & Carlston, 2005). Furthermore, study revealed that attitude is directly influenced by cognitive factor (Huang, Beatson & Lings, 2015). People generally form an attitude towards certain attitude object through related information. The information can come from a direct experience or an indirect experience with the attitude object. However, if the experience heads to thoughts that are favorable, individuals will tend to form an attitude that is positive towards the object. Conversely, if the experience heads to thoughts that are not favorable, a negative attitude will then be formed by the people. Besides that, behavioral information that includes past behaviors can shape our attitude. According to Petty et al. (1997), the theory of self-perception advocated that personal attitudes, emotions, as well as other inner states should be known by individuals, by partially inferring them from the observation of their personal behavior. Affective, cognitive and behavioral processes are not the only involved processes in the formation of attitude. It is important to note that biological processes could as well be one of the factors used in shaping attitudes (Petty et al., 1997).

However, as informed by Oskamp (1977), attitude formation is referred to as the initial change from non-possession of attitude towards a given object to the possession of some attitude towards it . Below are the factor to form an attitude; (a)

Genetic and physiological factors, (b) Direct personal experience, (c) Parental influence, (d) Group determinants.

Genetic and physiological factors are rarely mentioned in the discussion of attitude formation. Scott and Fuller (1965) discovered that genetic factors are determined on an organism's general level of aggressiveness and thus will influence peoples' attitudes. McGuire (1969) stated that the attitude which formed by the genetic factors could be changed under certain environmental conditions. Meanwhile, aging and sickness are the physiological factors that may determine a person's attitude (Oskamp, 1977).

Direct personal experience is the easier way in forming an individual's attitude. Belief towards certain object can be formed by a person's journey of life (Fishbein & Ajzen, 1975). Again, Ajzen and Fishbein (1972) defined beliefs as a particular characteristic towards certain object based on a person's subjective. Oskamp (1977) stated that the individual's past experience and present stimulus influence a person's responses as shown in Figure 2.1. Personal experience can be discussed in three aspects such as saliency of beliefs, repeated exposure and the development of stereotypes.

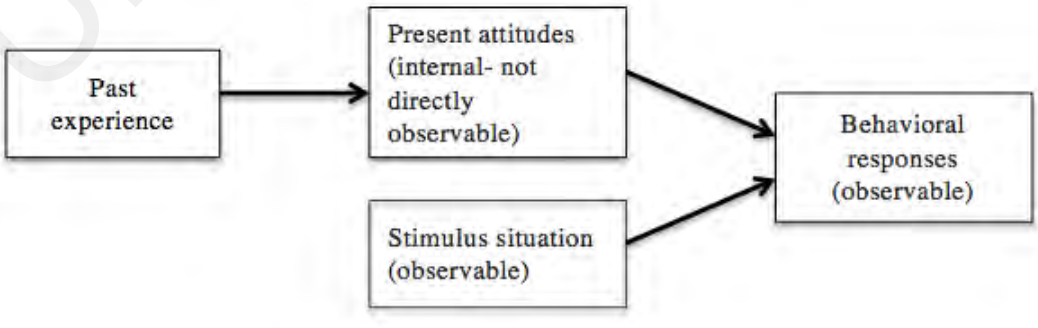

Figure 2.1. Past experience, present attitude, stimulus situation and behavioral responses. References: *Attitudes and opinions* (p.15), by Oskamp. S, 1977, Englewood Cliffs, N.J, Prentice Hall, Inc.

Rosenberg (1956) declared that the importance of belief with the concept of "value importance" is referred to as the amount of satisfaction or dissatisfaction derived from an attribute that is associated with a given object. Robert B. Zajonc (1968) proposed, "Mere repeated exposure of the individual to a stimulus is a sufficient condition for the enhancement of his attitude toward it. By 'mere exposure' is meant to be a condition which just makes the given stimulus accessible to the individual's perception" (p.1).

Oskamp (1977) defined stereotypes as a beliefs, which exist in majority of people of a particular social group. Campbell (1967) points out that the traits, which are the most significant to a group, and the traits that differs from another group, will be likely considered as a stereotype of the other group. Again, Campbell (1963) also pointed out that " a social attitude is a consistency in response to social objects" (p.31). Thus, a stereotype is decided by the nature of the perceiving group, but also partly by the nature of the group perceived (Oskamp, 1977).

Parent's influence plays an important role in forming peoples' attitudes, especially young children. According to Radke-Yarrow, Trager, and Miller (1952), child's behaviors were highly influence by their parent's behaviors indirectly. Therefore, parental attitudes serve as a mold in shaping their child's attitudes through their own experience (Oskamp, 1977). In short, child in young age learn many from their parent.

Group determinants include school, peers as well as conformity pressures in groups. According to Oskamp (1977), school teaching, indoctrination and peer group influences the determining of attitude. Besides, conformity pressures can cause to attitudes formation and changes. The formation of an attitude is based on the individual's assumptions and salient "facts" that were affected by our cultural context.

2.7 Theoretical Framework

Tripartite Theory of Attitude and the Theory of Planned Behavior (TPB) were applied in this study. The theory were discussed as below.

2.7.1 The Tripartite Theory of Attitude

The Tripartite Theory of Attitude advocates that attitudes have three domain, which are cognitive, affective and behavioral (Kats & Stotland, 1959; Rosenberg & Hovland, 1960; Smith, 1947). Conventionally, the cognitive domain has been used to refer to beliefs, perceived, perceptions and knowledge that one holds towards an attitude object. Affective domain has been used to describe the favorable and unfavorable feelings or emotions that one holds towards an attitude object, and the behavioral domain has been used to describe the past behavior, experiences, overt actions, intention actions and responses that one holds towards an attitude object. In other words, the tripartite theory is of the opinion that attitudes were comprised of these three domains, which future researchers have demonstrated that attitude is distinguishable from each other to three separate domains (Breckler, 1984; Kothandapani, 1971; Ostrom, 1969).

According to Petty el al. (2013), the tripartite theory of attitude has guided the future research on the attitude structure or domains. A significant difference between most contemporary theorists who use the tripartite theory (Zajonc & Markus, 1982; Zanna & Rempel, 1988) and the original proponents has been in the way that the affective domain is defined. The earliest studies have viewed the affective domain as relatively global and undifferentiated positive or negative evaluations which are associated with an attitude object without any clear discrimination between the evaluative and emotional dimensions of attitude (Rosenberg & Hovland, 1960).

However, based on Petty el al. (1997), it has been discovered by social psychologists that certain attitudes are dependent on more than an information type than others. In view of that, it is informative to state that some attitudes depends majorly on affect, while some others might depend more on the thoughts of individuals with regards to the attitude object.

2.7.2 Theory of Planned Behavior (TPB)

TPB has its basis on the attitude, subjective norm and perceived behavioral control of an individual. These three constructs are responsible for influencing people's intentions to get engaged in certain behavior. A person's attitude towards these three constructs has a high precision to predict a person's intention towards a particular behavior. Furthermore, these intentions with the perception of behavioral control help to enhance the actual behavior (Ajzen, 1991).

TPB has been used widely to predict desired behaviors in a physical activity. The first construct of the TPB is the individual's attitudes towards the behavior that involves beliefs towards the behavior. Attitudes is defined as a positive or negative evaluation towards certain object, hence, influence the behavioral intention. For example, by engaging in the behavior, the outcome can be beneficial or harmful and can align or not align with personal goals. As a result, beliefs and evaluation of outcomes from the individual's attitude about a behavior is important to influence a person indulging in a particular behavior.

The second construct of the TPB, subjective norms described as a person's perception of the social pressures. Normally, when there is a positive evaluation exist toward a certain behavior, and they believe it is importance to others, such as expected performances of such behavior by them from their peers, family and community

(Ajzen, 1991). For example, if one's peers believe that dance is important for health, and then the individual creates a subjective norm that dance is important. Conversely, if the society believes that dance is considered feminine and only suitable for females, and then the individual creates a subjective norm that dance activity is only for females and not suitable for males. This is the individual's perception of what others believe based on one's perception. These elements lead to the intention to engage or not engage in dance, which may also cause to the actual behavior.

The third construct of the TPB is perceived behavioral control (PBC). Based on Ajzen (1991), PBC construct refers to the general perceptions of control. PBC in TPB reveals the personal and environmental factors that affects behavior (Ajzen, 1991). These factors include the location of dance facilities, study schedule and years of study. For example, if an individual feels he has a very busy schedule with his final year project that does not allow time for dancing, he may feel a lack of control over the situation. However, if a dance studio is just located near to his place, the individual can drop by anytime. Thus, the individual feels a sense of control in such situation.

Ajzen (1991) hypothesized that PBC would exert two types of effects. First, it would influence intention together with attitudes and subjective norms. Second, PBC may predict behavior directly, especially when the perceptions of behavioral control are realistic. This may refer to the dotted line between PBC and behavior in the Figure 2.2 below.

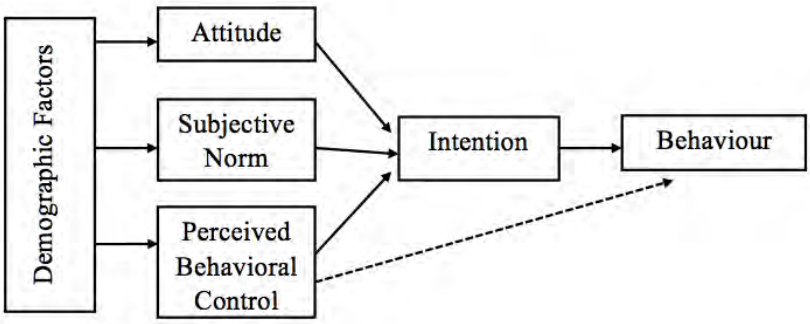

Figure 2.2. Theory of planned behavior

These approaches and theories discussed above have broadly explained the attitude change of an individual based on various factors. Moreover, the theory of planned behavior has been used frequently to understand exercise behaviors (Rhodes, Blanchard, & Matheson, 2006). In this current study, the researcher will look into the aspect of attitude as one of the factors that influences behavior. According to Armitage and Conner (2001), attitude is the least controversial construct in the theory of planned behavior.

2.8 The Measurement of Attitude towards Dance

Attitudes same as most psychological constructs are not directly observable. Thus, social psychologists have to develop various methodologies to assess attitude effectively (Maio & Haddock, 2014). Based on Maio and Haddock (2014), attitude measurement is basically distinguished to explicit measures or implicit measures. Explicit measures directly ask respondents to identify their attitude, whereas implicit measures indirectly obtain from respondents' their verbal report (Fazio & Olson, 2003). There are two most commonly used and accepted methods which is the Likert's method of summation and the Thurstone's equal-appearing intervals. Both measuring methods are categorized in explicit measures (Maio & Haddock, 2014).

Based on previous research findings, there are extremely limited resources regarding the measurement of dance attitude. Neal's Dance Attitude Inventory (1985) was developed to examine the dance attitude in three discriminate domains that included the cognitive, affective and behavioral domain (Neal & Dineur, 1991; Neal & Fortin, 1990). The items of Neals' Dance Attitude Inventory (1985) was shown in Appendix C. Dance Attitude Scale (DAS) as shown in Appendix B was developed by Sanderson (2000). Four subscales were constructed that included statements concerning ballet, dance and dancers in general, male dancers and dance performance. Recently, the Attitude Towards Dance Inventory (ATDI) as shown in Appendix A was developed by Vlašić et al. (2014). The first version of this inventory consisted of 42 items in a 5- point Likert scale; the second version of ATDI was shortened to 20 items that retained the affective, cognitive and behavior aspects of attitude in both positive and negative perspectives. The items were related to social dances, folk dances, dancing with and without a partner, as well as to wheel dancing. Furthermore, dance as a form of leisure and recreational activities was measured using the Leisure Attitude Scale (LAS). LAS was developed by Ragheb and Beard (1982) and was adapted into Turkish by Akgül and Gürbüz (2010), which was utilized to determine the leisure attitudes of the individual participants towards dance activities (Gökyürek, 2016).

The above mentioned questionnaires, scales and inventory of attitudes towards dance served as references for the researcher to develop a new appropriate questionnaire for this study. The new developed questionnaire focuses on the three attitude domains, which are cognitive, affective and behavioral domains.

2.9 Related Literature of Attitude towards Physical Activity

The following studies were concerned about the students' attitude towards physical activity.

Araújo and Dosil (2015) aimed at determining the influence of attitude towards physical activity. The Scale of Attitudes towards Physical Activity (ATPA) was used to assess the attitude of physical activity. There was a total of 1129 students, between 12 and 58 years old in Guimaraes, Portugal who participated in this study. The independent variables were age groups, gender, school grade and the state of physical involvement, such as physically active or non-physically active. The findings indicated that the attitudes towards physical activity and sport were more positive in the younger male individuals, who do not attend higher education and engage actively in physical activity. Lastly, participants with parents who engaged in physical or sport activity tend to express better attitudes compared to others.

Besides that, Esslinger et al. (2016) investigated students' attitudes towards physical activity when they were required to involve in some personal wellness classes as part of the physical activity in the university. This study was an experimental research; the students in the experimental group were involved in physical activities. Whereas, the students in the control group did not get involved in any type of physical activities. Corbin Attitude Test was used to access the students' attitudes towards physical activity. Surprisingly, the outcomes indicated that there were no significant changes on the students' attitudes in both group. In a nutshell, students' willingness to join a particular activity is important. Students' willingness was assumed to have had a great effect towards attitude rather than them being obligated to do so. In other words, choice of activity can be an essential factor for

improving attitude towards physical activity. Thus, students were suggested to participate in an activity that they were passionate or interested about.

Fengjuan et al. (2014) examined students' attitudes towards Physical Education in four Chinese Universities. A total of 949 university students participated in that study. The study revealed that there were five aspects, which included physical fitness, self-actualization and social development, physical education curriculum, physical education teachers and physical education teaching. These aspects were explored and analyzed using exploratory and confirmatory factor analysis. The result showed that the students expressed moderately positive attitudes towards Physical Education. Moreover, there was a positive significant relationship between students' physical activity participation and their academic achievement in PE. Besides that, there was a small relationship between the students' physical activity participation and their intention to treat physical activity as a lifelong activity outside the school.

Janauskas (2013) looked into the attitude of physical activity among students of Klaipeda University. The participants were first year university students, who were aged between 19 and 21 years old and inactive in any physical activities. A total of 203 participants had completed a questionnaire survey. The findings showed that 70.9% of female and 49.0% of male students had inadequate knowledge about physical activity. One third of the students did not spend time on physical self-improvement, and less than one fifth of the students were totally inactive in any types of physical activity. In sum, majority of the Klaipeda University Students expressed poor attitude towards physical activity. Moreover, the issue of insufficient information regarding physical activity was considered as the main factor causing the students' poor attitudes towards physical activity. This showed that the university was untended to promote physical activity in the university.

According to Bendíková and Dobay (2017), the formation of students' optimistic attitudes towards health and physical activity can be enhanced by physical and sport education. An empirical study was carried out to investigate the factors that were affecting participants' physical activity into their adulthood. The participants were comprised of 742 middle-aged who live in the districts of Southern Slovakia. The findings significantly showed that the males enjoyed physical and sport activities more than the females. Furthermore, men also performed more actively compared to women. Physical and sport education had given better impact to the male participants, which influenced them to continue to participate in physical activities not only in their school years but also in their adulthood. Thus, the men were evaluated to have had a greater health status and physical condition than the women. Overall, men showed better attitudes towards physical activities than the women.

Nolan and Surujlal (2011) carried out a study to investigate the perception of undergraduate university students' participation in physical activity. Besides that, this study also compared the male and female students' perceptions based on the physical activity factors. A total of 482 undergraduate students from Vaal University of Technology, South Africa participated in this study. They were completing a two-part validated questionnaire. The results revealed that the undergraduate students were aware of the benefits of participating in physical activities. For example, it can enhance students' self-esteem, improved mental well-being and health. Furthermore, they also perceived involvement in physical activity as a relevant part of their life.

2.10 Related Literature of Attitude towards Dance

The following studies were conducted to examine students' attitudes towards dance based on various variables in different countries with different backgrounds and contexts.

Recently, Gökyürek (2016) conducted a study to investigate peoples' leisure attitudes towards dance activities and its relationship with their life satisfaction. A total of 302 individuals with their mean age of 24.55±6.09 participated in dance activities in Ankara. The leisure attitudes toward dance were measured using the Leisure Attitude Scale. Findings showed that there were no differences on the individual attitude towards dance activities on the cognitive and behavioral domains based on their gender, age groups and educational level. Besides that, the finding also discovered that the participants showed good leisure attitudes towards the dance activity. However, their life satisfaction was moderate. In sum, the relationship between the participants' leisure attitude and their life satisfaction were parallel. The more their life satisfaction, the better their leisure attitudes towards dance activity or vice versa.

Research has also investigated the dance attitudes differences between male and female students at the university level (Vlašić, Oreb, & KatoviĆ, 2012). 80 female and 85 male of the third year students in the Faculty of Kinesiology at University of Zagreb, participated in this study. All the participants were of an average age of 21 to 23 years old. The students' dance attitudes were assessed using dance attitude scale that expressed both positive and negative directions, which was conducted at the beginning and at the end of the dance course. The result revealed that statistically significant differences existed in the dance attitudes between female and male students. Besides that, results also discovered that dance course classes had greater

influence in attitude change on the male students compared to the female students. Positive influence on the students' dance attitudes also implied that increased application of dance structures is needed in Physical Education.

Micallef (2008) investigated the dance attitudes of secondary students who aimed to sit for the Physical Education Secondary Education Certificate examination. A total of 265 respondents, 118 females and 147 males participated in this study. Variables such as gender, students' knowledge of Educational Dance and their personal dance experience after school were investigated in this study. The results revealed that female students expressed a positive attitudes towards dance. Whereas, male students manifested negative attitudes towards certain dance forms such as ballet. In contrast, male students showed positive attitudes towards disco dancing, hip-hop and breakdance. Both males and females demonstrated an interest in learning other forms of dance during their lessons as well as Educational Dance. A positive attitude was also shown towards dance as a recreational activity.

Furthermore, Sanderson (2008) examined the connection between the variable of social class and adolescents' perceptions of dance. A sample of 1298, 11 to 16 years old male and female students were the participants in this survey study. Four Likert-type dance attitude scales were used to access the students' dance attitudes. The findings revealed that the attitude of students towards dance were diverse based on their social class. Also, there was only one case that showed the interaction between gender and social class. A significant implication of the study is that dance should be promoted extensively in schools, create more opportunity for students to experience dancing as dance activity have a great potential to improve students' life quality.

Björling (2005) employed the use of a qualitative approach to examine the attitude of dance among Swedish schoolchildren. Eight students between 12 and 14

years old participated in an interview separately during their physical education lessons. Male students were more hostile towards dance as part of the Physical Education lesson than the female students. In other words, students' attitudes towards dance were more negative when dance served as a part of the physical education compare with dance as an extra-curricular activity. In conclusion, the study revealed that dance is considered as a feminine activity that is only suitable for females. Therefore, issues about gender may be addressed or emphasized through dance education.

Sanderson (2001) studied age and gender variables in adolescents' attitudes towards dance. A total of 1668 pupils, 735 boys and 933 girls, between 11 and 16 years old from 19 secondary schools throughout England participated in this study. Four Likert-type of dance attitude scales was used to collect data. The data collected were particularly related to students' attitudes towards ballet dance in general, male dancers and dance performance. Results showed that only little changes occurred in attitudes between the ages of 11 and 16 years old. Besides that, the result also showed that there was no significant relationship between age and gender. Overall, girls showed better attitudes towards ballet and dance in general. Whereas, boys showed more positive attitudes towards male dancers. Lastly, there were no gender differences on the attitude towards the dance performance.

In Finland, Nieminen and Varstala (1999) did a study to investigate dancers' attitudes towards different types of dance, such as folk, competitive ballroom, ballet and modern dance. This study also examined the independent variables that were related to the dancers' intergroup attitudes. The independent variables in this study included age, gender and years of dance experience. The participants were 308 adolescent and adult amateur dancers who had at least three years of dance experience

and age ranged from 16 to 61 years old. An instrument was developed to assess the dancers' attitudes towards four dance genres, which included folk, ballroom, ballet and modern dance. Results revealed that the oldest dancers, who participated in other dances, have a closer perception of folk dance to folk dancers' own attitudes, than the younger dancers. In contrast, intergroup attitudes toward modern dance were unpopular among the older dancers. In general, there were no gender differences in the intergroup attitudes of dancers toward folk, ballroom, ballet and modern dance. Besides that, years of dance experience were not related to the intergroup attitudes toward dance in this study.

In another study, a total amount of 196 French students' attitudes towards their first attempt of participation in dance were examined. Their attitude of dance was measured by Neal's Dance Attitude Inventory (1985). Neal and Dineur (1991) investigated the effects of students' dance participation on both experimental group and control group. Students in the experimental group were involved in six days modern dance lessons taught by an American who speaks French, whereas the students in the control group did not participate or watch any of the dance. There were significant differences in the affective and cognitive domain. However, there were no significant differences between the behavioral domains. In other words, the results showed that the change at one of the three attitude domain might affect the change in the other domains. Research findings also revealed the need for domain discrimination in dance attitude research (Neal & Dineur, 1991; Neal & Fortin, 1990).

Lakes et al. (2016) conducted a study on students' perceptions of physical, cognitive, affective, and social benefits of partnered dancing. A total of 225 students, who involved in a community ballroom dance center, participated in this study by completing an online survey questionnaire to measure their perceptions of the benefits

of modern and partnered dance styles. The analyses had been done on two groups, which were based on the duration of dance participation and the experience of dance. The findings showed that majority of the participants reported perceived benefits in physical, fitness, cognition, affect, and social functioning. In conclusion, participation in partnered dance is related to the improvement of physical fitness, cognitive and social functioning, mood, and self-confidence, and that perceived benefits may enhance an individual to participate in dance more frequently and over longer periods of time.

Neal and Fortin (1990) made use of the Neal's Dance Attitude Inventory (1985) to study children's attitudes towards dance classes, which was taught by teachers who speak native language, non-native language and with different genders. Four sessions of 45 minutes modern dance classes served as an intervention program in this experimental research. The dance lessons were delivered during the Physical Education classes. The French-speaking female teacher, French-speaking male teacher or English-speaking male teacher, respectively in three different groups taught modern dance lessons. The characteristics of the teacher, such as their gender and their speaking language in conducting the dance lessons served as an independent variable. This study found that a shift in the students' affective domain due to direct participation, of whether or not the teacher speaks in the native language of the student. Furthermore, the gender of teacher had no much effect on the students' affective attitudes.

On the other hands, Siljamäki, Anttila, and Sääkslahti (2014) investigated the perceptions and experiences of Finnish teachers with regards to transnational dances. More specifically, the aims of the study were to examine teachers' conceptions concerning the implication of the dances for their pedagogical practices. In this study,

transnational dances refer to West African dances, Oriental dance and flamenco in the Finnish context. The participants of the study are Finnish female dance teachers' aged 31-49. The study concluded that the teachers' conceptions can be identified in three different ways, which are "dance as a path towards personal expression", "telling a story of being a woman through dance", "self-approval and the collective nature of dance."

Goulimaris (2016) examined the relation between the planned behavior theory and the attitudinal loyalty to recreational dance activities. Loyalty estimation was based on one's intention to be involved in dance activities. There were a total of 254 dancers who participated in this study by completing an open-ended questionnaire. The findings revealed that the greater the experience and weekly participation of people in recreational dance activities, the greater the knowledge and information they acquire. In this case, the years of experience and the frequency of the dance involvement per week served as the independent variable in the study. These independent variables will influence participants' intention in joining dance activities. In other words, participants' loyalty is influenced by obtained information and knowledge.

2.11 Related Literature of Demographic Factors

The following studies were concerned about the students' attitude towards dance based on their demographic factors, which included gender variable, ethnic group variable, age group variable and years of dance experience variable.

2.11.1 Gender Variable

Dance is generally stereotypically defined as women's sports' activity and as such, dance is not a preference among men (Vlašić et al., 2012). According to

Risner (2014), dance is marginalized in the society due to the stereotype of dance as an activity for women. Furthermore, the educational system has reflected on the societal views of dance as a feminine activity and sports as a masculine activity (Kraus, Hilsendager, & Gottschild, 1991; Messner & Sabo, 1990). Conventionally, dance education is considered suitable only for female adolescents (Sanderson, 2001). Brennan (1996) pointed out that the gender has some complexities of power relations within physical education in Northern Ireland. Dance within American universities began as a part of women's physical education programs (Van Dyke, 1996). Meanwhile, the majority of dance artists are women whether in modern dance, ballet or jazz in the United States (Vlašić et al., 2012). Also, a recent study revealed that the ratio of the female to male students who choose dance as an extracurricular activity is 31 to 1.7 (Ahmad, Rahman, Ali, Rahman, & Al Azad, 2015)

Unsurprisingly, from the viewpoint of students, dance is considered as feminine (Björling, 2005; Thomas, 1996). Female students have been reported to hold more positive attitude towards dance than male students (Morrison & Krohn, 1997; Neal, 1983; Sanderson, 1989; Vlašić et al., 2012). Furthermore, female students have demonstrated higher personal interest (Bo, Ang, Hope, & Kristin, 2003) and higher levels of confidence (Lovatt, 2011) in dance than male students. Moreover, female students were significantly more motivated to participate in extra-curricular dance than the male students (Anderson et al., 2017). According to Sanderson (1996), the negative attitude of male students were significant to both ballet and male professional dancers. From the affective perspective, self-reported improvement in mood, such as the feeling of less depression, less anxiety and more happiness were reported higher for females than for males in the modern styles of partnered dancing

(Amado, SÁNchez-Miguel, GÓNzalez-Ponce, Pulido-GonzÁLez, & Del Villar, 2016). In addition, fewer males go into professional dance training than females (Burt, 2007). In sum, female students are assumed to perform better in attitude than male students with regards to the attitude domains.

However, previous research on dance attitude differences between female and male students have indicated that both female and male dancers changed to a better positive attitude after participating in dance classes (Vlašić et al., 2012). In other words, male students who had participated in dance classes or dance courses might show positive attitude towards dance as well. Based on Folsom Meek (1992), students' personal perception towards dance participation are closely related to gender as well as to the dance form. Male students are favorably disposed to some types of dance (Sanderson, 1996). More specifically, men and women both play their own role; men should dance as men, whereas women should dance as women. Men show power and women demonstrate beauty (Flores, 2009). Overall, dance is not an exclusively or innately feminine activity (Burt, 2007).

In addition, a research on students' participation on distance postgraduate dance program find out that there were no statistically significant differences on students' attitude of dance between male and female students (Goulimaris, Koutsouba, & Giosos, 2008). Furthermore, there was also no gender differences on students' attitudes towards their participation in a graduate Music and Dance Distance Learning Master's Degree Program (Bebetsos, 2015).

Based on the assertions of Li (2011), dance seems to have become more acceptable and popular among males in recent years due to the popular media such as *So You Think You Can Dance* and *Dancing with the Stars* showcase and the more open-minded audiences. For males who participate in dance, it served as a significant

drive for investigating dominant notions about masculinity, gender, sexual orientation, and the body (Risner, 2007).

2.11.2 Ethnic Group Variable

There is lack of research on the ethnic differences towards dance attitude domains. However, previous research has identified that ethnicity is one of the factors that contribute to dance's marginal status (Risner, 2014). With reference to Risner (2014), majority of the ballet companies in the United States are comprised primarily of white Americans. Meanwhile, Kerr-Berry (2012) expressed that the field of dance education in the United States, is not immune to the conflicted discourses about ethnic. Based on the information from Kerr-Berry (2016), the infusion of black content into the dance history pedagogy should be constantly integrated in the United States. The issues of black and white people had been discussed in the United States. Meanwhile, Malaysia, a multicultural and multiracial society inclusive of three major ethnic groups will be taken into consideration in this study. Thus, this study will add new data relating to the ethnicity to the dance attitude domains among multi-ethnic groups in Malaysia.

According to the Department of Statistics, Malaysia, the composition of Bumiputera ethnicity accounted for 20.07 million (69.1%) of the total citizens. However, the composition of Chinese and Indians ethnics are 6.69 million (23.0%) and 2.01 million (6.9%) separately. Lastly, the composition of other ethnics comprised of 0.29 million (1.0%) of the total citizens. Since the 1970s, the dominant Malay ethnic group has hegemonized the National Cultural Policy. The policy prioritizes the Malay forms as national art over other ethnics, which are Chinese,

Indian and other minority ethnics (Mandal, 2008). There are researches on the Malay folk dance, Indian dance, and the Chinese contemporary dance in Malaysia.

2.11.3 Age Group Variable

The attitude of Physical Education declines with age. In other words, older age groups have more negative attitude towards Physical Education (Janauskas, 2013; JuriŠIn, MalČIĆ, & KostoviĆ, 2017). Moreover, a mixed method study on the attitude of physical activities among adolescence between 18-25 years old was examined; the results revealed that only 28% of adolescence achieved the recommended levels of physical activity, which decreased with age. This research also identified that elements such as "enjoyment", "appearance" and "feeling good" were considered as important by this group of young people (Poobalan, Aucott, Clarke, & Smith, 2012). According to Milanović et al. (2013), university students were very well informed about the importance of physical activity. However, there were about 57% of the university students who do not participate in any physical activity. Dance is a multidimensional activity associated with many health benefits. Yet, the students' participation of dance has been declined in England over time (Vassallo, Hiller, Pappas, & Stamatakis, 2018).

Gilbert (1992) presented ideas and educational activities that is able to assist dance teachers, in her book titled: *Creative Dance for All Ages: A Conceptual Approach.* She emphasized that dance is suitable for all ages and that the teaching and learning experiences were based on the students' age groups and its developmental stages. Sanderson (2001) carried out a study of 19 schools throughout England with a total of 1668 students within age range of 11-16 years old, the students showed little changes in attitudes towards dance between their age range. The virtual absence of change in age-related scale marked the need for increased dance provision in schools

and more focused teaching. However, Bebetsos (2015) revealed that there were statistical significant differences in age groups among university students' attitudes towards their participation in a graduate Music and Dance Distance Learning Master's Degree Program.

2.11.4 Years of Dance Experience Variable

According to Risner (2014), dance classes has always been considered as a part of childhood activity and the students often grow up in dance, beginning as early as two or three years of age especially for many young girls. Meanwhile, previous study showed that attitudes to various aspects of dance was established on the entry to secondary school and not much have changed during the following five years (Sanderson, 1996). The lack of previous experience in dance, however, does not impede students in developing a positive attitude toward dance in their tertiary education. Based on Nieminen and Varstala (1999), they have demonstrated that the years of dancing experience was not related to the attitude of their own dance forms. Therefore, we can expect that there will be no differences on dance attitude based on the years of dance experience among students.

However, Goulimaris et al. (2008) and Bebetsos (2015) have reported that there were differences in the variable of previous dance experience. Students with previous dance experience showed better attitude of dance than students without dance experience. Besides that, a previous study examined women's subjective experience of Zumba as a form of group fitness physical activity in Los Angeles and California (Nieri & Hughes, 2016). The research reported a positive experience of Zumba and perceived Zumba to prioritize fun, value individual autonomy and personalization. Great experience in taking Zumba was formed as a good attitude

towards Zumba, and then engaged them in participating in that particular activity (Nieri & Hughes, 2016).

From the cognitive perspective, experienced dancers reported significantly higher self-perceived physical, social, and cognitive benefits towards modern styles of partnered dance compared to novice dancers (Lakes et al., 2016). Moreover, the findings showed that the greater the experience and weekly participation of people in recreational dance activities, the greater the knowledge and information they acquire which will influence the participants' attitudinal loyalty to recreational dance (Goulimaris, 2016). Furthermore, based on the work of Parschau et al. (2013), the findings revealed that the previous positive experience in a physical activity is suggested to be associated with exercise-specific self-efficacy.

2.12 Summary

This research aims to examine the attitude domains of dance that may affect students' participation in dance as a physical activity. This research also reports the variables of gender, ethnic, age group, and years of dance experience on three attitude domains. Based on previous researchers, studies have showed inconsistency in gender differences. However, many researchers have recognized a number of gender issues that may affect students' attitudes towards dance. Females show more positive attitude than males towards dance and dance is considered as feminine, that is it's only suitable for females (Björling, 2005; Micallef, 2008; Sanderson, 2001; Vlašić et al., 2012). Yet, Nieminen and Varstala (1999) stated that there are no gender differences in the attitudes towards dance. Besides that, Gökyürek (2016) revealed that there are no gender differences in attitude towards dance, when dance is served as a leisure activity.

Previous research showed that there are only minor changes in dance attitudes between ages 11 to 16 years old students (Sanderson, 2001). Besides, Gökyürek (2016) revealed that there are no significant differences in age groups among participants' attitudes towards dance. However, Nieminen and Varstala (1999) expressed that there are age differences in the attitudes towards dance between the intergroup and outgroup perceptions.

Based on inferences from the work of Nieminen and Varstala (1999), dance experience variable was not giving any impact on dance attitude. However, the greater the experience of dance, the better the students' attitude towards dance (Bebetsos, 2015; Goulimaris et al., 2008). Obviously, there are limited studies that have reported on the ethnic variable towards the attitude of dance. Therefore, this study will add new data reflecting the attitude of dance in our multiracial country, Malaysia.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Causal-comparative research design was utilized in this study due to obtain research evidence concerning the attitude of university students towards dance in three attitude domains; cognitive, affective and behavioral domain based on their demographic data which includes gender, ethnic group, age group and years of dance experience.

To make sure that the data were collected effectively, certain procedures were performed. These procedures include the selection of the sample population and the formulation of the questionnaires. These procedures were precisely followed in this study.

Methodology that were conformed to in conducting this study were presented in the following topics.

3.2 Research Design

A procedural investigation plan and structure was implemented by the researcher. Causal-comparative research design was conducted to examine the present students' attitude domains towards dance in the university.

Causal-comparative research design generally attempts to examine the possible cause-and-effect relationship that describes the differences that have being in the population (Baumgartner & Hensley, 2006). In others word, the independent variables in a causal-comparative research is not manipulated by the researcher, it is either innate or has already occurred. This research design allows the researcher to examine the differences between groups that are formed according to participants'

characteristics that already existed, without manipulation or intervention (Schenker & Rumrill, 2004).

In this present study, the researcher examined the cause-and-effect between students' demographic data and their attitudes towards dance. Gender, ethnic group, age group and years of dance experience are the demographic factors that have already occurred and cannot be manipulated. The dependent variables for this study are the attitudes towards dance, which consists of three domains.

However, as mentioned earlier, causal-comparative research designs lacks control of most extraneous variables that may also influence the outcome of between-group differences. Further discussion on this matter will be continuous while discussing on the suggestions for future study.

3.3 Sampling

Sampling is a process whereby a subgroup of a population is selected to participate in a research study (Baumgartner & Hensley, 2006).

This study was conducted in a public university, which is University of Malaya. University of Malaya is one of the public university that offers dance program as a major course for undergraduate students as well as postgraduate and doctoral students. Besides that, dance also serves as an elective subject and a co-curriculum course for students in the university. Furthermore, dance also plays a primary role in the events of the university campus, faculties and residential colleges.

However, the population in this current study consists of students who have enrolled in co-curriculum courses within the cultural and sport component. The population size in this study is 1254 students, who enrolled in co-curriculum courses for the academic year of 2017/2018 (Semester 1) according to the information provided by Centre for the Initiation of Talent and Industrial Training (CITra).

Simple random sampling method was used in this study. This method is obtained when each individual in a population were given same degree of chance to be selected, and the selection of an individual is independent without impeding with other individuals (Baumgartner & Hensley, 2006). In short, the chances of being selected for all individuals in the population is equal and independent. Therefore, it is a fair approach to select a sample that is a representative. It is important to make generalizations from the results of the representative sample back to the population.

The sample size in this study were 310 students, who were engaged in co-curriculum courses. The minimum sample size is 297 for the population size of 1254 (Krejcie & Morgan, 1970) as shown in Appendix E. Besides that, based on Cohen (1992), sample size table as shown in Appendix F, the sample size for this current study is 274 for MANOVA test at Power = .80, alpha = .05, effect size = small. A simple comparison on the sample size estimation using Krejcie and Morgan (1970) and Cohen (1992) statistical power analysis were discussed as above. In conclusion, based on Krejcie and Morgan (1970), the suggested sampling size for a population of 1254 is 297. However, the suggested sampling size based on Cohen (1992) is 274. This indicated that the sampling size can range from a minimum of 274 to 297. However, the researcher had obtained a larger sample size as recommended, which is 310 as a larger sample size enhances the representativeness of the sample and helps in generalizing the results. Thus, it can be concluded that the sample size achieved is considered appropriate in this study. The sample distribution by gender, ethnic, age group and years of dance experience will be discussed in details in Chapter 4.

3.4 Instrumentation

Instrumentation refers to the tool that is used to collect data, such as questionnaire, test, checklist, interview schedule or inventory (Baumgartner & Hensley, 2006). For

the purpose of obtaining data, a questionnaire was developed. The preparation of the questionnaire involved the following steps: (a) Preliminary study of related questionnaires, (b) Advice from a panel of experts, (c) Modification of the questionnaires, (d) Pilot study.

Prior to preparing the questionnaire, a series of procedures was conducted to make sure that there are relevant items for the questionnaire. The questionnaire was developed by the researcher after reviewing for previous related studies. Thus, most of the items in the questionnaire were constructed based on a comprehensive review of the literatures. Most items were obtained from previous studies (Neal, 1985; Sanderson, 2001; Vlašić et al., 2014). Furthermore, to establish face validity, advices and suggestions from a list of panel who are experts in the field of Physical Education, Culture Center, Sport Center and Psychology (Appendix G) was sought to ascertain the appropriateness of the items in the questionnaire. The items for each attitude domains with its source were clearly stated in the Table 3.1.

Besides that, the panel of experts also revealed that some terms, words and sentences were difficult to understand. Thus, some adjustments was needed to be done to make the items more clear and understandable. The adjustment of the items will be discussed in more details in the section of the validation of the questionnaire.

There are two sections in this questionnaire. Section A is regarding students' demographics data. This section consisted of 7 items. The items were related to the gender, ethnic group, age group, year of study, fields of study, years of dance experience and residential college. In all cases, respondents have to choose the right option from the given categories.

Table 3.1

The Items for Cognitive, Affective and Behavioral Domain and Its Source before Elimination

Domain	Item	Source
Cognitive	1. Dance is good exercise.	Neal's Dance Attitude Inventory
	2. Dancing can help build strong muscle.	Neal's Dance Attitude Inventory
	3. Dancing is healthy.	An Attitude Towards Dance Inventory
	4. Dance creates a feeling of comfort.	Suggestion from panel of experts
	5. Some kind of expression and communication is very important in dance.	Dance Attitude Scale
	6. Dance is fun.	Neal's Dance Attitude Inventory
	7. Dance is a waste of time.	Neal's Dance Attitude Inventory
	8. Dancing is only for girls	Neal's Dance Attitude Inventory
	9. Boys shouldn't do ballet or modern dance.	Dance Attitude Scale
	10. Dance does not help to keep you healthy.	Neal's Dance Attitude Inventory
	11. Dance should entertain the audience.	Dance Attitude Scale
Affective	1. I like to dance.	An Attitude Towards Dance Inventory
	2. I feel comfortable when I dance.	An Attitude Towards Dance Inventory
	3. I am happy when I dance.	An Attitude Towards Dance Inventory
	4. I like pair dancing	An Attitude Towards Dance Inventory
	5. I like dance production.	An Attitude Towards Dance Inventory
	6. I do not feel comfortable when I dance.	Suggestion from panel of experts
	7. Dance creates unease in me.	An Attitude Towards Dance Inventory
	8. I do not like it when I cannot follow a dance rhythm.	Suggestion from panel of experts
	9. I feel anxious when I dance in a pair.	Suggestion from panel of experts
	10. I feel stupid when I dance.	An Attitude Towards Dance Inventory
	11. I do not like to dance.	Suggestion from panel of experts
	12. I do not like to see boys doing expressive movement	Dance Attitude Scale
Behavioral	1. If I learned a dance I would like to show it to other people.	Neal's Dance Attitude Inventory
	2. I would tell others to take a dance class.	Neal's Dance Attitude Inventory
	3. If my best friend is taking a dance class, I would take a dance class too.	Neal's Dance Attitude Inventory
	4. I would like to dance day and night.	An Attitude Towards Dance Inventory
	5. I dance whenever I have a moment free.	An Attitude Towards Dance Inventory
	6. I can express my feelings through dancing.	Suggestion from panel of experts
	7. I dance whenever I have a chance to do so.	An Attitude Towards Dance Inventory
	8. I start dancing whenever I hear the music.	An Attitude Towards Dance Inventory
	9. I would take a dance class only when it is required.	Neal's Dance Attitude Inventory
	10. I avoid dancing.	An Attitude Towards Dance Inventory
	11. I do not attend dance performances.	Suggestion from panel of experts

Section B is concerned with the students' attitudes towards dance. All the items described the students' belief or knowledge, emotional response and behavior towards dance. Close-ended items were used to collect data in this investigation with three domains, namely cognitive, affective and behavioral domain. Each item were expressed in either positive or negative attitude.

A total of 11 items in the cognitive domain that refers to the thoughts and beliefs of an individual about dance was put together. Meanwhile, 12 items in the affective domain described the emotional response of students' towards dance. Lastly, 11 items in the behavioral domain was concerned about an individual's tendency to respond towards dance.

3.4.1 Validation of Instrument

Validity means that the scores or measures obtained from an instrument denotes an appropriate result (Baumgartner & Hensley, 2006). In other words, it is believed that the questionnaire is able to measure what is expected. According to Baumgartner and Hensley (2006), validity is usually estimated by a jury of experts, who are a representative of content experts, questionnaire construction experts, and questionnaire use experts. This present study describes two types of validity utilized in this study, which are face validity and content validity.

Face validity also known as logical validity, is a kind of validity that describes how a measure reflects the outcome that is being measured. (Thomas, Silverman, & Nelson, 2015). In other words, it indicates that the test is valid. According to the procedures, the instrument was first viewed by the supervisor then followed by six experts who worked in related fields. The experts were specialized in sport, dance and psychology fields from University of Malaya, University Tunku Abdul Rahman and University Pendidikan Sultan Idris

(Appendix G). They checked all the items to be used in this study appropriately. As a result, 2 out of 36 items were deleted and some items were amended to suit this study.

Based on Baumgartner and Hensley (2006), content validity originated with knowledge tests which were examined by the experts, who tested and evaluated it as to know whether it has a comprehensive coverage of the content to be tested, whether the test items are well constructed and understandable, and whether the format of the test is conducive to obtain the test scores which could lead to valid interpretations. An instrument has content validity if the items adequately samples the intended content of the construct (Silverman & Subramaniam, 2000).

A panel of experts from different backgrounds of expertise has given few feedbacks and suggestions on the items of the instrument. There were two associate professors and one lecturer from the sport field, two lecturers from the cultural center, performing arts in dance, and one lecturer from the psychology field. The experts involved in the content validity may be referred to in (Appendix G). Few feedbacks were received from the experts and few suggestions were commented to improve the questionnaires in this study. The returned of experts' validation forms was shown in Appendix H. Table 3.2 shows the items before and after adjustment.

Table 3.2

The Items Before and After Adjustment

No	Items before adjusted	Items after adjusted
C1	Dance is good exercise.	Dance is a good form of exercise.
C2	Dancing can help build strong muscle.	Dancing can help building up strong muscle.
C8	Dancing is only for girls.	Dance is only for girls.
C10	Boys shouldn't do ballet or modern dance.	Boys should not dance.
A5	I like dance productions.	I like dance performances.
A11	I avoid dancing.	I do not like to dance.
B1	If I learned a dance I would like to show it to other people.	If I learned a dance I would like to perform it in front of other people.
B2	I would tell others to take a dance class too.	I would encourage others to take dance classes.
B3	If my best friend is taking a dance class I would take a dance class too.	If my best friend is taking dance classes, I would take dance classes too.
B4	I would like to dance day and night.	I would like to dance regularly.
B9	I would take a dance class only when it is required.	I would only take a dance class when it is required.

Construct validity evidence refers to the evidence that a test measures a construct and yields scores that can be validly interpreted (Baumgartner & Hensley, 2006). EFA was conducted to examine the internal structure of the Students' Dance Attitude. EFA was done using SPSS Version 23. EFA was used to find out the factor structure and permits revisions of the Students' Dance Attitude instrument before the actual study. The results will extract the numbers of factors and its related items. Furthermore, EFA identified the factor loading of each item on its associated factors. The factor structure is evaluated due to determining the conformity of the structure to the prior model. The questionnaire of the Students' Dance Attitude was conducted

with a total of 150 participants for a pilot study. Pilot study and actual study were using different group of sample.

3.5 Pilot Study

Pilot study serves as a trial run of the instrument to check if it is in need of revision. Based on Baumgartner and Hensley (2006), pilot study aims to determine whether the participants understand the content items in the instrument, to make sure instrument provides the needed data, to familiarize the researcher with instrument administration procedures, to obtain a set of data for trying out the proposed data treatment technique and to make sure the instrument is ready to be used in actual study. In this research, a pilot study was administered to 150 participants in December 2016 to January 2017. The participants in the pilot study were university undergraduate students who had involved in dance as a physical activity.

Data cleansing was undertaken before any type of analysis was administrated. Data cleansing is also known as data cleaning. This process is an important step to make sure the data is correct before any other statistical analysis takes part. This process was conducted to examine and correct the errors, hence to avoid its effect on the result of study. The errors might include missing data, erroneous data, outliers and inliers. In this study, all data were inserted in a systematic way following the items code that was predefined and keyed them in into the SPSS program. Then, Screening, diagnosing, and editing of suspected data was administrated to make sure the quality of data was ready for other analysis.

3.5.1 Exploratory Factor Analysis (EFA) for Students' Dance Attitudes

EFA was conducted to identify marker variables for the construct of the instrument (Baumgartner & Hensley, 2006). Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were used to perform the correlation matrix for the factor analysis. Initially, all 34 items were subjected to EFA to explore the factor structure of the Students' Dance Attitudes. Principal Component Analysis (PCA) was done to explain the variance-covariance structure of a set of variables through linear combinations. The KMO was equal to .917, showing excellent sampling adequacy indicating that the factors analysis was appropriate for the scale. Based on Tabachnick and Fidell (2007), the recommended value for KMO is above 0.60 to move on with factor analysis. The values of KMO that was closer to 1 were considered better. Meanwhile, Bartlett's Test of Sphericity [X^2 (325) = 2537.105; $p < .001$] was at a significant level, which is less than .05, showed that the correlation matrix is significantly different from an identity matrix. Hull hypothesis was rejected. In other words, the variables were correlated highly enough to provide a reasonable basis for the factors analysis. Thus, inter-item correlation matrix was suitable for the factor analysis.

Table 3.3

KMO and Bartlett's Test

KMO	Measure of Sampling Adequacy	.917
Bartlett's Test of Sphericity	Approx. Chi-Square	2537.105
	Df	325
	Sig.	.000

Table 3.4

Communalities, Eigenvalues, Percentage of Variance and Factors Loading for Each Item

Dimention	Item	Component			Communalities	Eigen Value	% Variance
		1	2	3			
Cognitive	C1	0.77			0.61	10.72	41.20%
	C2	0.68			0.50		
	C3	0.80			0.70		
	C4	0.80			0.68		
	C6	0.72			0.62		
	C7	0.76			0.68		
	C8	0.75			0.64		
	C9	0.71			0.56		
	C10	0.70			0.64		
Affective	A1		0.76		0.72	1.87	7.19%
	A2		0.79		0.73		
	A3		0.79		0.77		
	A5		0.75		0.68		
	A6		0.73		0.62		
	A7		0.72		0.70		
	A8		0.69		0.62		
	A11		0.71		0.60		
Behavioral	B1			0.75	0.61	3.34	12.90%
	B2			0.71	0.59		
	B3			0.72	0.52		
	B4			0.62	0.53		
	B6			0.69	0.55		
	B8			0.63	0.55		
	B9			0.70	0.50		
	B10			0.62	0.51		
	B11			0.69	0.53		

Table 3.4 shows the factor loading for each construct, values of communalities, eigenvalues and percentage of Variance. A varimax rotation was the approach used to support the interpretation of the factors. The recommended values of factor loading should be greater than 0.50 due to determining the meaningfulness

of the instrument (Hair, Anderson, Tatham, & William, 2010). In this study, the factors loadings fell in an acceptable range, which are ranges from 0.62 to 0.80. Besides that, literature also revealed that the acceptable value for communalities should be greater than 0.40 (Lingard & Rowlinson, 2006). The value of the communalities of the items: C5, C11, B5, B7, A4, A9, A10 and A12 were less than 0.40. As such, PCA was repeated after removing C5, C11, B5, B7, A4, A9, A10 and A12 items. Analysis revealed that there are nine items in the cognitive domain, eight items in the affective domain and nine items in the behavioral domain. In total, there are 26 items in the Students' Dance Attitude questionnaire. Lastly, the values of communalities in this research ranged from 0.50 to 0.77.

Besides that, the acceptable eigenvalue as proposed in literature should be above 1.0 (Hair et al., 2010). There are three eigenvalues greater than 1.0 that accounted for 61.29% of the total variance. Percentage of Variance presents the percent of the total variance accounted for by each factor. Cognitive domain accounted for 41.20%, affective domain accounted for 7.19% and behavioral domain accounted for 12.90%.

More specifically, the cognitive domain comprised of nine items, which were reported on a 4-point Likert scale that explained 41.20 % of the variance with factor loadings from 0.68 to 0.80. While, affective domain comprised of eight items that explained 7.19% of the variance with factor loadings from 0.69 to 0.79. Lastly, the behavioral domain comprised of nine items that were reported on a 4-point Likert scale that explained 12.90 % of the variance with factor loadings from 0.62 to 0.75. Figure 3.1 shows the screen plot of the eigenvalue, percentage of variance.

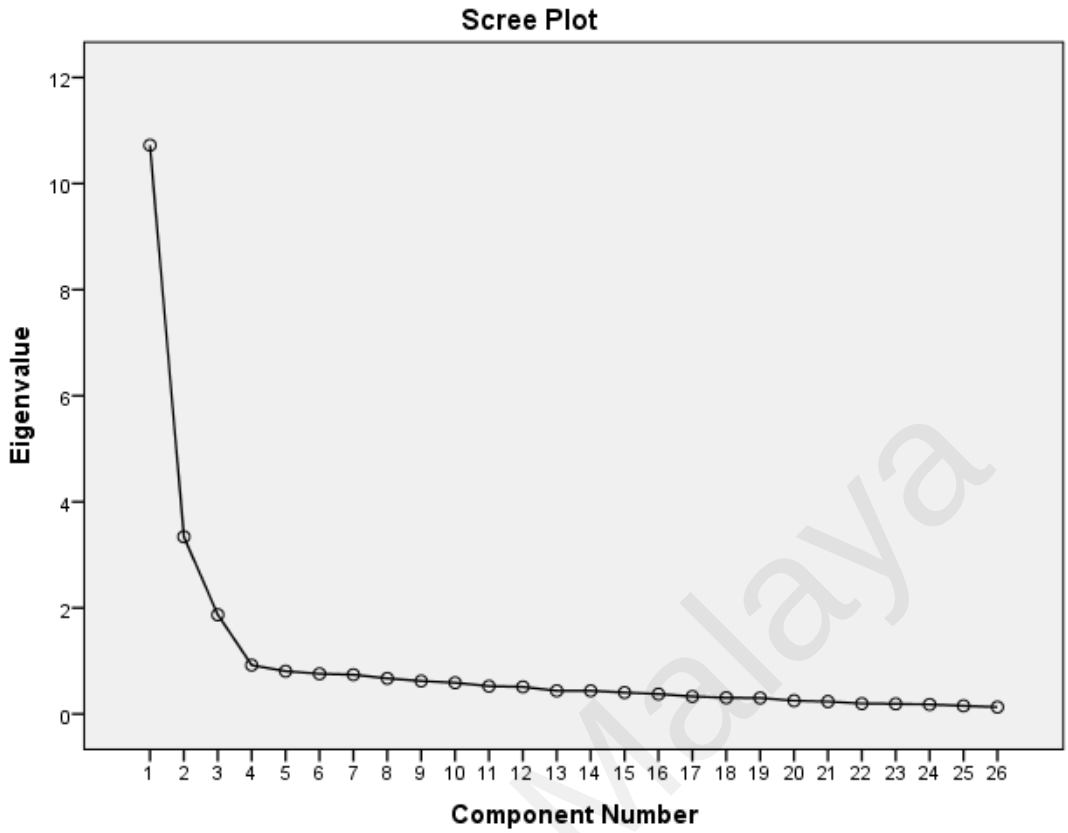

Figure 3.1. The eigenvalues, percentage of variance explained by factors, and factor loading for each item

3.5.2 Reliability of Instrument

Reliability refers to the internal consistency of scores that were obtained from a test or questionnaire (Thomas et al., 2015). Internal consistency reliability is determined by examining the components of the questionnaire against each other. This study reports the internal consistency reliability in the form of Cronbach alpha. Literature revealed that the acceptable values for Cronbach alpha coefficients should be greater than 0.70 (Pallant, 2013). Cronbach alpha coefficients were calculated for the Students' Dance Attitude in the cognitive, affective and behavioral domain individually. The results were .91, .93 and .88 respectively. Thus, the items have comparatively high internal consistency, as

the reliability coefficient was higher than .70. The Instrument also recorded that the alpha coefficient were significantly high. Table below shows the Cronbach alpha for each domains.

Table 3.5

Cronbach's Alpha for Cognitive, Affective and Behavioral

Domain	Cronbach's alpha
Cognitive	0.91
Affective	0.93
Behavioral	0.88

3.6 Data Collection Procedures

The data of students' attitudes towards dance in the cognitive, affective and behavioral domain were collected by using a four-point Likert scale questionnaire, which is tagged as: Students' Dance Attitudes. The questionnaire was developed by the researchers through a systematic process which included a survey on the related literatures, adaptation and adoption of appropriate statements and production of a tentative questionnaire, reflection upon and revising of the questionnaire, obtaining opinion from the panel of experts and also the conduct of a pilot study.

An approval letter (Appendix J) to conduct a survey research was obtained from the faculty of education. Consequently, the questionnaires were administered to the university students who joined dance as some form of physical activities in the co-curriculum courses. They were randomly selected to participate in this study. The questionnaires were printed out and delivered by hand to the participants and returned directly to the researcher after completion of the questionnaire. The questionnaires

were anonymous and there were no questions that would reveal the identity of the respondents. A period of seven weeks from August to September 2017 was set aside for the collection of data.

There are two sections in the questionnaire. First session, section A, which consisted of seven items regarding the students' demographic data. Meanwhile, items in section B were concerning the attitude of dance in the three domains. The researcher gave a short introduction regarding the purpose of the present study before handing out the informed consent form (Appendix I) and the survey questionnaire (Appendix D) to the participants. A total of 310 students participated in this study. Each participant was given a pen and a survey questionnaire; they were required to fill up the questionnaire individually and sincerely. A time duration of about 15 minutes were given to complete the questionnaires. Besides that, the researcher also presented her around the area of distributing the questionnaire in order to give any assistance if needed. The questionnaires were collected immediately upon completion.

3.7 Data Analysis

Quantitative research is important in providing and figuring data to the knowledge of attitude. An enormous sums of data can be acquired from a quantitative research, through survey form or questionnaire. Before computing any inferential statistics, Exploratory Data Analysis (EDA) was computed to examine the errors, missing data and to test the basic assumptions of multivariate analysis. In the direction of answering the research question one, "What are the attitude domains towards dance as a physical activity among university students?" descriptive analysis such as frequency, percentage, means and standard deviations were extracted. Meanwhile, inferential analysis, one-way MANOVA was used to answer the research questions two to five. MANOVA was administered to compare the mean differences of the dependent

variables, which are attitudes in cognitive, affective and behavioral domain based on gender, ethnic, age groups, and years of dance experience. In this current study, the significant level of .05 was considered. The following Table shows the statistical technique for each of the research questions.

Table 3.6

Statistical Technique to Answer the Research Questions

Research questions	Statistical technique
What are the attitude domains towards dance as a physical activity among university students?	Frequency, Percentage, Mean and Standard Deviation
What are the significant differences in the attitude domains towards dance between male and female students?	One – way MANOVA
What are the significant differences in the attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students?	One – way MANOVA
What are the significant differences in the attitude domains towards dance among students in different age groups?	One – way MANOVA
What are the significant differences in the attitude domains towards dance among students with different years of dance experience?	One – way MANOVA

3.7.1 Descriptive Analysis

According to Baumgartner and Hensley (2006), a descriptive statistic aims to describe the characteristics of a group. Gender, ethnic, age group and years of dance experience are the characteristics of the group that was taken into consideration in this study. The scores that were obtained from session A of the questionnaire are nominal scores that are mutually exclusive. The scores were obtained to answer the research question one. Furthermore, a simple frequency distribution and its percentage for each independent variables were computed and shown in Table 4.1. Besides that, mean, which is the most common measure of central tendency was calculated for each attitude domain. Meanwhile, the standard deviation is a measure of variability that is calculated to indicate the amount by which all the scores differ from the mean in each attitude domain.

3.7.2 Inferential Analysis

Based on Baumgartner and Hensley (2006), an inferential statistic is used in the process of making inference from a sample to a population. MANOVA and Analysis of Variance (ANOVA) are almost the same; both are used to compare means. The ANOVA method involves only one dependent variables while the MANOVA method involves multiple variables. In short, MANOVA is an extension of ANOVA with more than one dependent variable and compares the mean differences between the groups. In this current study, MANOVA was used to answer research question two to research question five. Before computing any of the MANOVA test, there are a few assumptions of MANOVA that were taken into consideration. Below are the discussion on the assumptions of MANOVA.

3.7.3 Assumption of MANOVA

MANOVA was used in this study, as there are three dependent variables, which are cognitive, affective and behavioral domain. To demonstrate MANOVA, there are few assumptions that need to be achieved. The assumptions of MANOVA were discussed as below.

According to Pallant (2013), the suggested cases for each cell should be more than the dependent variables. In this current study, there should be at least three cases in each cell. The total cells in this study are 12 (two levels of the independent variables of gender, four levels of race, three levels of ages and three levels of dance experience). Thus, diverse assumptions were achieved in this study.

The observation independence assumption points out that the dependent measures must be taken independently among the participants (Chen & Zhu, 2001). The measures must be independently in different observation groups. According to Chen and Zhu (2001), independence indicates that regardless of the measurement methods, each measurement on an individual participant is not related to the same measurement made on another participant. In statistical terms, the independence assumption is defined as the independence of the residual.

Outliers refer to extremely high or low scores that does not seem predictable for the group tested. Absence of outliers is considered as an important assumption of MANOVA. Outliers need to be removed from the score as it may cause error in the study. The existence of outliers may also lead to the issue of non-normality, and then it can cause critical problems in the study. Thus, it is necessary to screen and remove the data for outliers.

Normal distribution refers to the scores on a scale or measure fall in a nice symmetrical, bell-shaped curve. The dependent variables should be normally

distributed. Normality can be determined by examining the skewness and kurtosis values. Values of 0 indicates that the distribution is perfectly normal, which is uncommon in reality. However, George and Mallery (2011) defined that the acceptable range for skewness and kurtosis are between -2 and +2. Besides that, Kolmogrorov Smirnov test also can be demonstrated to test for normality.

Linearity is graphically showed as a straight-line. Linearity is commonly evaluated by scatterplots of the variables and also the Test for Linearity with the sig. value of deviation from linearity >0.05, which indicate that there is a linear relationship between the variables. Thus, the assumption of linearity is achieved if the sig. value exceeds 0.05.

Based on French, Macedo, Poulsen, Waterson, and Yu (2008), multicollinearity refers to a state of high inter-correlations or inter-associations among the dependent variables. The absence of multicollinearity can be checked by conducting correlations among the dependent variables. The R^2 in the Within-Cell Correlations Analysis report lets you determine if multicollinearity is a problem. If this R^2 value is greater than .99 for any variable, then the researcher should take corrective action by removing one of the variables. To correct for multicollinearity, it begins by removing the variables one at a time until all of the R^2 are less than .99. Based on assertions by Hair et al. (2010), multicollinearity is measured by variance inflation factors (VIF) and tolerance.

Homogeneity of variance, also known as equal variance assumes that the dependent variables shows equal levels of variance across the range of the predictor variables. In short, the assumption requires the variance among all the sample groups to be equal. Bartlett test is demonstrated when the group sample sizes are not equal (Garson, 2012). Furthermore, the test is sensitive to the assumption of normality. In

other words, if the data are not normally distributed, the power of identifying the difference in variance is affected.

Box's M Test of Equality of Covariance Matrices was used to test the homogeneity of the variance-covariance matrices. Homogeneity of variance-covariance matrices stated that the variances for the dependent variables in one group's dependent variable matrix is equal to the corresponding elements in all other groups' matrices. The sig. value that is larger than .001 indicates that the assumption is achieved. The analysis of the assumption of MANOVA will be discussed in details in Chapter 4.

3.8 Summary

The differences of the attitude domains based on university students' demographic data were investigated in this study. Causal-comparative research design with simple random sampling method were used. A total of 310 university students who enrolled in co-curriculum courses had participated in this study.

Student's Dance Attitude, a questionnaire was developed to answer the research questions. This chapter additionally defined the process in developing the questionnaire, such as the preliminary study of related questionnaires, acquiring advice from a panel of experts, modification of the questionnaire, pilot study, test of validity and reliability. Besides that, descriptive analysis and inferential analysis were computed to answer the research questions.

For the following chapter, it will present the details of the MANOVA assumptions and the results of analyses for each research question.

CHAPTER 4

DATA ANALYSIS

4.1 Introduction

This study aims to examine the attitude domains of students towards dance as a physical activity. In this chapter, the statistical analysis of the study is discussed. Descriptive statistics was employed to report the demographic background of the participants and describe the students' attitude domains towards dance. Mean scores and standard deviation were calculated as well in the descriptive analysis.

Inferential statistics was used to examine the differences of the variables. In the inferential statistics analysis, MANOVA was used to examine the differences. Data was analyzed using the SPSS version 23. The value of $p < .05$ was considered statistically significant. In Short, this chapter is organized according to the following sub topics; (a) Descriptive statistics of the students' attitudes domains towards dance, (b) Inferential statistics for hypothesis testing, (c) Summary of the results.

4.2 Descriptive Analysis

Descriptive analysis was applied to answer the first research question in this study. The first research questions is "What are the attitude domains towards dance as a physical activity among university students?" Number of students and the percentage of the sample distribution by gender, ethnic group, age group, and years of dance experience were calculated and shown in Table 4.1.

Table 4.1

Sample Distribution by Gender, Ethnic, Age Group and Years of Dance Experience

Variable		Number of students	Percentage
Gender	Male	131	42.3
	Female	179	57.7
Ethnic Group	Malay	106	34.2
	Chinese	120	38.7
	Indian	53	17.1
	Others	31	10.0
Age Group	Below 20 Years old	37	11.9
	20-25 Years old	192	62.0
	Above 25 Years old	81	26.1
Years of Dance Experience	Less than 3 years	168	54.2
	3- 6 years	75	24.2
	More than 6 years	67	21.6

Based on Table 4.1, there are 131 male students (42.3%) and 179 female students (57.7%) who participated in this study. From the perspective of the ethnic distribution, there are 120 Chinese students (38.7%), 106 Malay students (34.2%), 53 Indian students (17.1%) and lastly 31 students (10%) that are formed by the other minority ethnics. Besides that, most of the students are between the ages of 20 to 25 years old, which recorded a total amount of 192 (62%). Whereas, 81 (26.1%) of the students are above 25 years old and only 37 (11.9%) of the students are below 20 years old. Among the participants, there are 168 students (54.2%) who had less than 3 years of dance experience, 75 students (24.2%) had 3 to 6 years of dance experience and 67 students (21.6%) had more than 6 years of dance experience. Thus, Most of the participants in this study have less than 3 years of dance experience.

Average scores (mean) and standard deviation of the students' attitude domains towards dance as a physical activity were extracted for each item. The mean score of 4-point Likert Scale questionnaire in this study was equal to 2.5. Therefore, the mean scores of any domains or items that was equal or higher than 2.5 are considered as positive attitude. Whereas, the mean scores that were lower than 2.5 are considered as negative attitude. Table 4.2 shows the descriptive statistics for cognitive, affective and behavioral domain.

Table 4.2

Descriptive Statistics for Students' Attitude Domains

Attitude Domains	Mean	Standard Deviation (SD)
Cognitive	3.61	.36
Affective	3.33	.44
Behavioral	3.14	.39

Cognitive domain have the highest mean score (M = 3.61, SD = .36), followed by the affective domain (M = 3.33, SD = .44), and lastly the behavioral domain (M = 3.14, SD = .39). Based on the results computed, it can be concluded that the cognitive domain showed the highest score, which indicates that it had a strongly positive attitude towards dance, whereas behavioral domain had the lowest score. Overall, three attitude domains showed the positive attitude towards dance. Cognitive and affective domains showed a strongly positive attitude. Whereas, behavioral domain showed a moderate positive attitude towards dance.

4.2.1 Descriptive Statistics of Cognitive Domain Items

Descriptive analysis of the cognitive domain for each item is depicted in Table 4.3.

Table 4.3

The Ranking of Cognitive Items Based on Mean Scores

Rank	No	Items	*M*	*SD*
1	C9	*Boys should not dance.	3.82	.39
2	C8	*Dance is only for girls.	3.73	.47
3	C10	*Dance does not help to keep you healthy.	3.73	.55
4	C6	Dance is fun.	3.64	.53
5	C1	Dance is a good form of exercise.	3.59	.58
6	C7	*Dance is a waste of time.	3.58	.63
7	C3	Dancing is healthy.	3.57	.56
8	C2	Dancing can help build up strong muscle.	3.44	.63
9	C4	Dance creates a feeling of comfort.	3.36	.64

* Indicate a negative item.

Descriptive statistics in Table 4.2 shows that students expressed a strongly positive cognitive domain of attitudes towards dance with the mean scores ranging between 3.36 and 3.82. A mean score above 3.25 indicates a strongly positive attitude or strongly agree for positive items. However, a mean score above 3.25 indicates a strongly negative attitude or strongly disagree for negative items. In this study, the highest mean score (M = 3.82, SD = .39) shows a strong disagreement in the statement, which expresses that boy, should not participate in dancing. Second highest mean score (M = 3.73, SD = .47) and (M = 3.73, SD = .55) showed strong disagreement that dance is only for girls and that dance does not help to keep us healthy. Next, students strongly agreed that dance is fun (M = 3.64, SD = .53) and dance is a good form of exercise (M = 3.59, SD = .58). Besides, they also strongly disagreed that participating

in dance activities is a waste of time (*M* = 3.58, *SD* = .63). Furthermore, they believe that dancing is a healthy activity (*M* = 3.57, *SD* = .56) and that it can build up strong muscles (*M* = 3.44, *SD* = .63). Also, dance creates a feeling of comfort among university students (*M* = 3.36, *SD* = .64). In general, students show a strongly positive attitude towards dance in the cognitive domains.

4.2.2 Descriptive Statistics of Affective Domain Items

Descriptive analysis of the affective domain for each item is shown in Table below.

Table 4.4

The Ranking of Affective Items Based on Mean Scores

Rank	No	Items	*M*	*SD*
1	A11	*I do not like to dance.	3.64	.55
2	A5	I like dance performances.	3.52	.56
3	A1	I like to dance.	3.47	.58
4	A3	I am happy when I dance.	3.47	.56
5	A2	I feel comfortable when I dance.	3.36	.60
6	A6	*I do not feel comfortable when I dance.	3.30	.72
7	A7	*Dance creates unease in me.	3.25	.72
8	A8	*I do not like it when I cannot follow a dance rhythm.	2.61	.92

* Indicates a negative item.

Descriptive statistics in Table 4.4 shows that students express a strongly positive attitude towards dance in the affective domain with the mean scores range between 2.61 and 3.64 for each item. The highest mean score (*M* = 3.64, *SD* = .55) show that the students strongly disagree that they do not like to dance. Besides, they strongly agreed that they like dance performance (*M* = 3.52, *SD* = .56). Also, they like to dance (*M* = 3.47, *SD* = .58), they feel happy when participating in a dance activity

(*M* = 3.47, *SD* = .56) and they feel comfortable when they dance (*M* = 3.36, *SD* = .60). In other words, they strongly disagree that they do not feel comfortable (*M* = 3.30, *SD* = .72) and also disagree that dance creates an uneasy feeling (*M* = 3.25, *SD* = .72). However, there is only one item that expresses a moderate positive attitude, which disagrees that they do not like dancing when they cannot follow the dance rhythm (*M* = 2.61, *SD* = .92). Overall, students express a positive attitude towards dance in the affective domain.

4.2.3 Descriptive Statistics of Behavioral Domain Items

Descriptive analysis of the behavioral domain for each item is shown in Table 4.5.

Table 4.5

The Ranking of Behavioral Items Based on Mean Scores

Rank	No	Items	*M*	*SD*
1	B10	*I avoid dancing.	3.52	.63
2	B11	*I do not attend dance performances.	3.42	.67
3	B2	I would encourage others to take dance classes.	3.26	.58
4	B6	I can express my feelings through dance.	3.16	.71
5	B4	I would like to dance regularly.	3.14	.62
6	B8	I start dancing whenever I hear music.	3.02	.77
7	B1	If I learned a dance I would like to perform it in front of other people.	3.01	.66
8	B3	If my best friend is taking dance classes, I would take dance classes too.	2.95	.74
9	B9	*I would only take a dance class when it is required.	2.75	.80

* Indicate a negative item.

Descriptive statistics in Table 4.5 shows that students expressed a positive attitude towards dance in the behavioral domain with the mean scores ranging between 2.75 and 3.52 for items with lowest and highest mean scores. The highest mean score (M = 3.52, SD = .63) expresses that they strongly disagree with the behavior of avoiding to dance. Furthermore, they strongly disagree that they do not attend dance performances (M = 3.42, SD = .67). They would encourage others to take dance classes as well (M = 3.26, SD = .58). Besides, they moderately agree that they can express their feelings through dance (M = 3.16, SD = .71), like to dance regularly (M = 3.14, SD = .62), start dancing whenever they hear the music (M = 3.02, SD = .77) and also like to perform the dance that they learn in front of other people (M = 3.01, SD = .66). The students show less agreement that they will follow their friends to take dance classes (M = 2.95, SD = .74). But, they moderately disagree that they would only take a dance class when it is required (M = 2.75, SD = .80).

Overall, university students in this study have shown positive attitude in the three attitude domains, which includes the cognitive, affective and behavioral domain.

4.3 Inferential Analysis

MANOVA was performed to explore the differences of the dependent variables (cognitive, affective and behavioral domain) based on the independent variables (gender, ethnic group, age group and years of dance experience dance). In other words, inferential analysis was used to test the hypothesis in an effort to answer the research question 1 to 4 in this study. The hypothesis testing are showed as below:

4.3.1 Hypothesis Testing 1: The Differences of Attitude Domains Towards Dance Based on Gender

H1: There are no differences in the attitude domains towards dance between male and female students. Descriptive statistic shows that there are 131 male students, which comprises 42.3% of the participants. Whereas, there are 179 female students, which comprises 57.7% of the participants in this study. In short, female students are more than the male students in this study.

MANOVA analysis was performed to investigate the differences in the attitude domains towards dance based on gender among the university students. The independent variable was gender. Whereas, the dependent variables were the cognitive, affective and behavioral domain. There are few assumptions that need to be achieved before proceeding to the analysis of MANOVA. Normality, homogeneity of variance-covariance matrices and absence of multicollinearity were tested for the assumption of MANOVA.

i. Normality

Normality distribution refers to the scores on a scale or measures that fall in a nice symmetrical and bell-shaped curve. Normality can be determined by the value of skewness and kurtosis which 0 indicate that the distribution is perfectly normal, which is uncommon in reality. However, George and Mallery (2011) defines that the acceptable range for skewness and kurtosis are between -2 and +2. The results of skewness and kurtosis are showed in Table 4.6.

Table 4.6

Skewness and Kurtosis of Attitude Domains towards Dance Based on Gender among University Students

Attitude Domain	Gender	Skewness	Kurtosis
Cognitive	Male	-.511	-.823
	Female	-.774	-.529
Affective	Male	-.144	-.811
	Female	-.123	-.930
Behavioral	Male	-.056	-.071
	Female	-.007	-.646

Table 4.6 showed the skewness and kurtosis of the students' attitudes towards dance based on the male and female students in the university. Male students demonstrated (-.511, -.823) for the cognitive domain, (-.144, -.811) for the affective domain and (-.056, -.071) for the behavioral domain. Whereas, female students showed (-.774, -.529) for the cognitive domain, (-.123, -.930) for the affective domain and (-.007, -.646) for the behavioral domain. Based on the analysis finding, the values of skewness falls between -.774 and -.007. While, the values of kurtosis falls between -.930 and -.071. In short, both skewness and kurtosis values falls within the acceptable range, which are between -2 and +2. Thus, the attitude of dance among university male and female students achieves the assumption of normality and are considered as normally distributed.

ii. Homogeneity of Variance

Homogeneity of Variance can be assessed by the Homogeneity of Variance-covariance matrices. Homogeneity of Variance-covariance matrices is the multivariate version of the univariate assumption of the Homogeneity of variance. It refers to the variance-covariance matrices of the multiple dependent measures for

each group. Box's M. Test of Equality of Covariance Matrices was used to test the homogeneity of the variance-covariance matrices. The Box's M should be non-significant with the sig. value larger than .001. The analysis of Box's M is showed in Table 4.7.

Table 4.7

Box's Test of Equality of Covariance Matrices for Students' Attitude Domains towards Dance Based on Gender

Box's M	F	df 1	df 2	Sig.
7.619	1.256	6	540685.964	.274

The results of Box's M test in Table 4.7 showed a non-significant difference with sig. value of .274, (p > 0.001). In other words, Box's M tests the statistical hypothesis, inferring that the observed covariance matrices of the dependent variables are equal across groups. Thus, the assumption of the homogeneity of the variance-covariance matrices was acceptable.

iii. Absence of multicollinearity

Multicollinearity can be assessed by computing the statistics of collinearity. The value of variance inflation factors (VIF) that is less than 4.0 and tolerance greater than 0.2, indicates the absence of multicollinearity. Thus, there is an absence of multicollinearity based on the gender variable as the value of VIF is 1.064 <4.0 and the value of tolerance is .940 > 0.2 as illustrated in table 4.8 below.

Table 4.8

Variance Inflation Factors (VIF) and Tolerance for Students' Attitude Domains towards Dance Based on Gender

Independent Variable	VIF	Tolerance
Gender	1.064	.940

Based on the assumptions above, MANOVA analysis can be used to test the differences of attitudes towards dance based on gender. The results of MANOVA is shown below in Table below.

Table 4.9

Multivariate Test of Students' Attitude Domains towards Dance Based on Gender

Effect	Wilks' Lambda Value	F Value	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	.966	3.598	3.000	306.000	.014	.034

Based on table 4.9, the multivariate test results showed that there was a statistically significant difference between males and females on the combined dependent variables, F (3,306) = 3.598, p = .014 (p < .05); Wilks' Lambda = .966; partial eta squared = .034. Thus, the hypothesis 1 (H1) was rejected. The differences for each attitude domain will be shown in Table 4.10 with the analysis of One-way MANOVA. The results will be discussed in detail as below.

Table 4.10

Results of One-way MANOVA on the Differences in the Mean Scores for the Students' Attitude Domains towards Dance Based on Gender

Attitude Domain	Gender	N	M	SD	DF	Mean Square	F	Sig.	Partial Eta Squared
Cognitive Domain	Male	131	3.55	.37	1	.619	4.929	.027	.016
	Female	179	3.64	.34					
Affective Domain	Male	131	3.33	.44	1	.006	.028	.866	.000
	Female	179	3.33	.44					
Behavioral Domain	Male	131	3.10	.38	1	.345	2.247	.135	.007
	Female	179	3.17	.40					

N = Sample; M = Mean; SD = Standard Deviation

Table 4.10 showed the results of the one-way MANOVA analysis for the dependent variables separately in the three attitude domains based on gender. The results indicated that the cognitive domain, F (1,308) = 4.929, $p < .05$; partial eta squared = .016 were statistically significant. In other words, the gender variable was indicated as one of the factors affecting the cognitive domain with 1.6 % of the variance in the dependent variable. Whereas, in the behavioral domain, F (1,308) = 2.247, $p > .05$ and the affective domain, F (1,308) = .028, $p > .05$ showed that there were no significant differences based on gender.

Furthermore, an inspection of the mean scores indicated that females reported higher scores in the cognitive and behavioral domains. Female scored (M = 3.64, SD = .34) higher than males (M = 3.55, SD = .37) in the cognitive domain. Besides, females scored (M = 3.17, SD = .40) higher than male (M = 3.10, SD = .38) in the behavioral domain. However, the mean scores and standard deviation *(SD)* of the affective domain for both males and females were the same (M = 3.33, SD = .44). Overall, the cognitive domain scored the highest mean, followed by the affective domain and lastly the behavioral domain.

The analysis showed an inequivalent results between the cognitive, affective and behavioral domain. There is a significant difference in the cognitive domain based on gender. Whereas, there are no significant differences in the affective and behavioral domain with regards to gender. In short, the null hypothesis (H1) was rejected.

4.3.2 Hypothesis Testing 2: The Differences of the Attitude Domains towards Dance Based on Ethnic Group

H2: There are no differences in the attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students. Descriptive statistic shows that there are 106 Malay students, which comprises 34.2%, 120 Chinese students, comprising 38.7%, and there are 53 Indian students that comprises 17.7% of the participants in this study. Lastly, there are only 31 students, which is 10% of the participants from other ethnics.

MANOVA analysis was performed to investigate the differences of the students' attitude domains towards dance based on the students' ethnic groups among university students. The independent variable was student's ethnic group. Whereas, the dependent variables were cognitive, affective and behavioral domain. There are few assumptions that need to be achieve before proceeding to the analysis of MANOVA. Normality, homogeneity of variance-covariance matrices, linearity and absence of multicollinearity were tested for the assumption of MANOVA.

i. Normality

Normality was examined by the analysis of skewness and kurtosis. The values of skewness and kurtosis were ranging in between -2 and +2, which are in the acceptable range as referred to by George and Mallery (2011). The results of skewness and kurtosis are showed in Table 4.11.

Table 4.11

Skewness and Kurtosis of Attitude Domain towards Dance Based on Ethnic Group among University Students

Attitude Domain	Ethnic Group	Skewness	Kurtosis
Cognitive	Malay	-.853	-.257
	Chinese	-.585	-.801
	Indian	-.615	-.742
	Others	.089	-.1.520
Affective	Malay	-.171	-.813
	Chinese	-.159	-.890
	Indian	-.008	-.940
	Others	-.007	-1.163
Behavioral	Malay	-.086	-.546
	Chinese	-.160	-.441
	Indian	.001	-.146
	Others	-.266	-.275

Table 4.11 showed the skewness and kurtosis of students' attitude domains towards dance based on their ethnic group among university students. There are three major ethnic groups, which are Malay, Chinese and Indian. Other ethnic groups refer to the minority ethnic groups in the multi-ethnic country, Malaysia. For example, Iban, Bidayuh, Kadazan Dusun and Bajau. Malay students demonstrated (-.853, -.257) for the cognitive domain, (-.171, -.813) for the affective domain and (-.086, -.546) for the behavioral domain. Meanwhile, Chinese students demonstrated (-.585, -.801) for the cognitive domain, (-.159 -.890) for the affective domain and (-.160, -.441) for the behavioral domain. Whereas, Indian students showed (-.615, -.742) for the cognitive domain, (-.008, -.940) for the affective domain and (.001, -.146) for the behavioral domain. While, students from other ethnic groups demonstrated (.089, -1.520) for the cognitive domain, (-.007, -.1.163) for the affective domain and (-.266, -.275) for the

behavioral domain. Based on the finding from analysis, the values of skewness falls between -.853 and .089. While, the values of kurtosis falls between -1.520 and -.146. In short, both skewness and kurtosis values fall within the acceptable range, which are between -2 and +2. Thus, the attitude domains of dance among university students in the four ethnic groups achieved the assumption of normality and are considered as normally distributed.

ii. Homogeneity of Variance

Homogeneity of Variance was assessed by the Homogeneity of Variance-covariance matrices. Box's M Test of Equality of Covariance Matrices was used to test the homogeneity of the variance-covariance matrices. The Box's M should be non-significant with the sig. value larger than .001. The analysis of Box's M is showed in Table 4.12.

Table 4.12

Box's Test of Equality of Covariance Matrices for Students' Attitude Domains towards Dance Based on Ethnic Group

Box's M	F	df 1	df 2	Sig.
30.233	1.638	18	63061.618	.043

The results of Box's M test in Table 4.12 indicated a sig. value of .043, (p > 0.001), which identifies that the results is non-significant. In other words, Box's M tests the statistical hypothesis that the observed covariance matrices of the dependent variables are equal across groups. Thus, the assumption of the homogeneity of the variance-covariance matrices was acceptable.

iii. Linearity

Linearity refers to the linear relationship between the independent variables and dependent variables. The test of linearity with the sig. value of deviation > 0.05 indicates that there is a linear relationship between the variables as shown in table 4.13 below.

Table 4.13

Test of linearity for Students' Attitude Domains towards Dance Based on Ethnic Group

	Deviation from Linearity				
Attitude Domain	***SS***	***df***	***MS***	***F***	**Sig.**
Cognitive	.235	2	.118	.958	.385
Affective	.138	2	.069	.353	.703
Behavioral	.185	2	.093	.599	.550

Based on the table above, values of a sig. deviation from the linearity of .385 > 0.05 was found for the cognitive domain, .703 > 0.05 for the affective domain and .550> 0.05 for the behavioral domain, it can be concluded that there are linear relationships existing between the variables of students' attitude domains with student's ethnic group.

iv. Absence of multicollinearity

Multicollinearity can be assessed by computing the statistics of collinearity. The value of variance inflation factors (VIF) that is less than 4.0 and a tolerance greater than 0.2, indicates the absence of multicollinearity. Thus, there is an absence of multicollinearity based on the ethnic variable as the value of VIF is 1.018 <4.0 and the value of tolerance is .982 > 0.2 as shown in table 4.14 below.

Table 4.14

Variance Inflation Factors (VIF) and Tolerance for Students' Attitude Domains towards Dance Based on Ethnic Group

Independent Variable	VIF	Tolerance
Ethnic	1.018	.982

Based on the assumptions above, MANOVA analysis can be used to test the differences of the attitude domains towards dance based on ethnic group. The results of MANOVA is showed below in Table 4.15 and table 4.16 respectively.

Table 4.15

Multivariate Test of Students' Attitude domains towards Dance Based on Ethnic Group

Effect	Wilks' Lambda Value	F Value	Hypothesis df	Error df	Sig.	Partial Eta Squared
Ethnic	.943	2.009	9.000	740.007	.036	.019

Based on table 4.15, the multivariate test results shows that there was a statistically significant difference among ethnics based on the combined dependent variables, F (9,740) = 2.009, p = .036 (p < .05) ; Wilks' Lambda = .943; partial eta squared = .019. Thus, the hypothesis 2 (H2) was rejected. The differences for each attitude domain will be shown in Table 4.16 with the analysis of a One-way MANOVA. The results will be discuss in detail as below.

Table 4.16

Results of One-way MANOVA on the Differences in the Mean Scores for Students' Attitude Domains towards Dance Based on Ethnic Group

Attitude Domain	Ethnic Group	N	M	SD	DF	Mean Square	F	Sig.	Partial Eta Squared
Cognitive Domain	Malay	106	3.67	.30	3	.566	4.610	.004	.043
	Chinese	120	3.61	.34					
	Indian	53	3.58	.41					
	Others	31	3.41	.44					
Affective Domain	Malay	106	3.36	.44	3	.078	.400	.753	.004
	Chinese	120	3.31	.46					
	Indian	53	3.35	.41					
	Others	31	3.27	.42					
Behavioral Domain	Malay	106	3.18	.38	3	.142	.916	.433	.009
	Chinese	120	3.11	.39					
	Indian	53	3.15	.40					
	Others	31	3.06	.43					

N = Sample; M = Mean; SD = Standard Deviation

Table 4.16 showed the results of the one-way MANOVA analysis for the dependent variables separately in three attitude domains based on ethnic group. The results indicated that the cognitive domain F (3,306) = 4.610, $p < .05$, partial eta squared = .043 were statistically significant. In other words, the ethnic group variable was indicated as one of the factors affecting the cognitive domain with 4.3 % of the variance in the dependent variable. Whereas, in the behavioral domain, F (3,306) = .916, $p > .05$ and in the affective domain, F (3,306) = .400, $p > .05$ it was showed that there were no significant differences based on ethnic group.

Furthermore, mean scores and standard deviations were used to demonstrate the students' attitudes towards dance as a physical activity. From the table 4.16, Malay students scored higher mean scores on all the three attitude domains, which were cognitive (M = 3.67, SD = .30), affective (M = 3.36, SD = .44) and behavioral domain, (M = 3.18, SD = .38). While, other ethnic groups recorded the lowest mean

scores on all the three attitude domains, which were cognitive (M = 3.41, SD = .44), affective (M = 3.27, SD = .42) and behavioral domain, (M = 3.06, SD = .43). Chinese scored the second highest (M = 3.61, SD = .34) followed by Indian (M = 3.58, SD = .41) in the cognitive domain. However, Indian scored the second highest (M = 3.35, SD = .41) in the affective domain and (M = 3.15, SD = .40) in the behavioral domain, followed by Chinese (M = 3.31, SD = .46) in the affective domain and (M = 3.11, SD = .39) in the behavioral domain. Generally, students from all ethnic groups obtained highest scores in the cognitive domain, moderate scores in the affective domain, and lastly the behavioral domain.

The analysis showed an inequivalent results between the cognitive, affective and behavioral domain. There is a significant difference in the cognitive domain based on students' ethnic groups. Whereas, there are no significant differences in the affective and behavioral domain. In short, the null hypothesis (H2) was rejected.

Table 4.17

Post Hoc Scheffe's Test on Students' Attitudes towards Dance in the Cognitive Domain Based on Student's Ethnic Group

Dependent Variable	(I) Ethnic Group	(J) Ethnic Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitive	Malay	Chinese	.05	.05	.734
		Indian	.09	.06	.537
		Others	.26*	.07	.004
	Chinese	Malay	-.05	.05	.734
		Indian	.03	.06	.951
		Others	.21*	.07	.033
	Indian	Malay	-.09	.06	.537
		Chinese	-.03	.06	.951
		Others	.18	.08	.181
	Others	Malay	-.26*	.07	.004
		Chinese	-.21*	.07	.033
		Indian	-.18	.08	.181

An analysis of One-way MANOVA showed that the cognitive domain $F(3,306) = 4.610$, $p < .05$, was statistically significant. Post hoc analyses using scheffe's test indicated that there was a significant difference between the Malay students and other ethnics with a mean difference (I-J) = .26, $p = .004$ ($p < .05$). Besides that, There was also a significant difference between the Chinese students and other ethnics with a mean difference (I-J) = .21, $p = .033$ ($p < .05$).

4.3.3 Hypothesis Testing 3: The Differences of Attitude Domains towards Dance Based on Age Group

H3: There are no differences in attitude domains towards dance among students in the different age groups. Descriptive statistic shows that there are 192 students between 20 to 25 years old, which comprised 62.0% of the participants, 81 students above 25 years old, which comprised 26.1% of the participants. Lastly, there are only 37 students below 20 years old, which comprised 11.9% of the participants. In sum, most of the students who participated in this study are between 20 to 25 years old.

MANOVA analysis was performed to investigate the differences in attitude domains towards dance based on the university students' age groups. The independent variable was termed as: age group. Whereas, the dependent variables were the cognitive, affective and behavioral domain. There are few assumptions that need to be achieved before proceeding to the analysis of MANOVA. Normality, homogeneity of variance-covariance matrices, linearity and absence of multicollinearity were tested for the assumption of MANOVA.

i. Normality

Normality was examined by the analysis of skewness and kurtosis. The values of skewness and kurtosis were ranged in between -2 and +2, which are in an acceptable range as referred to by George and Mallery (2011). The results of skewness and kurtosis is shown in Table 4.18.

Table 4.18

Skewness and Kurtosis of Attitude Domains towards Dance Based on Age Groups among University Students

Attitude Domain	Age Group	Skewness	Kurtosis
Cognitive	Less than 20 years old	-.235	-1.370
	20-25 years old	-.710	-.595
	More than 25 years old	-.749	-.320
Affective	Less than 20 years old	.066	-.163
	20-25 years old	-.134	-1.070
	More than 25 years old	-.203	-.490
Behavioral	Less than 20 years old	-.319	.284
	20-25 years old	.039	-.573
	More than 25 years old	-.031	-.346

Table 4.18 showed the skewness and kurtosis of the students' attitude domains towards dance based on the age group of students in the university. There are three group of ages which are less than 20 years old, 20-25 years old and more than 25 years old. Students who were less than 20 years old demonstrated (-.235, -1.370) for the cognitive domain, (.066, -.163) for the affective domain and (-.319, .284) for the behavioral domain. Meanwhile, students between 20 to 25 years old demonstrated (-.710, -.595) for the cognitive domain, (-.134 -.1.070) for the affective domain and (.039, -.573) for the behavioral domain. Whereas, students more than 25 years old showed (-.749, -.320) for the cognitive domain, (-.203, -.490) for the affective domain and (-.031, -.346) for the behavioral domain. Based on the finding of the analysis, the values of skewness fall between -.749 and .066. While, the values of kurtosis falls between -1.370 and .284. In short, both skewness and kurtosis values fall within the acceptable range, which are between -2 and +2. Thus, the attitude of dance among

university students in the three groups of ages, achieved the assumption of normality and were considered as normally distributed.

ii. Homogeneity of Variance

Homogeneity of Variance was assessed by the Homogeneity of Variance-covariance matrices. Box's M Test of the Equality of Covariance Matrices was used to test the homogeneity of the variance-covariance matrices. The Box's M should be non-significant with the sig. value larger than .001. The analysis of Box's M is showed in Table 4.19.

Table 4.19

Box's Test of Equality of Covariance Matrices for Students' Attitude Domain towards Dance Based on Age Groups

Box's M	F	df 1	df 2	Sig.
17.532	1.427	12	53166.999	.145

The results of Box's M test in Table 4.19 indicated a sig. value of .145, (P> 0.001) which identified that the results is non-significant. In other words, Box's M tests the statistical hypothesis that the observed covariance matrices of the dependent variables are equal across groups. Thus, the assumption of homogeneity of the variance-covariance matrices was acceptable.

iii. Linearity

Linearity refers to the linear relationship between the independent variables and the dependent variables. Test of linearity with the sig. value of deviation > 0.05 indicates that there is a linear relationship between the variables as shown in Table 4.20 below.

Table 4.20

Test of linearity for Students' Attitude Domains towards Dance Based on Students' Age Groups

Deviation from Linearity					
Attitude Domain	***SS***	***df***	***MS***	***F***	**Sig.**
Cognitive	.468	1	.468	3.715	.055
Affective	.029	1	.029	.149	.700
Behavioral	.213	1	.213	1.379	.241

Based on the table above, values had a significant deviation from the linearity of .055 > 0.05 for the cognitive domain, .700 > 0.05 for the affective domain and .241> 0.05 for the behavioral domain, it can be concluded that there are linear relationships between the variables of the students' attitude domains with the students' age group.

iv. Absence of multicollinearity

Multicollinearity can be assessed by computing the statistics of collinearity. The value of variance inflation factors (VIF) that is less than 4.0 and a tolerance greater than 0.2, indicates the absence of multicollinearity. Thus, there is an absence of multicollinearity based on the age group variable as the value of VIF is 1.010 <4.0 and the value of tolerance .990 > 0.2 as in table 4.21 below.

Table 4.21

Variance Inflation Factors (VIF) and Tolerance for Students' Attitude Domains towards Dance Based on Age Group

Independent Variable	**VIF**	**Tolerance**
Age Group	1.010	.990

Based on the assumptions above, MANOVA analysis can be used to test the differences of the attitude domains towards dance based on the age group. The results of MANOVA is showed below in Table below.

Table 4.22

Multivariate Test of Students' Attitude Domains towards Dance Based on Age Group

Effect	Wilks' Lambda Value	F Value	Hypothesis df	Error df	Sig.	Partial Eta Squared
Age	.963	1.936	6.000	610.000	.073	.019

With reference to table 4.22, the multivariate test results showed that there were no statistically significant differences between the students' age groups on the combined dependent variables of attitudes towards dance, F (6, 610) = 1.936, p =.073 (p > .05); Wilks' Lambda = .963. Thus, hypothesis 3 was accepted.

The differences for each attitude domain will be shown in Table 4.23 with the analysis of a One-way MANOVA. The results will be discussed in detail below.

Table 4.23 showed the results of the one-way MANOVA analysis for the dependent variables separately in the three domains based on the students' age groups. The results indicated that there were no significant differences on the students' attitudes towards dance based on their ages in the three attitude domains, which are cognitive domain, F (2,307) = 2.524, p > .05; affective domain, F (2,307) = 1.173, p > .05 and behavioral domain F (2,307) = .794, p > .05.

Table 4.23

Results of One-way MANOVA on Differences in the Mean Scores for the Students' Attitude Domains towards Dance Based on Age Group

Attitude Domain	Age (Years Old)	N	M	SD	DF	Mean Square	F	Sig.	Partial Eta Squared
Cognitive Domain	< 20	37	3.49	.40	2	.318	2.524	.082	.016
	20-25	192	3.63	.35					
	> 25	81	3.60	.35					
Affective Domain	< 20	37	3.34	.41	2	.227	1.173	.311	.008
	20-25	192	3.33	.46					
	> 25	81	3.37	.40					
Behavioral Domain	< 20	37	3.11	.39	2	.123	.794	.453	.005
	20-25	192	3.16	.40					
	> 25	81	3.10	.38					

N = Sample; M = Mean; SD = Standard Deviation

Furthermore, mean scores and standard deviations were used to demonstrate the students' attitudes towards dance as a physical activity. From table 4.23, students between 20- 25 years old had higher mean scores on the cognitive and behavioral domain, which were (M = 3.63, SD = .35) and (M = 3.16, SD = .40) respectively. While, students who were more than 25 years old showed higher mean scores on the affective domain, which is (M = 3.37, SD = .40). Students more than 25 years old scored second highest in the cognitive domain, which is (M = 3.60, SD = .35) followed by students less than 20 years old, (M = 3.49, SD = .40). Students less than 20 years old scored second highest also in the affective domain, which is (M = 3.34, SD = .41) followed by students who were 20-25 years old, (M = 3.37, SD = .40). Meanwhile, Students less than 20 years old scored the second highest in the behavioral domain, which is (M = 3.11, SD = .39) and were followed by students more than 25 years old, (M = 3.10, SD = .38).). Overall, the cognitive domain scored the highest

mean, followed by the affective domain and lastly the behavioral domain for all age groups.

In short, the analysis showed an equivalent results between the cognitive, affective and behavioral domains. There are no significant differences in all the three attitude domains. In short, the null hypothesis (H3) was accepted.

4.3.4 Hypothesis Testing 4: The Differences of Attitude Domains towards Dance Based on Years of Dance Experience

H4: There are no differences in the attitude domains towards dance among students with different years of dance experience. Descriptive statistic shows that there are 168 students that comprised of 54.2%, who had less than 3 years of dance experiences. 75 students comprised about 24.2%, who had 3 to 6 years of dance experience, and 67 students comprised 21.6% of the participants had more than 6 years of dance experience.

MANOVA analysis was performed to investigate the differences in the attitude domains towards dance based on the students' years of dance experience. The independent variable was years of dance experience. Whereas, the dependent variables were the cognitive, affective and behavioral domain. There are few assumptions that need to be achieved before proceeding to the analysis of MANOVA. Normality, homogeneity of variance-covariance matrices, linearity, and absence of multicollinearity were tested for the assumption of MANOVA.

i. Normality

Normality was examined by the analysis of skewness and kurtosis. The values of skewness and kurtosis were ranged in between -2 and +2, which are in the acceptable range as referred to by George and Mallery (2011). The results of skewness and kurtosis are showed in Table 4.24.

Table 4.24

Skewness and Kurtosis of Attitude Domain towards Dance Based on Students' Years of Dance Experience

Attitude Domain	Years of Dance Experience	Skewness	Kurtosis
Cognitive	Less than 3 years	-.532	-.959
	3 – 6 years	-.807	-.069
	More than 6 years	-.882	-.429
Affective	Less than 3 years	.098	-.882
	3 – 6 years	-.472	-.205
	More than 6 years	-.288	-.1.275
Behavioral	Less than 3 years	.123	-.334
	3 – 6 years	.180	.014
	More than 6 years	-.566	-.136

Table 4.24 showed the skewness and kurtosis of the students' attitudes towards dance based on the students' years of dance experience. There are three group of years of dance experience which are: less than 3 years, 3-6 years and more than 6 years. Students who had less than 3 years of dance experience demonstrated (-.532, -.959) for the cognitive domain, (.098, -.882) for the affective domain and (.123, -.334) for the behavioral domain. Meanwhile, students who have 3 to 6 years of dance experience demonstrated (-.807, -.069) for the cognitive domain, (-.472 -.205) for the affective domain and (.180, .014) for the behavioral domain. Whereas, students who had more than 6 years of dance experience showed (-.882, -.429) for the cognitive domain, (-.288, -1.275) for the affective domain and (-.566, -.136) for the behavioral domain. Based on the analysis findings, the values of skewness fell between -.882 and .180. While, the values of kurtosis fell between -1.275 and .014. In short, both skewness and kurtosis values fell within the acceptable range which are between -2

and +2. Thus, the attitude of dance among the university students in the three group of years of dance experience, achieved the assumption of normality and were considered as normally distributed.

i. Homogeneity of Variance

Homogeneity of Variance was assessed by the Homogeneity of Variance-covariance matrices. Box's M Test of the Equality of the Covariance Matrices was used to test the homogeneity of the variance-covariance matrices. The Box's M should be non-significant with the sig. value larger than .001. The analysis of Box's M can be showed as in Table 4.25.

Table 4.25

Box's Test of Equality of Covariance Matrices for Students' Attitude Domains towards Dance Based on Years of Dance Experience

Box's M	F	df 1	df 2	Sig.
15.409	1.262	12	185873.273	.234

The results of Box's M test in Table 4.25 indicated a sig. value of .234, (p > 0.001), which identified that the results was non-significant. In other words, Box's M tested the statistical hypothesis, indicating that the observed covariance matrices of the dependent variables are equal across groups. Thus, the assumption of homogeneity of variance-covariance matrices was acceptable.

ii. Linearity

Linearity refer to the linear relationship between the independent variables and the dependent variables. Test of linearity with the sig. value of deviation > 0.05, indicates that there is a linear relationship between the variables as shown in table 4.26 below.

Table 4.26

Test of linearity for Students' Attitude Domains towards Dance Based on Years of Dance Experience

Deviation from Linearity					
Attitude Domain	***SS***	***df***	***MS***	***F***	**Sig.**
Cognitive	.026	1	.026	.205	.651
Affective	.036	1	.036	.190	.663
Behavioral	.017	1	.017	.113	.737

Based on the table above, values sig. deviation from the linearity of .651 > 0.05 for the cognitive domain, .663 > 0.05 for the affective domain and .737> 0.05 for the behavioral domain, it can be concluded that there are linear relationships between the variables of students' attitude domains with the years of experience.

iii. Absence of multicollinearity

Multicollinearity can be assessed by computing the statistics of collinearity. The value of variance inflation factors (VIF) that is less than 4.0 and a tolerance greater than 0.2, indicates the absence of multicollinearity. Thus, there is an absence of multicollinearity based on the years of experience variable as the value of VIF is 1.065 <4.0 and value of tolerance .939 > 0.2 as shown in table 4.27 below.

Table 4.27

Variance Inflation Factors (VIF) and Tolerance for Students' Attitude Domains towards Dance Based on Years of Dance Experience

Independent Variable	**VIF**	**Tolerance**
Years of Dance Experience	1.065	.939

Based on the assumptions above, MANOVA analysis can be used to test the differences of attitudes towards dance based on the years of dance experience. The results of MANOVA is showed below in Table 4.28 and table 4.29 respectively.

Table 4.28

Multivariate Test of Students' Attitude Domains towards Dance Based on Years of Dance Experience

Effect	Wilks' Lambda Value	F Value	Hypothesis df	Error df	Sig.	Partial Eta Squared
Years of Dance Experience	.942	3.024	6.000	610.000	.006	.029

Based on table 4.28, the multivariate tests results shows that there was a statistically significant difference of years of dance experiences on the combined dependent variables, F (6,610) = 3.024, p = .006 (p < .05); Wilks' Lambda = .942; partial eta squared = .029. Thus, the hypothesis 4 was rejected.

The differences for each attitude domain will be shown in Table 4.29 with the analysis of One-way MANOVA. The results will be discussed in detail below.

Table 4.29

Results of One-way MANOVA on Differences in the Mean Scores for the Students' Attitude Domains towards Dance Based on Years of Dance Experience

Attitude Domain	Years of Dance Experience	N	M	SD	DF	Mean Square	F	Sig.	Partial Eta Squared
Cognitive Domain	< 3 years	168	3.58	.36	2	.244	1.929	.147	.012
	3– 6 years	75	3.61	.37					
	> 6 years	67	3.68	.34					
Affective Domain	< 3 years	168	3.25	.44	2	1.241	6.629	.002	.041
	3– 6 years	75	3.38	.44					
	> 6 years	67	3.46	.41					
Behavioral Domain	< 3 years	168	3.07	.39	2	1.055	7.108	.001	.044
	3– 6 years	75	3.16	.37					
	> 6 years	67	3.28	.40					

N = Sample; M = Mean; SD = Standard Deviation

Table 4.29 showed the results of the one-way MANOVA analysis for the dependent variables separately in the three domains based on the students' years of dance experiences. The results indicated that the behavioral domain F (2,307) = 7.108, $p < .05$; partial eta squared = .044 and affective domain F (2,307) = 6.629, $p < .05$, partial eta squared = .041, are significantly different based on the years of dance experiences. In other words, students' years of dance experiences variable was indicated as one of the factors affecting behavioral and affective domains with 4.4 % and 4.1 % of the variance in the dependent variable. Whereas, the cognitive domain F (2,307) = 1.929, $p > .05$ showed that there was no statistically significant difference based on the years of dance experiences.

Furthermore, an inspection of the mean scores indicated that students who had more than 6 years of dance experiences reported higher scores on all the three attitude domains, which were cognitive (M = 3.68, SD = .34), affective (M = 3.46, SD = .41) and behavioral domain, (M = 3.28, SD = .40). In contrast, students who have less than 3 years of dance experiences have lower mean scores on all the three attitude domains, which were cognitive (M = 3.58, SD = .36), affective (M = 3.25, SD = .44) and the behavioral domain, (M = 3.07, SD = .39). Students who have 3 -6 years of dance experience recorded cognitive (M = 3.61, SD = .37), affective (M = 3.38, SD = .44) and behavioral domain, (M = 3.16, SD = .37). The analysis showed an inequivalent result between the cognitive, affective and behavioral domain. Overall, the cognitive domain scored the highest mean, followed by the affective domain and lastly the behavioral domain.

There is no significant difference in the cognitive domain based on the years of dance experience. Whereas, there are significant differences in the affective and behavioral domain. In short, the null hypothesis (H4) was rejected.

Table 4.30

Post Hoc Scheffe's Test on Students' Attitude Domains towards Dance in the Cognitive Domain Based on Years of Dance Experience

Dependent Variable	(I) Years of Dance Experience	(J) Years of Dance Experience	Mean Difference (I-J)	Std. Error	Sig.
Affective	< 3 years	3 – 6 years	-.13	.06	.089
		> 6 years	-.21*	.06	.003
	3-6 years	< 3 years	.13	.06	.089
		> 6 years	-.08	.07	.537
	> 6 years	< 3 years	.21*	.06	.003
		3-6 years	.08	.07	.537
Behavioral	< 3 years	3 – 6 years	-.09	.05	.274
		> 6 years	-.21*	.06	.001
	3-6 years	< 3 years	.09	.05	.274
		> 6 years	-.12	.06	.174
	> 6 years	< 3 years	.21*	.06	.001
		3-6 years	.12	.06	.174

An analysis of One- way MANOVA showed that the affective domain F (2,307) = 6.629, $p < .05$, and behavioral domain F (2,307) = 7.108, $p < .05$ were statistically significant. Table 4.30 showed the Post hoc analyses using scheffe's test which indicated that there was a significant difference between the students who had less than 3 years of dance experience and the students with more than 6 years of dance experience with a mean difference (I-J) = -.21, $p = .003$ ($p < .05$) in the affective domain. Besides, there was also a significant difference between the students who had less than 3 years of dance experience and students with more than 6 years of dance experience with a mean difference (I-J) = -.21, $p = .001$ ($p < .05$) in the behavioral domain.

4.4 Summary

This study was attempted to examine university students' attitude domains towards dance based on their demographic factors, which are gender, ethnic, age group and years of dance experience. SPSS 23 was used to analyze the data. Data analysis revealed the following results:

There were inequivalent results in three attitude domains, which were cognitive, affective and behavior domain based on independent variables such as gender, ethnic and students' year of dance experience. Thus, it is important to achieve the equivalence in these three attitude domains by making certain adjustments. However, the results of the cognitive, affective and behavioral domain were equivalent based on the students' age.

The results showed a significant difference on the students' attitudes towards dance between males and females on the combined dependent variables, F (3,306) = 3.598, p = .014 (p < .05); Wilks' Lambda = .966; partial eta squared = .034. Conventionally, the female students showed a better attitude of dance than the male students in all the three attitudes domains. In particular, there are significant differences between the male and female students in the cognitive domain, but not in the affective and behavioral domain.

The results showed a statistically significant difference among the ethnic groups on the combined dependent variables, F (9,740) = 2.009, p = .036 (p < .05); Wilks' Lambda = .943; partial eta squared = .019. The results revealed that Malay students presented a better attitude of dance than the other ethnic groups in all the three attitude domains. Whereas, other ethnic groups or the minority ethnic groups recorded the lowest mean score in all the three attitude domains. More specifically, there are significant differences between the Malay students and other ethnics,

Chinese students and other ethnics in the cognitive domain, but not in the affective and behavioral domain.

The results also showed that there were no statistically significant differences between the students' age groups on the combined dependent variables of attitudes towards dance, F (6, 610) = 1.936, p =.073 (p > .05); Wilks' Lambda = .963. In other words, the students' age groups did not affect university students' attitude domains towards dance.

The results showed a statistically significant difference of the years of dance experiences on the combined dependent variables, F (6,610) = 3.024, p = .006 (p < .05); Wilks' Lambda = .942; partial eta squared = .029. The findings revealed that the students with more than 6 years of dance experience showed a better attitude of dance compared to students who had less than 6 years of experience in dance. There are significant differences between students with less than 3 years of dance experience and more than 6 years of dance experience in the affective and behavioral domains, but not in the cognitive domain.

CHAPTER 5

SUMMARY AND CONCLUSION

5.1 Introduction

The purpose of this study was to investigate the attitude domains of dance among university students. A survey of related research towards dance attitude had been observed. Nevertheless, there is no single study regarding dance attitude in Malaysia. However, this research will be the first attempt in Malaysia which focuses on students' demographic factors, which are independent variables of gender, ethnic group, age group and years of dance experience towards the attitude domains of dance. The findings of this study are organized as following; (a) Summary of the research, (b) Research finding and discussion, (c) Summary of findings, (d) Implication of the study, (e) Contribution of the study, (f) Suggestion for future research, (g) Conclusion.

5.2 Summary of the Research

This quantitative research focused on demographic factors of students and their attitude domains towards dance. This study utilized the causal-comparative research design. The independent variables are gender, ethnic group, age group and years of dance experience and the dependent variables are cognitive, affective and behavioral domains. Simple random sampling method was administrated in this research. The sample of this study comprised of 310 university students who enrolled in co-curriculum courses within the cultural and sport components. An instrument on students' attitudes towards dance was developed to answer the research questions.

A number of statistical analysis were administrated to analyze the data gathered in the research. Descriptive statistics analysis including mean and standard deviation were administrated in this study to answer research question 1. One-way

MANOVA was used with certain assumptions achieved. The results revealed that students show positive attitude towards dance in three attitude domains with the highest mean score in the cognitive domain, followed by the affective domain and lastly the behavioral domain. Furthermore, there are significant differences in the students' attitudes towards dance based on gender, ethnic and students' year of dance experience. However, students' age group didn't bring any differences towards the dependent variables.

5.3 Research Finding and Discussion

This study was aimed at answering the research questions and obtain the study objectives. The discussions on each research questions will be organized accordingly.

5.3.1 Students' Attitude Domains towards Dance as Physical Activity

Research question 1: *What are the attitude domains towards dance as a physical activity among university students?* The researcher has identified the students' attitudes towards dance in three attitude domains, which are cognitive, affective and behavioral domain and each item in the attitude domains. Generally, three attitude domains obtained mean scores that were higher than 2.5. Cognitive domains achieved the strongest positive attitude, followed by the behavioral domain and lastly the affective domain as shown in Table 4.1. The mean scores range in the affective domain is the largest. While, the mean score range in the behavioral domain is smaller than the affective domain. Lastly, the cognitive domain has the smallest mean score range. In short, the analysis revealed the following results:

1. University students showed a positive attitude towards dance in all the three attitude domains, such as cognitive, affective and behavioral domain.
2. Students showed greater positive attitude in the cognitive domain, followed by the behavioral domain and lastly the affective domain.

3. Cognitive domain obtained the highest positive attitude of dance with the perception that dance is for both genders.

Negative item “Boys should not dance”, obtained the highest mean score in the cognitive domain that showed the strongly disagreement among the university students towards the statement. The result is allied with the second highest mean score of the negative statement “Dance is only for girls”. In other words, current research reveals that university students strongly agree that dance should be for both boys and girls. They are open minded to view dance as a physical activity, which is suitable to be participated or involved by both genders. The result also showed a strongly positive attitude towards males who were involved in dance activity and denied that dance is only for females. The result proved that the university students are open-minded and ready to accept dance as a physical activity regardless of gender perception.

The results are contradictory with previous researches which defined that dance is stereotypical as women’s activity, feminine and inappropriate for men (Björling, 2005; Thomas, 1996; Vlašić et al., 2012). Typically, dance education is designed for the female adolescents (Sanderson, 2001). In American universities, dance is part of women’s physical education program but not for men (Van Dyke, 1996). From that point of view, Ajzen’s theory of planned behavior have emphasized the influence of attitude and subjective norms on students’ intentions to participate in dance. Students’ attitudes and perceptions of the social pressures that does not encourage male to be involved in dance activity, may lead male students to avoid from participating in dance. Thus, it is important for students to evaluate dance activity positively with their important acquaintances, such as their peers, family and community that motivates, encourages and expect them to participate in dance.

Besides that, university students show a great positive attitude in the cognitive domain. They have an optimistic thought, belief, perception, idea and knowledge towards dance as a physical activity. They have a strong belief that dance can enhance healthy lifestyle, improve body fitness and create a feeling of comfort. They perceived dance as a good form of exercise. Moreover, it is fun and enjoyable. In short, university students perceived dance as one of the physical activity that brings multiple benefits. Yet, it is suitable for both males and females. More specifically, university students strongly disagreed with the cognitive negative item "Dance does not keep you healthy". Undoubtedly, dance brings about multiple health benefits in term of the physical and physiological dimensions. The benefits of dance includes the enhancement of aerobic power, muscle endurance, strength and flexibility, balance, agility, spatial awareness, and well-being (Alpert, 2010; Keogh et al., 2009). Moreover, dance can enable the decrease of students anxiety (Lesté & Rust, 1990). Additionally, dance is able to strengthen one's posture and cardiovascular endurance as well as decrease psychological distresses (Monte, 2017). Obviously, dance is a good form of exercise that helps to keep healthy.

Thus, it is important to promote dance activity in various forms to students from different backgrounds. For example, Zumba, aerobic, and line dance are more appropriate for students who prefer or feel more comfortable with dance routines; hip hop, modern and contemporary dance most probably will attract students who like to face challenges, active and those who would like to develop certain dance skills. On the other hands, classical dance, traditional dance, and folk dance are more emphasized on cultural issues and ethnicity. In short, different dance forms will attract different people. So, it is important to promote dance by knowing students' background, preference and their attitude towards dance.

From the perspective of affective domain, negative item "I do not like to dance." obtained the highest mean score that showed a strong disagreement towards the statement among the university students. In other words, university students expressed emotionally that they like to dance very much. They feel happy and enjoyable when they participate in dance. Dance can be a medium to express oneself feeling, it serves as a tool to express one's life in their own. Based on the information by Behera and Rangaiah (2014), dance as a tool to express emotion and feeling through body movement and gestures. Furthermore, dance significantly helps to escape from stress through a change in emotion (Kulinna et al., 2018).

Besides that, previous researchers in the affective domain have revealed that dance as a movement therapy is able to help in the decrease of depression feelings (Kuettel, 1982; Punkanen, Saarikallio, & Luck, 2014) and enhance the development of emotional skills (Panagiotopoulou, 2018; Pereira & Marques-Pinto, 2018). Thus, dance might be one of the physical activities that helps them to decrease their anxiety and stress in their life. Particularly, the use of aerobic can be seen as a way to cope with stress (Anshel, 1996). This was supported by previous researches which revealed that low-impact aerobic dance exercise statistically decreases the stress among sedentary females, specifically in Malaysia (Mastura, Omar Fauzee, Bahaman, Rashid, & Somchit, 2012). Based on the study of Leelarungrayub et al. (2011), aerobic dance exercise at a moderate intensity and duration can improve blood oxidative stress status and increases interleukin-2. Moreover, there are significant positive changes for aerobic dance participants in their mood states (McInman & Berger, 1993; Netz & Lidor, 2003)

The students however moderately disagreed with the affective negative item "I do not like it when I cannot follow a dance rhythm". This statement obtained the

lowest mean score in the affective domain. Based on the statement, the students learn the dance patiently. They never give up despite the fact that they are facing difficulties in following the dance rhythm. This could be attributed to the attainment of satisfaction through dance. This were allied to previous researches which revealed that physical activities could include warm-up movements, fitness dance and street dance reduced trait anxiety levels and improved life satisfaction (EsentÜRk, Yilmaz, Yarimkaya, & İLhan, 2017). Moreover, with reference to Gökyürek (2016), the higher the students' life satisfaction level, the more positive their leisure attitude will be when they participate in dance. Overall, university students respond affectively that they like to dance and they feel happy and comfortable when they dance. Besides that, they also enjoy dance performances.

Negative item "I avoid dancing" obtained the highest mean score in the behavioral domain that showed its strongly disagreement among the university students towards the statement. In other words, university students show in actions, intention or behavior that they do not avoid dancing. This could be attributed to the attractive teaching method that enhances students to participate in dance. Plenty of researches had been discussing on the teaching method towards dance activities and their motivation in dance participations (Amado, Del Villar, Sánchez-Miguel, Leo, & García-Calvo, 2016; Amado et al., 2017). Regarding insights from the work of Amado, Del Villar, et al. (2016) creative techniques have caused adaptive consequences on the male gender and dis-adaptive consequences on the female students. However, female students showed a higher motivation and positive psychological consequences compared to the male students in the teaching and learning of dance that is based on creativity (Amado et al., 2017).

On the other hand, negative item "I would only take a dance class when it is required" obtained the lowest mean score in the behavioral domain, which shows a moderate disagreement among university students towards the statement. University students express their behavior, experience, actions, intention or verbal statements regarding future behavior, that they do not take dance classes when it is required. In other words, they participate in dance activities without any enforcement. Besides that, they also attend to dance performances, encourage others or follow their friends to take dance classes, dance regularly, perform to others and express their feelings through dance.

In conclusion, university students express a positive attitude towards dance in all the three attitude domains, which are cognitive, affective and behavioral domain. However, cognitive domain obtained the highest mean score, followed by the affective domain, and lastly the behavioral domain. They have a very positive belief, thought, perceptions, attributes, ideas and knowledge towards dance as a physical activity. But, their behaviors, experiences, intentions, actions and verbal statements regarding future behaviors is less aggressive as compared to their thoughts and feelings. Thus, it is important to promote dance since the student perceived dance positively. Moreover, physical activity is gradually less preferred (Nicholson, 2004), and dance becomes an option for students to enhance their fitness level and improve their healthy lifestyle.

5.3.2 Students' Attitude Domains towards Dance Based on Gender

Research question 2: *What are the significant differences in attitude domains towards dance between male and female students?* The result of the inferential analysis indicated that there is a statistically significant differences between male and female students' attitude domains towards dance. One-way MANOVA analysis identified

that the independent variable of gender significantly showed differences in attitude towards dance in the cognitive domain. However, there were no significant differences in the affective and behavioral domains based on gender. In short, the analysis of the data revealed the following findings:

1. Female students significantly showed better attitudes towards dance compared to male students in the cognitive domain.
2. There are no significant differences between male and female students in the affective and behavioral domain.
3. There are in-equivalences in the attitude domains towards dance based on gender.

From the result, female students significantly show a greater positive attitude than male students in the cognitive domain. In other words, female students have better perceptions and belief towards dance compared to male students. The results is consistent with previous researches in the cognitive domain (Risner, 2014; Sanderson, 2001; Vlašić et al., 2012). Unsurprisingly, results of the current study agrees with those stated earlier in previous researches, that female students demonstrated more positive attitude towards dance and showed higher personal interest in dance than male students (Bo et al., 2003). Based on the concept of attitude formation, it is crucial to take the conventional and cultural context that surrounds us into consideration. The conventional and cultural context as a main factors that affect our attitudes in the cognitive domain towards dance. The conventional and cultural context that is surrounded by people or environment which states dance as feminine (Björling, 2005; Kraus et al., 1991; Messner & Sabo, 1990), not a serious activity and

less attention was given to dance activity (Mattsson & Lundvall, 2015) were responsible for the negative beliefs, thought, perception and stereotypes towards dance, which labeled dance as a physical activity that is not suitable for male students and that it is less important.

Physiological characteristic also affects students' attitudes towards dance. Female students normally perform better flexibility than male students. This characteristics encourages female students to participate more actively in dance activity or other similar activities that requires flexibility, such as gymnastic, ballet and acrobatic. This was supported by previous researchers which revealed that female students were significantly superior to male students in flexibility (Bale, Mayhe, Piper, Ball, & Willman, 1992). Flexibility is one of the important requirement for dancing (Deighan, 2005). Dancers with better flexibility will be able to reach a wide range of movement and will also be able to challenge their possibilities of body movements. Unfortunately, generally, males perform more lack of flexibility compared to females. This reason is challenging, and it discouraged them and affected their motivation in dance participation. Thus, male students are more motivated to get involved in other physical activities that requires less flexibility and more strength. The phenomena has reflected that females are more actively involved in dance activity compared to males, and this will also influence the male students' perception towards dance.

There are no significant differences on the affective and behavioral domain towards dance among male and female students, although female and male students have a significant difference in their perceptions and beliefs towards dance. This could be attributed to the pedagogical practices. Pedagogical practices, which includes teaching strategies, have a great impact on students' interest, engagement, and

achievement in school. This statement was supported by Deighan (2005) in the study of redesigning pedagogy for boys. The finding showed that the altered pedagogical practices resulted in increasing the students' engagement. Based on previous research Folsom Meek (1992), male students showed attitudes towards physical activity that were challenging and risky; whereas female students showed more favorable attitudes towards physical activity that emphasized aesthetics. Thus, teaching techniques towards dance could also be taken into consideration when applied to different genders. Amado, SÁNchez-Miguel, et al. (2016), voiced out the importance of understanding the gender differences in dance participations when different teaching method were used. Thus, they suggested that the teachers may need to apply a different treatment, intervention or teaching method depending on the characteristic of male and female students.

Besides that, the result also could be attributed to dance presented as a physical activity in the university. Dance can appear in many forms, such as the form of serious art, recreation, competition, sport, entertainment as well as physical activity. Dance as a physical activity is similar to sport that requires domain-specific skills, strength, endurance, flexibility, practice and training (Nieminen, 1998). It is regardless of gender. For example, aerobic, hip-hop and Zumba are the popular dance activities among university students for both females and males. Additionally, Warwick Arts Centre launched the "Boys Dancing" project in 2005 that was aimed exclusively at males to challenge the typical perception towards dance which is particularly for females (Holdsworth, 2013).

Furthermore, campaigns and conferences have been organized to promote the participation of dance for both genders. For example, the National Dance Education Organization (NDEO) facilitated discussion through Special Interest Group (SIGs).

An article was described as the “Men in Dance: Bridging the Gap”, in the event to get attention on problem men in dance (McGreevy-Nichols & Dooling-Cain, 2017). Campaign and conferences of dance education encourages male students to embrace the notion of dancing as an acceptable and masculine activity by introducing them to the dance concepts and challenging the social stereotypes, which have stated that dance is an inherently feminine activity. Thus, male students reconstruct the ideas of dance and then get inspired to participate in dance activities. For example, an intensive dance course entitled: Movement for Men, was particularly designed for male students to challenge their stereotype of men participation in dance by imprinting that the ideas of dance can be masculine as well (Soriano, 2010). Thus, it is important to have sufficient arts or dance scholars, dance educators in various dance forms and research resources to promote the involvement of dance among university students regardless of the gender.

In short, the attitude of dance in the cognitive domain is not allied to the affective and behavioral domain based on gender. Based on Rosenberg and Hovland (1960) consistency theories, it is important to achieve consistency between the cognitive and affective domains of an attitude. In this case, certain adjustment should be done in order to achieve an equilibrium between the domains. The belief of “dance is appropriate for both genders”, as this should be imprinted in our young generation by introducing different types of dance as a physical activity at the universities, such as hip hop, street dance, Zumba, aerobic, line dance, contemporary and modern dance, that are enjoyable and give feelings that are comfortable for both genders. Moreover, different types of teaching strategies that are based on the characteristic of male and female students is important and should be taken into consideration in promoting dance for both genders. A favorable type of dance and an appropriate teaching strategy

will encourage the students to take dance classes and hence inspire friends around to participate in dance as well.

In other words, the conventional and cultural context have given impact on the students' perceptions and beliefs towards dance based on the gender variable. However, their stereotypes towards dance do not make any differences towards their affective and behavioral responses. Female and male students still express positive feelings and emotion towards dance. Also, they are showing good behavioral responses towards dance.

5.3.3 Students' Attitude Domains towards Dance Based on Ethnic Group

Research question 3: *What are the significant differences in attitude domains towards dance between Malay, Chinese, Indian and other ethnic minority students?* Descriptive statistics showed that Malay students' mean scores are higher than other ethnics in all the three attitude domains. The results of the inferential analysis indicated that there is a statistically significant differences between ethnics in students' attitudes towards dance. One-way MANOVA analysis identified that ethnics attained statistically significant differences in the cognitive domain. However, there are no statistically significant differences between ethnics in attitudes towards dance for the affective and behavioral domains. In short, the analysis of the data revealed the following findings:

1. Malay students significantly showed a better attitude among other ethnic groups in the cognitive domain.
2. There are no significant differences among ethnics in the affective and behavioral domain.

3. There are in-equivalences in the attitude domains towards dance between the cognitive, affective, and behavioral domain based on student's ethnic group.

The findings showed significant differences in the cognitive domain. In other words, the university students expressed that there are significant differences on their perceptions and beliefs towards dance based on their ethnic groups. From the finding, Malay students expressed greater perceptions and beliefs towards dance compared to other ethnics. Risner (2014), pointed out that ethnicity is one of the factors that causes dance's marginal status, in which most of the ballet companies in the United States are formed by white American. However, there are lack of information that discusses on students' attitude of dance in a multi-racial country, like Malaysia. But, there are connections between race, ethnicity and culture in Malaysia dances.

Malay students showed better attitude towards dance in the cognitive domain and this could be attributed to the Malay cultural context that is enriched by a variety of dances and were widely promoted in the university campus. There are no significant differences in the affective and behavioral domain based on students' ethnic groups, although they have differences in their perceptions, beliefs and thoughts towards dance. Students from different ethnics showed the same attitude in the affective and behavioral domain. They expressed positive feelings and emotions towards dance. They also showed good intention and demonstrated good experience, past behaviors and actions in the behavioral domain. The finding could be attributed to the Malaysia's multi-racial, multi-ethnic and multi-cultural environment that shapes diverse dance forms in Malaysia. Three major ethnics form Malaysia, which are Malay, Chinese and Indian. Each group has different cultures, yet they live peacefully and in harmony under the same roof. Malay is identified as the largest

ethnic group, followed by the Chinese, Indian and others minority ethnic groups. Each of the ethnic groups practices their own culture, customs as well as their own dance forms. For example, *Tarian Asli, Tarian Inang, Tarian Joget* and *Tarian Zapin* for Malay; Chinese classical dance, such as sword dance, long-sleeve dance and ethnic dance, such as *Yang Ge* and flower lantern dance for Chinese; *Bharatanatyam, Kuchipudi, Oddisi* and *Kathak* for Indian. The environment that is enriched with multi-cultural freedom encourages the diversity of dance in Malaysia. This unique environment has created an opportunity on sharing diverse identity among ethnics. Other ethnics are able to experience or learn different type of dance forms other than their own dance forms. Furthermore, they are also learning on how to appreciate other dance forms and cultures.

Besides that, the existence of government and non-government organizations that promotes dance could also encourage the students to be attracted to dance. For example, Cultural, Arts and Sport Department under Kuala Lumpur City Hall was established to encourage people to participate in cultural, arts, sporting and recreational activities. Furthermore, The National Department for Culture, also known as *Jabatan Kebudayaan dan Kesenian Negara* (JKKN) has established a resource center for arts and culture which gathers all reference materials to support researches that can be accessed by the arts and cultural researchers, university students, primary and secondary school students as well as individuals. Moreover, the non-government organizations and dance groups that promote different types of dance have flourished the environment and inspired the younger generation to participate in dance. For example, Ramli Ibrahim from Sutra Dance Theater, a well-known Indian classical dance practitioner transcends the ethnic and religious boundaries in an Islamic state

to appear as one of the foremost advocates of the classical Indian dance forms, namely *Odissi* in Malaysia (Thiagarajan, 2017).

Malaysia is unique with its multi-cultural and multi-ethnic identity. Students from all ethnics showed great attitude in the affective and behavioral domain, and this could attribute to this flourish cultural context and background that can give opportunity for students to understand, experience, participate and appreciate not only their own ethnics' dance forms but also other ethnics' dance forms.

Additionally, The Ministry of Education (MOE) has established Malaysian Arts School (*Sekolah Seni*) to develop the potential of individuals in a balanced and integrated manner through a planned and systematic arts education program. Currently, there are four Arts Schools situated in Johor, Perak, Kuala Lumpur and Kuching. One of their mission is to promote the participation of students in arts activities that includes music, dance, theater and visual arts. The students who enrolled in the Malaysian Arts School were given more opportunity to learn, explore and practice a diversity of the cultural dances of Malaysia. Consequently, they will be more open-minded, present a better attitude towards dance and engage in dance activity when they enter the university. Furthermore, this group of students who are exposed to dance activity play a main role to encourage and inspire their peers in the university.

Besides that, the findings could be attributed to event or festival that are organized by the university, which encourage the students to participate aggressively in their preferred art forms. One of the biggest festival in University of Malaya named as: Festival Seni UM (FESENI), has motivated the students to represent their residential college and participate in various arts competitions. FESENI is an annual festival that consists of numerous art competitions that promotes multi-cultural

performing arts, such as *Tarian Traditional Kebangsaan, Tarian Traditional Cina, Tarian Traditional India, Tarian Kreatif, Boria* and others art forms, for example, music and poetry. Thus, FESENI serves as a great platform for university students to involve in dance. The students in the university are welcome to take part in any dance forms regardless of their ethnicity. Apart from that, FESENI also inspires the audiences, particularly those who have never been expose to any kind of dance activity. The students as audience also might form a good attitude towards dance after watching the competitions' performance presented by their peers.

In short, the attitude of dance in the cognitive domain is not allied to the affective and behavioral domain based on students' ethnic group. Certain adjustments should be done in order to achieve an equilibrium in all the three attitude domains. In other words, Malay students have showed a significantly positive attitude in the cognitive domain. However, this did not affect the other ethnics' positive affective and behavioral responses towards dance. The uniqueness of multi-cultures and multi-ethnicity in Malaysia should promote cross-culturalism by sharing their own cultures to other ethnic groups. So that everyone in Malaysia can experience different types of dance forms, especially university students. By exploring and experiencing other cultures, particularly in dance, this will give the students a better understanding towards the culture of different ethnics as well as their historical story.

5.3.4 Students' Attitude domains towards Dance Based on Age group

Research Question 4: *What are the significant differences in the attitude domains towards dance among students in different age group?* The result of the inferential analysis indicated that there were no statistically significant differences among age groups in the students' attitude domains towards dance. One-way MANOVA analysis identified that the independent variable of age group showed no significant

differences in all three attitude domains. In short, the analysis of the data revealed the following findings:

1. Age group was not a variable that affects students' attitudes towards dance in these three attitude domain.
2. There are equivalences in the attitude domains towards dance, which are cognitive, affective, and behavioral domain based on age group.

Current findings showed that there are no significant differences in the results with regards to all three attitude domain based on the age group. The finding could be attributed to the small age range of university students in this study. The small range of students' age might cause them to go through the same training, same program and same experience under the same educational system. Thus, this batch of students have no significant differences on their attitude of dance based on their age group. Furthermore, Oskamp (1977) also pointed out that the physiological factors play a crucial role in the development of attitude. From the perspective of the physiological factors, majority of the university students with an average age range between 20-25 years old were fully grown and have reached their maximum strength. Thus, they have almost the same level in their body mechanisms that works to keep their human body alive, functioning and involved in physical activities.

Moreover, Most of the university students stay in the campus of the university. They spend almost all the time with their peers rather than their parents. Thus, their coursemates, college residential peers, roommate and friends are their best and intimate companions in their age group. So, besides parent influence, peer influence is a main factor to influence their engagement and involvement in physical activity. For example, if a student mingles with a group of friends, who have a positive attitude

towards dance, involves actively in dance activity, they will encourage and invite their friends to join the activity as well. Conversely, if they mingle with people who don't like to join a physical activity, then most probably their friends around also will be reluctant to get involved in any type of dance activity. It is important for them to encourage each other on the continuity of involvement in dance as a physical activity. This statement was supported by previous research on the involvement of physical activities that is influenced by peers (Barkley et al., 2011; Brown, Frankel, & Fennell, 1989).

Thus, a small gap of age group and peers influence, most probably would cause no significant differences in the students' attitude domains towards dance. Based on previous research, the attitude towards Physical Education and physical activity were declined with ages (Janauskas, 2013; JuriŠIn et al., 2017). Moreover, there are more than half of the university students who do not involve in any physical activity (Milanović et al., 2013), and the participation of dance also have been declined over time in England (Vassallo et al., 2018).

5.3.5 Students' Attitude Domains towards Dance Based on Years of Dance Experience

Research Question 5: *What are the significant differences in attitude domains towards dance among students with different years of dance experience?* The result of the inferential analysis indicated that there were statistically significant differences in the students' attitudes towards dance in the affective and behavioral domain based on the students' years of dance experience. One-way MANOVA analysis identified that the independent variable, year of dance experience significantly showed difference attitude towards dance in the affective and behavioral domain. However, there were no significant

differences in the cognitive domains based on the students' years of dance experience. In short, the analysis of the data revealed the following findings:

1. Students with more than 6 years of dance experience showed significantly better attitude towards dance in the affective and behavioral domain compared to students with less than 6 years of dance experience.
2. There are no significant differences among students with different years of dance experiences in the cognitive domain.
3. There are in-equivalences in attitudes towards dance between the cognitive, affective, and behavioral domain based on the students' years of dance experience.

The findings showed that the students who had more than 6 years of dance experience represented a better attitude in the affective and behavioral domain compared to students who had less than 6 years of dance experience. In other words, students with more years of dance experience will show better attitude towards dance. They show positive feelings and emotional responses towards dance. Experienced students indulge themselves better in the dance movements, feel happy, enjoyable and are satisfied when they participate in dance. Besides that, they also respond positively in terms of behavior, such as their past behavior, experience, intention and verbal statements regarding their future behavior. They behave aggressively in dance activities, encourage their friends to participate in dance and also take any opportunity to dance and perform to others. However, the result is contradictory with previous researches. Based on Nieminen and Varstala (1999), their research have revealed that the years of dance experience was not allied to the attitude towards dance.

Based on the attitude formation, Oskamp (1977) pointed out that personal experience is one of the main factors in developing the students' attitudes towards a certain object. Thus, an enjoyable and memorable past experience towards dancing may lead to the formation of positive beliefs towards dance. Then, the positive beliefs towards dance may determine their responses to engage in dance activity as shown in Figure 2.1. Thus, previous positive experience in dance is considered crucial as one of the factors to influence their dance participation in the future.

Besides that, learning approaches in the attitude change theory also emphasized on the stimulus-response connections. Being informed by Hovland, Janis, and Kelley (1963), practice and incentive are the factors that causes an attitude change. Reward and reinforcement are the main motivations needed to get engaged in certain responses. Thus, appropriate learning approach in previous learning experience may engage students' participation in the future. According to Goulimaris (2016), the finding showed that the greater the experience and number of weekly participation, the greater the knowledge and information they acquire which will influence the participants' attitudinal loyalty to recreational dance.

Current finding that showed significant differences in the results regarding the affective and behavioral domain based on years of dance experience, which could be attributed to the students' engagement with enlightened dance teachers or educators that had given them a wonderful and pleasurable experience in dance. These great experience of dance have been imprinted in the students' memories, which could later form a positive attitude of dance in them when they continue their dance activity in university. Dance educators or teachers should always incorporate creative processes instead of rigid and conventional teaching methods into their practice.

In short, the attitude of dance in the cognitive domain is not allied to the affective and behavioral domains based on the years of dance experience. Certain adjustment should be done in order to achieve an equilibrium in all the three attitude domains. Students should be encouraged to participate in any types of dance activity right from their young age. The positive past experience is the main key to get them keep moving their body and maintain a healthy lifestyle.

5.4 Summary of the Findings

Overall, female students showed better attitude in the cognitive domain towards dance compared to male students, and there are no differences between male and female students' attitudes in the affective and behavioral domain. Malay students also demonstrated more positive attitude in the cognitive domain than other ethnics but no differences was found in the affective and behavioral domain among ethnics. Moreover, students with more than 6 years of dance experience showed a better attitude towards dance in the affective and behavioral domain compared to students with less than 6 years of dance experience. But, there are no differences in the cognitive domain based on years of dance experience. Besides that, the independent variables of students' age groups have no differences in the students' attitude domain towards dance. This research also showed that there are inequivalent attitude of dance among the cognitive, affective and behavioral domain based on gender, ethnic and years of dance experience. Thus, certain adjustments on particular attitude domains are important to achieve the equilibrium in all the three attitude domains that will approach the student's engagement in a dance activity. Furthermore, the research findings serve as a guidance for people in related fields to understand students' attitude of dance based on their demographic data.

Each independent variable has demonstrated differences in the attitude domains towards dance. The tripartite theory of attitude endorsed the three components of attitude, which are cognitive, affective and behavioral domain. However, (Ajzen & Fishbein, 2000)revealed that some attitudes are based more on one type of information, either affective response or people's beliefs and thoughts about the attitude object. In this study, independent variables, gender and ethnic were reported to have had no differences in the affective domain. Overall, they showed positive responses in the affective domain regardless of their gender and ethnic. Whereas, the independent variable, years of dance experience was reported to have attained no differences in the cognitive domain. The students have positive beliefs and thoughts towards dance regardless of their dance experience. In short, attitudes towards dance are based primarily on the affective responses.

5.5 Implication of the Study

The following are some of the implications for parents, dance teachers or educators, individuals, society, ministry of education and the government.

5.5.1 Implication for Parents

Parents play the main and first role model in children's physical activity. Family members that are actively engaged in physical activities will most likely influence their children to involve in physical activities as well. Thus, parents should model healthy physical activity behaviors by being active themselves. Furthermore, establishing healthy physical activity behaviors in early childhood is crucial in their future performance on a particular activity. Based on the findings, students who exposed themselves to more years in dance activity will have a better attitude towards dance. Thus, it is important for parents to encourage and expose their children in dance

activity right from when they were young. Parents should improve their knowledge of dance activity and increase their awareness of the benefits of dance activity.

Parents are also encouraged to participate and interact with their children in dance activities such as social dance, line dance, and Zumba. The participation of parents in the children's learning process will give a physical and mental support for their children, and then will motivate their children in learning and participating in dance. Besides, parents need to be aware and always keep observing what kind of dance activity their children are interested in and try to access that related dance activity. In sum, the positive attitude of dance that had been from young age will lead them to be an active student involved in dance activity at the university.

Besides that, parents are the important ones to create an unforgettable and enjoyable experience to their children. The past experience with the present stimulus situation will determine their responses towards a certain object. The great and positive experience in dancing is more likely to influence the students' engagement in dance. This is important to help in achieving the consistency among three attitude domains too.

5.5.2 Implication for Dance Educators or Teachers

Educators or teachers are the second role model after the students' parents. Dance educators' adequate knowledge in dance education is important in educating the students regarding the significance of participating in a dance activity. Teachers act as a mentor and should develop an effective teaching of dance skills and also identify the styles of teaching and learning that optimizes the students' interest and frame a positive attitude towards dance. They should use appropriate and flexible teaching styles to structure a dance class that is suitable to the students, as all the students have

different abilities, strength, and ways of learning. In short, there is a necessity of improving the teaching methods within the university level education system.

The present research is the first attempt to study students' attitude domains towards dance. It serves as a starting point in understanding students' attitude domains based on their demographic data. Thus, the information that is obtained from the study might give dance educators or teachers some guidance on their lesson plan and teaching method so that it can be appropriate and effective for their students that are learning dance. In short, this study is significant to provide some empirical data for future research, educational planning, lesson planning, teaching method and also serve as a reference for dance teachers and educators.

By increasing the understanding between students' attitude domains towards dance and demographic factors, dance teachers may come out with an appropriate teaching method, creating fun, challenges and safe learning environment. Dance teachers play an important role in providing a positive reinforcement and foster an enjoyable, challenging atmosphere for learning and experiencing dance. Teachers also are suggested to offer challenges for the students that will raise them to the next level. Besides, it is important to make all the students, regardless of their ability level, feel included in the class by engaging in an appropriate relationship and also encourage reluctant male participants to dance in ways that are considered "cool" and fun. Teacher should introduce choreographs masculinity movements for male students who are involved in dance. The performances of athletic-coded masculinity will break the typical perception of dance as said to be feminine and not suitable for male students. Besides, dance teachers or educators should engage in modeling a healthy lifestyle, be passionate in their career and patient in their teaching by encouraging and motivating their students to engage in dance.

5.5.3 Implication for Individuals

Students should always be aware of dance activity that happens in university campuses. There are many opportunities to get involved in dance activity such as arts festival, cultural performance, physical activity that promotes dance and also co-curriculum subjects with variety of dances. Students should be open minded to explore different types of dance. They can choose a particular dance that they are interested in, deepen the dance skills and progress to the next level. Besides that, they should encourage their peers to participate in dance activities too as dance can help them to decrease stress in study. They should help and motivate each other when someone have difficulties in learning the dance steps or facing problems in following the rhythm of music while dancing. Also, they should surround themselves with people who have positive attitude and hold a strong passion and interest to dance. Furthermore, they should also be responsible to themselves by establishing appropriate disciplines in learning dance. First, setting up a realistic and specific goals. Then, monitoring a dance activity regularly, which can be once a week or twice a week. Also, recording down the learning progress regularly so that they know the achievements and keep moving towards it.

Based on this study, the affective domain have more influence than the cognitive and behavioral domain. Thus, it is important that students who participate in dance feel enjoyable, happy and have fun when dancing. Besides that, other feelings and emotional responses such as the level of confidence, level of satisfaction and self-esteem should be taken into consideration.

5.5.4 Implication for the Society

The society plays a vital role in promoting dance activity. The society should hold an open minded and positive attitude towards dance activity by instilling the ideas of

dance that is not only for females but also for males. Based on this current study, female students significantly showed better attitude than male students toward dance in the cognitive domain. In others words, female students hold a better belief, thoughts, perception and knowledge towards dance compare to the male students. Thus, the society should be educated and gain knowledge in dance so that people can think beyond the traditional belief towards dance. The society should encourage the students, especially male students to participate in dance activities. An ideal society is one that gives opportunity to every individual to grow healthy physically and mentally. They can establish a dance society to provide a platform to promote dance and gather the people who are interested in dance. Besides that, they can also organize some activities and events, such as regular dance classes, dance workshop, dance festival and collaboration with other societies. The whole society plays an important role to create a healthy environment that promotes dance activities.

5.5.5 Implication for Ministry of Education

The Ministry of Education should revise the status of dance as important as other physical activities. Dance is part of the physical education curriculum, unfortunately, there is too little attention given and only plenty of time is devoted to dance. Furthermore, the intangible status of dance has deprived the students from the benefits of participating in the dance activity. Thus, it is important to restate the significance of dance by developing an appropriate policy that is able to guide the implementation of the dance activity.

In the drive for the dance implementation, the Ministry of Education should ensure equitable access to quality and relevant dance education or activity to all students regardless of their demographic variables, such as gender, ethnic and age. Thus, it is important to coordinate the training of dance teachers and educators in order

to conduct the dance class professionally, yet effectively. The effectiveness of educators' and teachers' teaching skills are able to influence and improve students' attitudes and behaviors towards dance. Based on assertions by Blazar and Kraft (2017), teacher practices such as teachers' emotional support and class organization are factors that influences the students' attitudes and behaviors towards certain subjects.

Besides that, the Ministry of Education should develop a strategy in the dance educational contexts to improve the teachers' support and students' engagement. It is vital important in helping to improve the attitudes of student towards dance. Furthermore, schools, institutes or universities can encourage male students to participate in dance by making a connection between dance and sport as suggested in previous research by Crawford (1994).

5.6 Contribution of the Study

The aim of this study is to investigate the students' attitude domains towards dance activity based on their demographic factors. Most studies have focused on the physical activity or physical education and less attention have been given to dance activities although it is also part of the physical activity. Moreover, the study on the attitude of dance based on demographic factors have not been found in Malaysia. So, this current study serves as the first study on students' attitude domains towards dance. Thus, the contribution from this study is wide and immense in scope. This current research is considered as the starting point in studying the attitude of dance.

It provides a reference of the dance attitude domains based on demographic factors. Since research in these areas is relatively new and the related literature is still limited, thus, this study has contributed to the literature reference on the attitude domains of dance among university students, particularly in our multi-cultural and

multi-ethnic context. It serves as a guideline for other researchers, scholars or students who are interested to study students' attitude of other similar physical activities, such as gymnastic, Zumba, yoga.

It also provides a relevant basis for the Ministry of Education, policy makers and program planners to develop appropriate dance programs or activities in university campuses by taking the students' dance attitude domains and their demographic factors into consideration. It is important to understand the attitude domains of dance among students before the implementation of dance activities. Based on the finding as referenced, related organizations can look at the current issues and sort out an applicable system, strategize to improve the students' attitude domain towards dance.

Besides that, it also serves as a guideline for the dance teachers and educators to understand the attitude domains of their students. By understanding the students' attitude domains towards dance, dance teachers are able to plan for appropriate dance lesson structures and implement suitable teaching methods to attract the interest of the students. Furthermore, the teaching and learning process will become more effective if the students' attitudes are given attention.

5.7 Suggestions for Future Research

Based on the findings of this study, additional research is needed in the area of students' attitudes towards dance in the university. There are some suggestions for future study in the following areas as stated below.

The sample of this study is restricted to students who are involved in co-curriculum courses within the cultural and sport components in the university only.

Thus, future research can be carried out on students from other courses or faculties, to compare students' attitude domains towards dance based on course of study or faculty. Hence, course of study and faculty can serve as independent variables, as one of the demographic factors.

Besides that, further research could cover more than one public university with greater financial resources and longer timeline. The further study of more than one university enables the researchers to make comparison among students from different universities.

The methodology that is used in this current study is quantitative with questionnaire on students' attitudes towards dance in three attitude domains. Thus, mixed method studies or qualitative studies can be conducted in future studies to gather in-depth data and information through extensive observations and interviews.

Since the focus of this study is confined to dance as a physical activity, future research can be conducted to investigate students' attitudes towards dance from variety of aspects, such as dance as performing arts form, arts therapy, dance education, and leisure activity.

Furthermore, future research can be conducted to investigate the students' perception towards dance. This will provide more indication of what the students think about dance and these information will be helpful for designing an appropriate dance program or dance activity that attracts them.

In this current research, students' attitudes towards dance in three attitude domains based on gender, ethnic, age group, and years of dance experience were surveyed; further research can be carried out to determine the perceived barriers, difficulties and challenges associated with dance activity among university students. So that the factors of barriers and challenges that affect students' participation in

dance can be able to get identified. Also, further study may offer recommendations for increasing the participation of dance activity in the university campus. Modifying the dance activity to attract the students' interest and increasing the exposure of dance activity. Moreover, future research on dance motivation should also be carried out to identify the dance participation motivational factors.

Further investigation on other aspects that might influence the dependent variables, such as economic status, quality of studies, instructor's quality should be studied due to creating more awareness on the importance of dance.

5.8 Conclusion

The ultimate objective of the current research is to identify the attitude of dance among university students who were participating in dance activities as co-curricular subjects. The three attitude domains were examined and the students' demographic variables that could affect their attitudes towards dance were determined. Overall, the students showed positive attitude towards dance, the results are considered as positive and encouraging towards the development of dance as a co-curricular subject in the tertiary education system.

The current findings of this study revealed that there are significant differences on students' attitudes of dance based on gender, race and years of dance experience variables. In short, female students had demonstrated better attitude than the male students, Malay students showed the best attitude of dance among other races. Lastly, students who had more than 6 years of dance experience expressed better attitude than students who had less than 6 years of dance experience. Meanwhile, there is no significant differences based on the age variables.

In conclusion, the findings of the research allows a better understanding of the attitude of dance among university students, which explains the demographic factors

that helps in influencing the attitudes of students towards dance. Discussion and conclusion from the present study reflects a first attempt to interpret the attitudes of the students towards dance particularly in Malaysia. Thus, we wish that this study opens the doors for further in-depth studies related to the factors that influences students' attitudes towards dance.

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