

**DETERMINANTS OF LEARNING AUTONOMY  
PRACTICES AMONG GIFTED STUDENTS IN  
JEDDAH SAUDI ARABIA**

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PRACTICES AMONG GIFTED STUDENTS IN  
JEDDAH SAUDI ARABIA**

**by**

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# **PENENTUAN AUTONOMI PEMBELAJARAN YANG DIAMALKAN DALAM KALANGAN PELAJAR BERBAKAT DI JEDDAH SAUDI ARABIA**

## **ABSTRAK**

Pelajar berbakat adalah pelajar yang mempunyai tahap kebolehan yang tinggi dalam bidang akademik. Beberapa penyelidik bersetuju pentingnya yang bersesuaian untuk pelajar berbakat untuk pembangunan bangsa dan negara. Antara teknik pembelajaran terkini yang telah diamalkan sejak beberapa dekad yang lalu untuk menilai bakat pelajar adalah melalui konsep autonomi pembelajaran. Autonomi pembelajaran adalah matlamat pendidikan khas ini untuk membolehkan pelajar berbakat menjadi pelajar yang berautonomi. Terdapat beberapa faktor yang dianggap mempengaruhi penggunaan autonomi pembelajaran dari segi perspektif pelajar. Faktor-faktor ini adalah kesedaran pelajar, motivasi pelajar, peranan guru, dan pengaruh rakan sebaya. Faktor-faktor ini dianggap sebagai penentu penggunaan autonomi pembelajaran khususnya di Arab Saudi, di mana beberapa bukti yang dikemukakan dalam kesusasteraan menunjukkan bahawa perkhidmatan yang disediakan di Arab Saudi bagi pelajar berbakat tidak memenuhi keperluan dan kebolehan mereka. Kajian ini bertujuan untuk mengenal pasti penggunaan autonomi pembelajaran dalam kalangan pelajar berbakat di Arab Saudi di samping mengenal pasti pengaruh penentu kepada penggunaan autonomi pembelajaran pelajar. Bagi mengkaji hubungan ini dalam konteks negara Arab Saudi, kajian ini telah melibatkan seramai 117 pelajar berbakat sebagai responden kajian. Data kuantitatif dan kualitatif telah dikumpul untuk menjawab soalan-soalan kajian dalam kajian ini. Dapatan kajian telah menunjukkan bahawa hanya 60.68% daripada pelajar berbakat di Arab Saudi menggunakan autonomi pembelajaran. Di samping itu didapati semua penentu yang

telah diramalkan diamalkan oleh dalam autonomi pembelajaran oleh pelajar berbakat di negara Arab Saudi. Kajian ini juga mencadangkan beberapa cadangan untuk meningkatkan penggunaan autonomi pembelajaran dalam kalangan pelajar berbakat di Arab Saudi serta untuk tujuan kajian pada masa hadapan.

# **DETERMINANTS OF LEARNING AUTONOMY PRACTICES AMONG GIFTED STUDENTS IN JEDDAH SAUDI ARABIA**

## **ABSTRACT**

Gifted students are students with high abilities in the academic field. Several researchers agreed on the importance of appropriate education for gifted students for the development of countries and nations. Among the recent learning techniques that have emerged during the past few decades to assess the giftedness is the concept of learning autonomy. Learning autonomy is a goal in gifted education to allow gifted students to become autonomous learners. Number of factors have been hypothesised to influence the use of learning autonomy from the learners' perspectives. These factors are learners' awareness, learners' motivation, teachers' role, and peers' influence. These factors are considered as determinants of the adoption of learning autonomy specially in Saudi Arabia where several evidence in the literature show that the education services that are provided in the country for gifted students does not meet their needs and abilities. The present study aims to determine the use of learning autonomy among the gifted students in Saudi Arabia as well as the influence of the determinants on learners' use of learning autonomy. To examine this relationship in Saudi Arabian context, the present study involved 117 gifted students. Quantitative data as well as qualitative data was collected to answer the questions of this study. The findings showed that only 60.68% from the gifted students in Saudi Arabia uses learning autonomy. In addition, all the hypothesized determinants were found significantly predicted in the use of learning autonomy among the gifted students in



Saudi Arabia. This study also provides several recommendations to increase the use of learning autonomy among gifted students in Saudi Arabia as well as for future studies.

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

Learning autonomy was described as the students' ability to acquire and organize knowledge personally whilst preserving concentration and motivation (George, 2003). Learning autonomy is encouraged among students in general, it is specifically promoted by many researchers and practitioners among gifted students in particular (Diezmann & Watters, 2000). Diezmann and Watters (2000) argued that in the field of giftedness education, many researchers and educators stressed the effectiveness of using and supporting learning autonomy. Thus, in order to provide a rich and thorough understanding of learning autonomy in giftedness and the factors that influence this learning autonomy, a contextualized Saudi giftedness research is highly needed. Several factors were suggested in the literature, which determine the learning autonomy among gifted student in general and in Saudi Arabia in particular. These factors include learners' awareness about learning autonomy, their motivations towards learning autonomy, their teachers' role in learning autonomy, and finally their peers influence. The primary goal of the present study is to examine the use of learning autonomy among gifted students in Saudi Arabia. Another goal of the present study is to examine the impact of the determinants of learning autonomy among gifted students in Saudi Arabia.

## **1.2 Research Background**

Davis and Rimm (2004) stressed the students need for opportunities to learn, grow, and be encouraged to struggle for excellence. The researchers further elaborate that students with exceptional abilities and learning potential (gifted students) require appropriate education, specific knowledge, and attention. These students are valuable assets for their communities and have the potential to provide a significant contribution to the world around them (Al Qarni, 2010; Alqefari, 2010; Alkhannani, 2016). In the literature, it was stated that without this special attention and knowledge, the price that communities pay could be seen in lost academic growth, lost creative potential and sometimes lost enthusiasm for educational success and eventual professional achievements and substantial contributions to society (Bibi et al., 2014; Jha et al., 2015).

The National Association for Gifted Children (NAGA) (2008) defined gifted student as “someone who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression” (Chamberlin & Chamberlin, 2010, p. 385). There is no single definition for the construct of giftedness as countries and communities define the construct in their own way and philosophy. For example, giftedness in Saudi Arabia, which is the focus of this research, refers to being “evident in someone who has exceptional academic abilities and who needs special and different education from that which is available in the regular classroom” (AL Garni, 2012, p. 7). Thus, it can be understood from the localised Saudi definition of giftedness that the academic achievement is the criterion upon which gifted students are being selected for gifted schools in the country.

Providing gifted students with adequate facilities has been a perpetual problem not only in KSA but also in other countries that focus on the development of gifted education (Wood, Portman, Cigrand, & Colangelo, 2010). Interest in studying issues related to gifted education in Saudi Arabia is still insufficient (Alamer, 2010; Al Garni, 2012). In spite of establishing two professional institutions, the General Department for Gifted Students at the Ministry of Education and King Abdul Aziz and His Companions Foundation for Giftedness and Creativity, many challenges still face gifted students in our schools. Reviewing the goals of these institutions showed that the ultimate goal of the Ministry of Education and The King Abdul Aziz and His Companions Foundation for Giftedness and Creativity is to identify gifted children in order to provide them with all knowledge that can meet their needs (Alamer, 2010).

The government of KSA, represented by King Abdul Aziz, has established institutions to provide the needs of gifted education (Alfurayh, 2016). Nevertheless, the lack of attention to the educational trends of modern learning, such as learning autonomy based on modern educational theories and their indicators, has been added to the equation of the problem that should be solved (Rogers, 2007). That is, the government of KSA is dealing with the potential problem of adopting learning autonomy to the gifted students. Despite the various definitions for giftedness, there seems to be a consensus among researchers and practitioners on the importance of gifted education and gifted students for the overall development of countries and nations and that careful and productive teaching and learning techniques should be utilized with this group of students.

Among the recent learning techniques that have emerged during the past few decades was the concept of learning autonomy which was introduced due to the development of learner-centered approaches in education. Holec (1981) defined

learning autonomy as the idea of taking charge of one's learning and being responsible for all the decisions related to all aspects of the learning process including setting objectives, choosing methodology, and evaluating what has been learned. Although learning autonomy is encouraged among students in general, it is specifically promoted by many researchers and practitioners among gifted students in particular (Diezmann & Watters, 2000).

In field of learning autonomy in giftedness, a number of factors have been hypothesised to influence the use of learning autonomy from the learners' perspectives. One of the important and influential factors that have been hypothesised to influence the use of learning autonomy is the construct of learners' awareness in learning autonomy (Cohen, 2014). Awareness as defined in the dictionaries is the state of being aware, having knowledge, and consciousness about something. In this context Tudor (1993) claims that teachers need to prepare learners for their new role by developing learners' self-awareness of learning goals and options. In addition, Cotterall (1995, p. 203) argued that "this awareness is an essential foundation of learner autonomy".

Another factor that has been hypothesised to influence the use of learning autonomy is the construct of learners' motivation towards learning autonomy (Dickinson, 1995). The construct of learners' motivation in this context refers to "a student's tendency to find academic activities meaningful and worthwhile and to try to get the intended learning benefits from them" (Brophy, 2004, p. 249). "students are motivated when they believe they are able to succeed at a given task and when they understand and value the outcome of the task" (Brophy, 2004; 2013, p. 34). Dickinson (1995, p. 165) elaborated that "A common theme in justifications for autonomy, especially in general education but also in language learning, is that autonomous

learners become more highly motivated and that autonomy leads to better, more effective work”.

Another factor that has emerged in the literature regarding the use of learning autonomy in general and learning autonomy in the giftedness context in particular is the construct of teachers’ role in learning autonomy. Teachers role refers to the idea that teachers are responsible about prepare learners to be more autonomous by rising the learners awareness (Cotterall, 1995) and motivation (Dickinson, 1995) towards learning autonomy. Teachers also need to be equipped with the necessary skills to carry out autonomous learning (Pierson, 1996; Garcias, Marín, & Negre, 2014). In this context, Little (1995) elaborated that “in formal educational contexts learners do not automatically accept responsibility for their learning, teachers must help them to do so; and they will not necessarily find it easy to reflect critically on the learning process, teachers must first provide them with appropriate tools and with opportunities to practice using them” (p. 176-177).

One of the important factors that have also been identified as influential factors in fostering and using learning autonomy in gifted education is the construct of peers influence. Grouping is one of the important methods that been suggested to rise the autonomous level among the gifted students due to the effects of the peers in the group on rising the competitions and the cooperation on each other (Tassinari, 2011). Newman (2002a) asserted that “peer influences are constrained by the degree to which teachers and classroom rules permit students to work together and help one another” (p. 134). He added that “students can support, or undermine, one another’s sense of autonomy needed for adaptive help seeking” (p.135).

The impact of the previous factors on learning autonomy use with the gifted education context takes place through the impact of these same factors on learners' attitudes towards learning autonomy considering the well-established link between attitudes and behaviour. In the field of attitudes in education, researchers and practitioner seems consensus that attitudes related with behaviour in which individuals' attitude capable to direct their experiences and rule the impact of experience on their behaviours (Chaiklin, 2011). Thus, the present study proposes that the impact of the previously mentioned factors on the adoption of learning autonomy in the giftedness context is better understood through the impact of these same factors on the attitudes of students towards learning autonomy. The following section addresses the statement of the problem.

### **1.3 Problem Statement**

As far as gifted education in Saudi Arabia is involved, Al-Gamdi (2007) mentioned that Ministry of Education in the country runs very few programmes for gifted students. In Saudi Arabia, increasing interest has been growing in education in general and giftedness education in particular over the past decade (Al-Hogail, 2003; Subhi-Yamin, 2009; Mourgues et al., 2016). Although the Saudi Arabia government through the MoE seems to be eager to provide gifted students with better designed programmes that would enhance their intellectual abilities and needs. The government of Saudi Arabia has established a special programme to boost the academic achievement of high-performing students. Nevertheless, the programme does not focus on psychological traits, such as learning autonomy but rather, it focuses on cognitive aspect. The present programmes appear to be less than what was expected as they do not impressively meet such abilities and needs (Ayoub & Aljughaiman, 2016; Aljohani,

2018). This disapproval of these programmes that are provided to gifted students in Saudi Arabia was also affirmed by Alqefari (2010).

More recent researchers such as Alqefari (2010) and Alfurayh (2016) supported this criticism of the programmes offered to gifted students in Saudi Arabia. Alqefari (2010) went further by criticised the efficiency of gifted education in Saudi Arabia at all. He criticised the identification process, the policies, and the process of gifted education in the country. Alqefari (2010) stressed the need to further research on giftedness education and gifted students to be conducted in the country and even in other neighbouring countries in the area. Alfurayh (2016) and Alharbi (2018) supported this argumentation on the need for further researches in the giftedness education field. Thus, the present study attempts to contribute by responding to these recommendations by examining a very important and critical factor that has been hypothesised to raise the value of the gifted education process worldwide, namely ‘the learning autonomy’ in the giftedness. In order to provide a rich and thorough understanding of learning autonomy in giftedness and the factors that influence this learning autonomy, a contextualized Saudi giftedness research is highly needed. Thus, the present study attempts to respond to such gap in the literature regarding this matter by examining an influential factor that has been hypothesised to positively influence gifted education, namely learning autonomy.

Learning autonomy has been agreed upon by many researchers and educators in the field of giftedness to be a valuable and effective learning method for gifted students (Diezmann & Watters, 2000). Therefore, the idea of integrating teaching and learning styles that support and make use of learning autonomy has been promoted by educators and policy makers in many countries worldwide. However, before designing or adapting activities to promote autonomous learning, it is crucially important to study



learners' attitude towards learning autonomy especially that these learners are not the same and cultural differences between learners from different countries play a role in shaping their behaviour (Ho & Crookall, 1995). This view was supported by Chan (2003) who argued that researchers should keep in mind that learners are from diverse cultural background and so cultural differences among these learners should be taken into account before fostering any activities that promote learning autonomy.

In other words, researchers should shed light on how ready learners are before promoting and implementing autonomous learning activities. In this context, limited research seems to have been conducted on learning autonomy among gifted students in Saudi Arabia and particularly, scarce research seems to have been conducted on the attitudes of Saudi gifted teachers to autonomous learning. Apart from that, not much is known about the factors that influence learning autonomy in the field of giftedness, particularly in the Saudi context. Thus, the present study attempts to fill in these gaps in the literature by examining the construct of learning autonomy and some of its influential factors in the context of gifted education in Saudi Arabia.

The first among the factors that affect the learners' attitude towards being autonomous learners is the awareness rising towards learning autonomy (Tassinari, 2011). Awareness as defined as the state of being aware, having knowledge, and consciousness about something. The present study is aimed to investigate the awareness of the gifted students in Saudi Arabia about learning autonomy and its influence on their attitudes to be learner autonomy. Another factor which affects the students' attitude towards being autonomous learners is the motivation rising towards learning autonomy (Tassinari, 2011). Motivation is the reason for people to decide actions, desires, and needs. The present study is aimed to investigate the motivation of

the gifted students in Saudi Arabia about learning autonomy and its influence on their attitudes to be learner autonomy.

Another factor is the construct of teacher role in learning autonomy. Teachers' role refers to the idea that teachers are responsible about prepare learners to be more autonomous by rising the learners awareness (Cotterall, 1995) and motivation (Dickinson, 1995) towards learning autonomy. The present study aims to investigate the Saudi gifted students' teachers' role on the learners' attitude to be learner autonomy. Peers influence is one of the influencing factors among gifted students of being learner autonomy. Grouping is one of the important methods that been suggested to rise the autonomous level among the gifted students due to the effects of the partners in the group on rising the competitions and the cooperation on each other. The present study aims to investigate the influence of the peers influence on Saudi learners' attitude to be learner autonomy.

One important factor that could influence use of learning autonomy is the construct of students' attitudes towards learning autonomy. In this regard, not much is known about Saudi students' attitudes towards learning autonomy, in addition, several models like the Theory of Planned Behaviour (TPB) argued the importance of this construct in influencing the use of actions. Thus, the present study tried to examine the mediating role of attitude in the relation between the determinants of learning autonomy and the use of learning autonomy.

More importantly, the factors that have been hypothesised to influence learning autonomy among gifted students were stated in literature that suggested models to evaluate the learner autonomy (The Dynamic Model of Learner Autonomy (Tassinari, 2011) and The Autonomous Learner Model for the Gifted and Talented (Betts, 1991).

More specifically, direct relationship between the determinants and learners autonomy is well documented. However, the planned behaviour theory proposes a model, which can measure how human actions are guided. It predicts the occurrence of a particular behaviour, provided that behaviour is intentional and that intention is grounded on individuals' attitudes towards the usefulness of this action and the consequences of adopting a particular action. This means that the theory posits that there is a relationship between attitudes and behaviour and that these attitudes are influenced by other factors (external factors). Thus, the theory proposes a link or a relationship, which is referred to as the attitude-behaviour relationship. In this relationship, attitude strength is regarded as a key mediator variable in which stronger attitudes are likely to be more predictive of people's behaviour than are weak attitudes. There seems a dearth in the literature regarding the mediating role of attitude in the relationship between external factors and learning autonomy. Particularly, these relationships have not been examined in the context of Saudi Arabia giftedness program and not being conceptualized under a solid framework. Thus, the present study contribute to this gap in the literature by conceptualizing a framework that is believed to be able to explain the links between these variables and learning autonomy and the nature between them based on a strong and well-founded theory that is the theory of planned behaviour (TPB). This contribution is believed to be consequential and reflect the importance of the present study.

#### **1.4 Research Purpose**

The purpose of the present study is to investigate and examine the influence of the determinants of learning autonomy among gifted students in Saudi Arabia represented by the sample of the gifted students in secondary levels who are study in

8 schools in city of Jeddah. Gifted students required special educational environment and styles. Learning autonomy provide students the way to have decision-making and creative thinking in their learning process. A survey was conducted by the Ministry of Education in 2013 in Saudi Arabia on the decision-making and the creative thinking skills of the gifted student and was answered by 24 teachers, shows that gifted students have difficulties in practicing and using creative thinking skills in the first rank, decision-making skills in the second rank, and critical thinking skills in the third rank. Thus, investigating the factors that limit the ability of learning autonomy among the gifted students is significant in order to discover these factors and overcome these difficulties.

Furthermore, the general objectives of Article No. 57 of the education policy in Saudi Arabia, which was circulated in 1969, indicates the detection and cultivation of the skills and abilities of gifted students. The specific objectives of Article Nos. 192, 193, and 194 confirm that the identification of gifted students and providing them with special programs that meet their needs and ability, are necessary to improve their abilities and talents. Al-Hogail (2003) added the need to prepare all means of scientific research to help highlight their abilities. However, the objectives of meeting needs and abilities of gifted students in Saudi Arabia have not been attained, and they were not given enough opportunity to highlight their skills and abilities, perhaps because of the lack in the programs that support learning autonomy among gifted students and the absence of related curriculum and instructional methods. Therefore, the giftedness education outcomes are gifted person who are not able to give what was expected from him, and this reflect the failure of the giftedness education in Saudi Arabia to meet the needs of gifted students, which wasted their abilities and talents (Al-Rafi, 2007).

## **1.5 Research Objectives**

The research objectives are stated as follow:

1. To investigate the use of learning autonomy among gifted students in Saudi Arabia.
2. To examine the influence of awareness on the use of learning autonomy among gifted students on Saudi Arabia.
3. To examine the influence of motivation on the use of learning autonomy among gifted students in Saudi Arabia.
4. To examine the influence of teachers' role on the use of learning autonomy among gifted students in Saudi Arabia.
5. To examine the influence of peers on the use of learning autonomy among gifted students in Saudi Arabia.
6. To examine to what extent the gifted students' attitudes do mediate the relationship between determinates of learning autonomy and the use of learning autonomy among gifted students in Saudi Arabia.

## **1.6 Research Questions**

Based on the abovementioned research objectives, the research questions are as follow:

1. To what extent do the gifted students in Saudi Arabia use the learning autonomy in their learning process?
2. What is the influence of awareness on the use of learning autonomy among gifted students in Saudi Arabia?

3. What is the influence of motivation on the use of learning autonomy among gifted students in Saudi Arabia?
4. To what extent does teachers' role influence the use of learning autonomy among gifted students in Saudi Arabia?
5. To what extent peers influence the use of learning autonomy among gifted students in Saudi Arabia?
6. To what extent do the gifted students' attitudes mediate the relationship between determinates of learning autonomy and the use of learning autonomy among gifted students in Saudi Arabia?

### **1.7 Research Significant**

Gifted students worldwide have a great deal of potential that can make great contributions to their communities and countries, provided that they receive good education tailored to their needs and abilities (Davis & Rimm, 2004). A number of researchers argued that learning autonomy is among the influential learning techniques that positively respond to the needs of gifted students while at the same time makes use of their potentials (Diezmann & Watters, 2000). Thus, the study attempts to examine the construct of learning autonomy in the gifted education context in Saudi Arabia together with the factors that have been hypothesised to influence this learning autonomy. The study is expected to be highly significant for the body of research in general and for educators and policy makers in Saudi Arabia in regarded to gifted education in the country. In other words, the study is expected to be significant on both levels, theoretical significance and practical significance. The following sections address each of these levels.

It was mentioned early that, to great extent, the related studies that are available in the literature of learning autonomy in giftedness education were conducted in Western countries. Only limited amount of researches were conducted in Saudi Arabia. Therefore, the field of learning autonomy was understood mainly from the findings of the western researchers. As a result this field to be investigated and studied in other cultural areas, such as Saudi Arabia and Arabian countries to have clear understanding about the field in multi-cultural context. This does not means that the western findings of no use to the giftedness field in Saudi Arabia, however, it need to testes in the culture context in Saudi Arabia. considering the consensus among researchers and practitioners on the idea that cultural differences between individuals from different countries influence their behaviour and ways of thinking (Hofstede, 2003). Thus and due to the lack of research on giftedness in the Arabic context, it is expected that the findings of the present study would be of a great use to the body of research on giftedness as such findings could provide a cross-cultural understanding of how learning autonomy is understood and implemented across cultures and countries in the educational context in general and the in the context of gifted education in particular.

Considering the great deal of potential gifted students possess and how this potential can be utilised to positively contribute to the overall being of countries, it is important that educators and policy makers in a given country pay good attention to the whole process of teaching and learning in the giftedness field. As learning autonomy has been hypothesised to be an extremely useful teaching and learning technique and considering the fact that it is the focus of this research, it is hoped that the current study will generate useful findings and recommendations that would be made use of by educators and policy makers in Saudi Arabia. When responded to effectively, such recommendations could enhance the educational process of gifted

education in the country and would in turn ensure that gifted students in Saudi Arabia receive quality education through learning autonomy.

## **1.8 Definitions of Related Terms**

### **1.8.1 Gifted Students**

Conceptually, a gifted student refers to "a student who has high capabilities in intellectual, creative, specific academic or leadership aspects, or aptitude in the performing or visual arts, and needs services or activities that are not being provided in the mainstream schools" (Garni & Abdullah, 2012). In Saudi Arabia, a gifted student is defined as a person who has superior academic abilities and who needs particular and different education from that which is provided to regular students in regular schools (Alnafei, 2001; Garni & Abdullah, 2012).

### **1.8.2 Learning Autonomy**

Holec (1981) defined Learning autonomy as the ability of a learner to take charge of his learning and to be in charge to take decisions that are related with his learning that include setting objectives, choosing methodology, and evaluating his progress. On the other hand, learning autonomy is defined in the present study as the perception of a gifted student in Saudi Arabia of his ability to manage his learning independently.



### **1.8.3 Learners' awareness**

Awareness is defined as the state of being aware, having knowledge, and consciousness about something (Tudor, 1993). Cotterall (1995, p. 203) argued that “this awareness is an essential foundation of learner autonomy”. However, learners' awareness is defined in this study as the state of being aware, having knowledge, and conscious about learning autonomy.

### **1.8.4 Learners' Motivation**

Learners' motivation is defined as a student's tendency to find academic activities meaningful and worthwhile and to try to get the intended learning benefits from them (Brophy, 2004, p. 249). On the other hand, learners' motivation is defined the present study as the tendency of a gifted student in Saudi Arabia towards learning autonomy.

### **1.8.5 Teachers' Role**

Teachers' role is defined as the idea that teachers are responsible about prepare learners to be more autonomous by rising their learner's awareness and motivation towards learning autonomy (Cotterall, 1995; Dickinson, 1995). Teachers' role is defined in the present study as the responsibility of teachers of gifted students in Saudi Arabia to foster learning autonomy among their students by rising their awareness and motivations towards learning autonomy.

### **1.8.6 Peers' Influence**

Peers' influence is defined by Newman (2002a) as the students' support or undermine on their peers that is constrained by the degree to which teachers and classroom rules permit students to work together and help one another. Operationally, peers' influence

is defined in the present study as the learners' perception about the support or undermine that they are experience from their peers in Saudi Arabia and affect their autonomy.

### **1.8.7 Learners' Attitude**

Schneider (1988) defined attitudes as evaluative reactions to persons, objects, and events that includes beliefs and positive and negative feelings about the object, whereas, learners' attitude is defined in the present study as evaluative reactions of gifted students in Saudi Arabia towards learning autonomy.

## **1.9 Summary**

This chapter is the first chapter in the present study and is referred to as the introduction chapter. The chapter began with the background of the study in which a brief overview about giftedness, learning autonomy, and its influential determinants was presented. The chapter proceeded with the statement of the problem in which the gaps in the literature regarding the study's variables were highlighted and discussed including the way the present study responds to these gaps. Research objectives and research questions were then outlined. The chapter proceeded to present the significance of the study which is divided into two main categories, namely practical significance and theoretical significance. Organization of the thesis was then presented in which an overview about each chapter was provided. The chapter concluded with the definitions of related terms including their operational definitions in the present study. The following chapter (Chapter 2) addresses the review of literature on the study's variables including the theoretical underpinnings upon which the study is grounded.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

While the term 'autonomy' in education context acknowledged to be often used vaguely, an implicit meanings is found in the literature: "We have some idea of what we are talking about when we use it - when our students or clients are acting consciously (not without thought), independently (not compliantly), imaginatively (not routinely) and with commitment (not remotely)" (Ecclestone, 2002). The primary goal of the present study is to examine the use of learning autonomy among gifted students in Saudi Arabia. Another goal of the present study is to examine the impact of a number of determinants of learning autonomy among gifted students, namely awareness about learning autonomy, motivations towards learning autonomy, teachers influence on learning autonomy, and finally peers influence on learning autonomy.

The present chapter begins with a review on the field of giftedness education in which definitions and procedures of giftedness education were introduced. Giftedness education in Saudi Arabia was also reviewed. Furthermore, the theories of giftedness education are presented and discussed. The chapter then brings out a review on learning autonomy which definitions and characteristics of learning autonomy are presented. Learning autonomy in giftedness education and in Saudi Arabia are also presented and discussed. The chapter proceeds by providing a review on the determinants of learning autonomy that were hypothesised to be the most influential factors to the use of learning autonomy among gifted students in Saudi Arabia. Finally, the chapter introduces and discussed the theories that the present study based on them. The next section presents the review on giftedness education.

## **2.2 Giftedness Education**

Giftedness education is a construct that refer to special programs, procedures, and theories which are used for students who are recognized as gifted or talented students in the education context. Gifted education in the twenty first century is much more in accordance with servicing the resources of gifts or learning styles of gifted students (Callard-Szulgit, 2010). Multiple programs, models, and curriculums were developed in recent decades to provide an education that meet the needs of the high achieving students or what are known as gifted students (Callard-Szulgit, 2010). The main goal of these programs and models is the trend to improve and enhance academic achievements and motivations of gifted students. The following subsection provides the definition of giftedness education and gifted students followed by the related literature about the definitions, procedures and theories of giftedness education.

### **2.2.1 Definition of Giftedness Education and Gifted Students**

Giftedness education defined as the concerns about fully identified and improve the abilities of gifted students in systematic and strategic way by providing these students with chances to experience education that is appropriate to their levels in a flexible educational environment (Chan et al., 2010). Gifted students are individuals with exceptional abilities who accomplish and perform at a remarkable high levels of achievements comparing to others who are in their age, experience, or environment (Callard-Szulgit, 2010). Callard-Szulgit (2010) argued that these individuals exhibit high achievement ability in different areas such as intellectual, creative, and artistic areas. They possess a high leadership capacity, or excel in an academic field. These individuals require special services or activities that are not regularly provided by the school. Garni and Abdullah (2012) defined a gifted student

as a student who has high intellectual and creative abilities in academic, leadership, or arts fields, and requires special services or activities that are not being regularly provided in schools.

In Saudi Arabia, only one unified definition is presented for a gifted student. A gifted student is defined as an individual who has unusual academic abilities and requires extraordinary education that is not available in regular schools (Alnafe'i, 2001). Giftedness education is about developing the potentials of gifted students. Gifted students should be able to individually develop their potentials. However, schools and teachers must support them by create an environment in which students feel safe and be able to take risks without fear from evaluation. Gifted students need to feel that it is allowed for them to try and fail and try again multiple times (Hargrove, 2005). This process will motivate them to be autonomous gifted students.

Motivation is suggested to be a critical factor in giftedness education. Phillips and Lindsay (2006) argued that gifted students' motivation is adversely affected when they feel bored in the class due to slow progress and unqualified challenges. Low motivation among gifted students occasionally leads to the phenomena of underachievement. unqualified challenge was defined as an activity such as lessons repetition or unplanned activity (Phillips & Lindsay, 2006, p. 59). Teachers must deal with gifted students in special styles they must consider that gifted students are thinking and understanding quickly and have extraordinary memory skills. McAllister and Plourde (2008, p. 40) indicated that if gifted students do not learn in a challenging environment, they may lose their abilities. They proceeded, scientific evidences showed that without adequate challenging environment that meet the gifted students interests and abilities, gifted brain may lose its abilities. Stepanek (1999) concluded

that gifted students lack motivation due to a physical cause. To avoid these lack giftedness education need to follow specific procedures that are discussed below.

### **2.2.2 Procedures of Giftedness Education**

The procedures of giftedness education include the identification process of the gifted students and the programs that are provided to improve the potentials of gifted students. The identification procedure and the programs that are provided to gifted students are investigated and discussed in the following subsections.

#### **2.2.2(a) Gifted Students Identification**

Gifted students are share several characteristics, however, there are other characteristics, traits, and ways that are different among gifted students and used by gifted students to express their giftedness (National Association for Gifted Children, 2019). As mentioned by the National Association for Gifted Children in USA, several issues should be considered for identification of gifted students:

- i. Giftedness is dynamic, not static. Therefore, identification process needs to occur over time, with multiple opportunities to exhibit gifts. One test at a specific point in time should not dictate whether someone is identified as gifted.
- ii. Giftedness is represented through all racial, ethnic, income levels, and exceptionality groups. Therefore, Underrepresentation is widely spread. For example, African American, Hispanic American, and Native American students are underrepresented by at least 50% in programs for the gifted (U.S. Department of Education Office of Civil Rights, 2014).

- iii. Giftedness may be exhibited within a specific interest or category—and even a specific interest within that category. Therefore, Professionals must seek ways to gather examples across various domains and contexts.
- iv. Early identification in school improves the likelihood that gifts will be developed into talents. Therefore, the identification process should applied in early age students.

On the other hand, according to Alqefari (2010), the identification process of the gifted students in Saudi Arabia employs several methods, which are: Teachers' nomination, High academic achievement, High achievement in science and mathematics, IQ tests, and Torrance test for creativity thinking. An action research approach is employed for the identification process of the gifted students in Malaysia. However, gifted students in Malaysia did not been provided with much concerns. Only few schools were assigned for giftedness education in Malaysia, the first between them was PERMATApintar High School, which serves fully residential gifted students aged 16 to 17 year-old (Yassin, Ishak, Yunus, & Majid, 2012). The identifying process that are used to select gifted students for PERMATApintar High School uses UKM1 and UKM2 online intelligence tests and UKM3 comprehensive assessment (Yassin et al., 2012). In Saudi Arabia, The identification process was launched by Ministry of Education in the country by making decision to adopt the USA procedure of gifted students' identification. According to Alqefari (2010), the identification process of the gifted students in the country occupy several steps, which are:

- i. Teachers' nomination,
- ii. High academic achievement,
- iii. High achievement in science and mathematics,

- iv. IQ tests, and
- v. Torrance test for creativity thinking.

Al Qarni (2010) cited criteria that was used to assess the nomination process of the gifted students in science and mathematics:

- i. Evaluations made by teachers.
- ii. Outstanding academic achievement should not be less than 90%.
- iii. Outstanding results in science should not be less than 90%.
- iv. Outstanding results in mathematics being not less than 90%.
- v. Outstanding results in the mental abilities test (collective and individual).
- vi. Outstanding results in the Torrance Test of Creative Thinking.
- vii. Outstanding results in the Wechsler Intelligence Scale for Children (MSC).
- viii. Outstanding results in a student's exam in science and mathematics.

In 1998, Ministry of education in Saudi Arabia established a project entitled “Identify and Care Programme for Gifted Students”. This project was designed to be in charge for the identification process of gifted students (Alwasruh, 2005). Four units were attached with this project: identification unit, enrichment programmes unit, training, planning and organization unit, and finance and administration services unit. This project had attained great importance, since it provided a more succinct way to identify and support gifted students in the country. Therefore, it is a landmark in the development of giftedness education in the country. An opportunity was provided to the Ministry of Education by this project to establish new and effective programmes that meet gifted students’ needs (Alqefari, 2010).



### **2.2.3 Giftedness Education Programs in General**

It is important to look at a curriculum philosophy in teaching the gifted students. This has been broken down by VanTassel-Baska (2006) into curriculum as a development of cognitive process; curriculum as technology; curriculum as personal relevance; curriculum of social reconstruction; curriculum as academic rationalism; and, curriculum as precursor to a professional career. It is commonly perceived that teachers can choose any of these philosophies; however it has been stated by VanTassel-Baska (2006) that the most effective curricula incorporate all of them. To some extent any other action might appear elitist. Academic rationalism can also be challenged with an emphasis on procedural knowledge above declarative knowledge, while technology-based learning approaches emphasise the former.

Curriculum differentiation is defined as a critical component in teaching the gifted. This can be delineated into three fundamental points that include awareness of a curriculum that is sequential, carefully integrated and articulated to reach beyond regular curriculum scope. Little, Feng, VanTassel-Baska, Rogers, and Avery (2007) again reinforced the notion that instructional differentiation is vital to students studying at varying levels so that their learning is not diluted. The NSW Department of Education and Training policy (2007) reinforced the concept mentioned earlier that gifted students must have qualitatively different content and learning opportunities. Chessman (2006) believed that most curricula planned for the greater number of students are not effective for gifted students. Thus curriculum modification in teaching gifted students must be all-embracing and influence all curriculum areas. She goes on to say that gifted children have to be given opportunity for acquiring cognitive and affective skills and behaviours (Chessman, 2006). Maker's early work on curriculum set the benchmark for curriculum differentiation for gifted students (Maker, 1982).