

**EFFECTIVENESS OF THE MODIFIED AL-  
MADINAH PROGRAM IN IMPROVING SELF-  
CONCEPT AND MOTIVATION OF GIFTED  
STUDENTS IN SAUDI ARABIA**

**ALSHARARI SULTAN NADR A**

**UNIVERSITI SAINS MALAYSIA**

**2021**

**EFFECTIVENESS OF THE MODIFIED AL-  
MADINAH PROGRAM IN IMPROVING SELF-  
CONCEPT AND MOTIVATION OF GIFTED  
STUDENTS IN SAUDI ARABIA**

by

**ALSHARARI SULTAN NADR A**

**Thesis submitted in fulfilment of the requirements  
for the degree of  
Doctor of Philosophy**

**September 2021**

## ACKNOWLEDGEMENT

*In the name of Allah, the Merciful, the Compassionate, and praise be to Allah,  
Lord of the Worlds and prayers and peace be upon the master of Messengers.*

After God awarded me the completion of this modest effort, I thank God Almighty for helping me achieve my dreams. Then, I extend my sincere thanks and gratitude to my main supervisor Associate Professor Dr Aznan Che Ahmad the Supervisor of this message for his effort, the fruitful directions, scientific value and observations he provided me and the continued support for me throughout the preparation period of this thesis which significantly contributed to the fulfilment of this work in its current form. So, I thank him profusely.

I also extend my thanks and appreciation to my Co-Supervisor Associate Professor Dr Ahmad Zamri Khairani for his guidance, support, assistance and helping me through his valuable remarks which had a major role in the emergence of this work in this way. Moreover, I like to thank all the Universiti Sains Malaysia staff who gave me precious help, assistance and guidance.

I also like to deliver my sincere thanks and appreciation to my parents, and my beloved wife Hanan who support me during this journey. A special thanks go to my kids, Megren, Yazan, Aseel, Salman, Najah and Hanai. And to all my brothers and sisters who didn't hesitate to support me. I also extend my sincere thanks to my loyal colleagues who stood with me at this stage with their guidance and ongoing support, and everyone helped me to be during my study.

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENT</b> .....	<b>ii</b>
<b>TABLE OF CONTENTS</b> .....	<b>iii</b>
<b>LIST OF TABLES</b> .....	<b>ix</b>
<b>LIST OF FIGURES</b> .....	<b>xiii</b>
<b>ABSTRAK</b> .....	<b>xv</b>
<b>ABSTRACT</b> .....	<b>xvi</b>
<b>CHAPTER 1 INTRODUCTION</b> .....	<b>1</b>
1.1 Introduction.....	1
1.2 Background of the Study .....	1
1.3 Problem Statement.....	4
1.4 Objectives of the Study.....	9
1.5 Research Questions.....	10
1.6 Research Hypotheses .....	11
1.7 Significance of the Study.....	12
1.8 Definition of Key Terms.....	14
1.8.1 Motivation .....	14
1.8.2 Self-Concept .....	15
1.8.3 Gifted Student.....	15
1.8.4 Al-Madinah Program .....	16
1.8.5 Modified Al-Madinah Program .....	17
1.9 Conceptual Framework.....	18
1.10 Limitations of the Study .....	21
1.11 Summary .....	22

<b>CHAPTER 2 LITERATURE REVIEW .....</b>	<b>23</b>
2.1 Introduction.....	23
2.2 Education in the Kingdom of Saudi Arabia .....	23
2.2.1 Educational System in The Kingdom of Saudi Arabia.....	24
2.2.2 Gifted Students Programmes in the Kingdom of Saudi Arabia .....	25
2.2.3 The General Administration for Gifted Students .....	26
2.2.4 Care Centres for Gifted Students in Saudi Arabia.....	27
2.2.5 Care Programmes for Gifted Students in the Schools of the Kingdom of Saudi Arabia.....	27
2.2.6 King Abdul Aziz and His Companions Foundation for The Gifted (KACFG) (MAWHIBA) .....	28
2.2.7 Support for Gifted Education .....	29
2.2.8 Development of New Gifted Students in Saudi Arabia.....	30
2.2.9 Regulations of Gifted Education in Saudi Arabia .....	32
2.3 Conceptualization of Giftedness.....	34
2.3.1 Characteristics of the Gifted Students .....	37
2.4 Motivation.....	47
2.4.1 Definition of Motivation.....	47
2.4.2 Theoretical Approaches .....	48
2.4.3 Appearance of Motivation .....	49
2.5 Self-Concept .....	51
2.5.1 The Nature of the Self-Concept.....	52
2.5.2 Self-Concept as a Source of Motivation.....	53
2.6 Review of Studies Related to Research Domains .....	57
2.6.1 Studies Related to Self-Concept .....	57
2.6.2 Studies Related to the Motivation.....	58
2.6.3 Studies on The Relationship Between Self-Concept and Motivation.....	59

2.6.4	Studies Related to Al-Madinah Program.....	61
2.7	Theoretical Framework of the Study .....	64
2.7.1	Cognitive Theory .....	65
2.8	Summary .....	68
<b>CHAPTER 3 DEVELOPMENT OF THE MODIFIED AL-MADINAH PROGRAM (MAL-MADINAH PROGRAM) .....</b>		<b>70</b>
3.1	Introduction.....	70
3.2	Al-Madinah Program .....	70
3.2.1	The Program Theories .....	71
3.2.2	The Program Model.....	72
3.2.3	The Program Strategies .....	74
3.2.4	Sentimental Processes.....	85
3.3	The Modified Al-Madinah Program (MAL-Madinah Program) .....	85
3.3.1	Motives of Designing MAL-Madinah Program .....	86
3.3.2	Goals of MAL-Madinah Program .....	87
3.3.3	MAL-Madinah Program Design.....	88
3.3.4	Development of MAL-Madinah Program .....	90
3.3.5	The development Procedures of the MAL-Madinah Program .....	91
3.3.6	The Modified Al-Madinah Program Validity.....	92
3.3.7	Reliability of MAL-Madinah Program.....	94
3.3.8	Lessons of MAL-Madinah Program.....	94
3.3.9	Teaching Methods in MAL-Madinah Program .....	96
3.3.10	Procedures for Applying for the MAL-Madinah Program.....	96
3.3.11	Expected Outcomes of MAL-Madinah Program.....	98
3.4	The Modifications in Al-Madinah Program to Suit MAL-Madinah Program .....	99
3.4.1	Innovative Strategies of the Training Program.....	102

3.4.2	Execution of the Program.....	103
3.5	Summary .....	103
<b>CHAPTER 4 RESEARCH METHODOLOGY .....</b>		<b>104</b>
4.1	Introduction.....	104
4.2	Research Design .....	104
4.3	Study Procedures .....	108
4.4	Research Population .....	110
4.5	Respondents and Sampling Procedure .....	110
4.6	Variables of the Study .....	113
4.7	Research Instruments.....	113
4.7.1	Piers-Harris 2 Self-concept Measurement Scale .....	114
4.7.2	Dimensions of Piers-Harris 2 Self-concept Measurement Scale.....	115
4.7.3	Measurement of Motivation .....	125
4.8	The Semi-Structured Interview .....	130
4.8.1	The Validity of the Interview .....	133
4.8.2	The Reliability of the Interview.....	133
4.9	Pilot Study.....	134
4.9.1	Sample of the Pilot Study .....	134
4.9.2	Pilot Study's Collection of Data Procedures .....	135
4.9.3	Pilot study results.....	136
4.10	Training for Teachers .....	146
4.11	The Main Study .....	147
4.11.1	Data Collection Procedures in the Main Study .....	147
4.12	Statistical Analysis.....	149
4.12.1	Quantitative Data Analyses .....	151
4.12.2	Qualitative Data Analyses .....	151
4.13	Summary .....	152

<b>CHAPTER 5 RESULTS .....</b>	<b>153</b>
5.1 Introduction.....	153
5.2 Study's Results and Analysis .....	153
5.2.1 Demographic Characteristics.....	153
5.2.2 Descriptive Characteristics of Study's outcomes .....	154
5.2.3 The Effect of Modified Al-Madinah Program on Self- Concept of Gifted Students.....	156
5.2.4. The Effect of Modified Al-Madinah Program on Motivation of Gifted Students .....	158
5.3 Differences and Correlations in Study's Outcomes .....	162
5.3.1 Difference between Control and Experiment Groups .....	162
5.3.2 Differences in Participants' Demographic Characteristics.....	164
5.3.3 Factors Affected the Study's Outcomes at Post-Session.....	171
5.4 Summary of Hypotheses.....	208
5.5 Qualitative analysis.....	209
5.5.1 Themes and Subthemes .....	210
5.5.2 Objectives of Qualitative Study.....	212
<b>CHAPTER 6 DISCUSSION AND CONCLUSION .....</b>	<b>221</b>
6.1 Introduction.....	221
6.2 Achievement of the Research Objectives.....	222
6.3 Self-concept and Domains .....	225
6.3.1 Self-Concept Overall Score .....	225
6.3.2 Behavioural Adjustment .....	226
6.3.3 Intellectual and School Status.....	227
6.3.4 Physical Appearance and Attributes.....	228
6.3.5 Freedom from Anxiety .....	229
6.3.6 Popularity.....	230
6.3.7 Happiness and Satisfaction Pairs .....	231



6.4	Motivation and its Domains .....	232
6.4.1	Overall Score of Motivation .....	232
6.4.2	Obedience .....	234
6.4.3	Tendency .....	235
6.4.4	Responsibility .....	236
6.4.5	Social .....	236
6.4.6	Warmth .....	237
6.5	Impact of Demographic Characteristics on Study Outcomes .....	238
6.6	Impact of Research on The Saudi Education Sector .....	238
6.7	Recommendations.....	239
6.8	Conclusion .....	240
	<b>REFERENCES.....</b>	<b>241</b>
	<b>APPENDICES</b>	

## LIST OF TABLES

		<b>Page</b>
Table 3.1	Strategies and Their Main Concepts in AL-Madinah Program .....	76
Table 3.2	Comparison between Al-Madinah Program and MAI-Madinah Program .....	90
Table 3.3	The Elements and Procedure Which Have Been Modified .....	101
Table 4.1	Distribution of Study Participants from the Al-Jawf Talent Center .....	113
Table 4.2	Value of Reliability Coefficient of the Piers-Harris 2 Questionnaire in the Current Study .....	122
Table 4.3	Value of Reliability Coefficient of the Motivation Questionnaire in the Current Study .....	130
Table 4.4	Dimensions of Self-concept after Factor Analysis .....	137
Table 4.5	Correlation Matrix of Self-Concept Questionnaire .....	138
Table 4.6	Factor Analysis and Reliability of Self-Concept .....	140
Table 4.7	Component Transformation Matrix .....	141
Table 4.8	Value of Reliability Coefficient of Self-concept Questionnaire in the Current Study .....	141
Table 4.9	Dimensions of Motivation after Factor Analysis .....	142
Table 4.10	Correlation Matrix of Motivation Questionnaire .....	143
Table 4.11	Factor Analysis and Reliability of Motivation .....	145
Table 4.12	Component Transformation Matrix .....	146
Table 4.13	Value of Reliability Coefficient of Motivation Questionnaire in the Current Study .....	146
Table 4.14	The data collection phases .....	147

Table 5.1	Demographic Characteristics Represent the Level and Birth Order of Participants .....	154
Table 5.2	Demographic Characteristics Represent Age of the Participants ...	154
Table 5.3	Descriptive Characteristics of Self-Concept.....	155
Table 5.4	Descriptive Characteristics of Motivation.....	156
Table 5.5	Students' Answers about Self-Concept at Pre- and Post-Sessions .....	157
Table 5.6	Students' Answers to Motivation at Pre- and Post-Sessions.....	160
Table 5.7	The difference in Self-Concept (and Domains) between Control and Experimental Groups at Pre-Session.....	163
Table 5.8	The difference in Motivation (and Domains) between Control and Experimental Groups at Pre-Session.....	164
Table 5.9	Differences in Self-Concept (and its Domains) among the Levels of Education at Study's Sessions.....	166
Table 5.10	Differences in Motivation (and its Domains) among the Levels of Education at Study's Sessions .....	167
Table 5.11	Differences in Self-Concept (and its Domains) among the Birth Orders at Study's Sessions .....	168
Table 5.12	Differences in Motivation (and its Domains) among the Birth Orders at Study's Sessions .....	169
Table 5.13	Correlation of Age with Study's Outcomes .....	170
Table 5.14	Predictors of Self-Concept at Post-Session .....	175
Table 5.15	Parameter Estimates of Self-Concept at Post-Session.....	176
Table 5.16	Predictors of BEH at Post-Session .....	178
Table 5.17	Parameter Estimates of BEH at Post-Session.....	178

Table 5.18	Predictors of INT at Post-Session.....	180
Table 5.19	Parameter Estimates of INT at Post-Session .....	181
Table 5.20	Predictors of FRE at Post-Session .....	183
Table 5.21	Parameter Estimates of FRE at Post-Session .....	183
Table 5.22	Predictors of HAP at Post-Session .....	185
Table 5.23	Parameter Estimates of HAP at Post-Session.....	186
Table 5.24	Predictors of POP at Post-Session.....	187
Table 5.25	Parameter Estimates of POP at Post-Session .....	188
Table 5.26	Predictors of PHY at Post-Session .....	190
Table 5.27	Parameter Estimates of PHY at Post-Session.....	190
Table 5.28	Predictors of Motivation at Post-Session.....	196
Table 5.29	Parameter Estimates of Motivation at Post-Session.....	196
Table 5.30	Predictors of WAR at Post-Session .....	198
Table 5.31	Parameter Estimates of WAR at Post-Session .....	199
Table 5.32	Predictors of SOC at Post-Session.....	200
Table 5.33	Parameter Estimates of SOC at Post-Session.....	201
Table 5.34	Predictors of TEN at Post-Session.....	202
Table 5.35	Parameter Estimates of TEN at Post-Session.....	203
Table 5.36	Predictors of RES at Post-Session .....	204
Table 5.37	Parameter Estimates of RES at Post-Session .....	205
Table 5.38	Predictors of OBE at Post-Session .....	206
Table 5.39	Parameter Estimates of OBE at Post-Session.....	207
Table 5.40	Predictors of EFF at Post-Session .....	208
Table 5.41	Parameter Estimates of EFF at Post-Session.....	208

Table 5.42	Summary of Hypotheses, Statistical Tests, Results and Decisions .....	209
Table 5.43	Themes and Subthemes of Qualitative Study.....	212

## LIST OF FIGURES

	<b>Page</b>
Figure 1.1	The Conceptual Framework of The Study ..... 20
Figure 2.1	Theoretical Framework of Modified Al-Madinah Program ..... 65
Figure 3.1	AL-Madinah Program Scientific Model..... 73
Figure 3.2	The Five Strategies of AL-Madinah Program ..... 75
Figure 3.3	Activities of Session 1 and 2 ..... 95
Figure 3.4	Activities of Session 3 and 4 ..... 95
Figure 3.5	Activities of Session 5 and 6 ..... 95
Figure 4.1	Research Design ..... 105
Figure 4.2	Method of Analyses..... 150
Figure 5.1	Normal Distribution of Overall Score of Self-Concept at Post Session ..... 173
Figure 5.2	Relationship between of Dependent and Covariate Variables ..... 174
Figure 5.3	Homoscedasticity of Self-Concept at Post Session ..... 174
Figure 5.4	The difference in Self-Concept at Post-session between Control and Experimental Groups..... 176
Figure 5.5	The difference in BEH at Post-Session between Control and Experimental Groups ..... 179
Figure 5.6	The difference in INT at Post-Session between Control and Experimental Groups ..... 181
Figure 5.7	The difference in HAP at Post-Session between Control and Experimental Groups ..... 184
Figure 5.8	The difference in HAP at Post-Session between Control and Experimental Groups. .... 186

Figure 5.9	The difference in HAP at Post-Session between Control and Experimental Groups .....	188
Figure 5.10	The difference in PHY at Post-Session between Control and Experimental Groups .....	191
Figure 5.11	Normal Distribution of Overall Score of Motivation at Post Session .....	193
Figure 5.12	Relationship between Dependent and Covariate Variables.....	194
Figure 5.13	Homoscedasticity of Motivation at Post Session .....	194
Figure 5.14	The difference in Motivation at Post-Session between Control and Experimental Groups.....	197
Figure 5.15	The difference in WAR at Post-Session between Control and Experimental Groups .....	199
Figure 5.16	The difference in SOC at Post-Session between Control and Experimental Groups .....	201
Figure 5.17	The difference in TEN at Post-Session between Control and Experimental Groups .....	203
Figure 5.18	The difference in RES at Post-session between Control and Experimental Groups .....	205
Figure 5.19	The difference in OBE at Post-Session between Control and Experimental Groups .....	207
Figure 5.20	Word Cloud for Domains of Self-Concept.....	213
Figure 5.21	Word Cloud for Domains of Motivation .....	216

**KEBERKESANAN PROGRAM AL-MADINAH YANG DIUBAHSUAI  
DALAM MENINGKATKAN KONSEP KENDIRI DAN MOTIVASI MURID  
PINTAR CERDAS DI ARAB SAUDI**

**ABSTRAK**

Objektif utama kajian ini adalah untuk meningkatkan konsep sendiri dan motivasi murid pintar cerdas di Arab Saudi melalui program Al-Madinah yang diubahsuai. Kajian ini menggunakan kaedah campuran (kuantitatif dan kualitatif) yang melibatkan responden kajian yang terdiri daripada murid sekolah yang berada di tahun ke-7, ke-8 dan ke-9. Seramai lapan puluh orang murid telah terlibat sebagai responden dalam pengumpulan data kuantitatif. Manakala bagi kaedah kualitatif, seramai sepuluh orang murid telah dilibatkan. Responden telah dibahagikan kepada dua kumpulan dengan bilangan murid yang sama dalam setiap kumpulan. Satu kumpulan didedahkan kepada program Al-Madinah yang diubahsuai, manakala satu kumpulan lagi telah diletakkan di bawah kaedah pengajaran konvensional. Data kuantitatif yang dikumpulkan telah dianalisis dengan menggunakan *Statistical Package for the Social Sciences* (SPSS), manakala bagi data kualitatif pula, ia telah dianalisis melalui NVivo. Dapatan kajian telah menunjukkan bahawa motivasi, konsep sendiri, dan bidang yang diikuti adalah lebih berkesan selepas penerapan program ini. Dapatan kajian juga menunjukkan tiada perbezaan yang signifikan antara kedua-dua kumpulan tersebut berdasarkan urutan kelahiran dan gred pencapaian pendidikan. Bagi faktor umur pula, ia didapati memberikan kesan yang signifikan terhadap konsep diri. Akhir sekali, perspektif murid dan guru adalah positif terhadap penggunaan program ini. Selain itu, kajian ini mencadangkan agar sektor pendidikan memberikan perhatian yang lebih kepada kumpulan masyarakat ini kerana mereka berpotensi menjadi sumber kekayaan dan kemajuan masyarakat.



**EFFECTIVENESS OF THE MODIFIED AL-MADINAH PROGRAM IN  
IMPROVING SELF-CONCEPT AND MOTIVATION OF GIFTED  
STUDENTS IN SAUDI ARABIA**

**ABSTRACT**

The main objective of the current study is to enhance self-concept and motivation of gifted students in Saudi Arabia through the evaluation of the implemented program of Al-Madinah. This is a mixed method study (quantitative and qualitative) which involved samples from the 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> grade of school students. Eighty students were involved in the quantitative method which have been divided equally into two groups and ten students were involved in the qualitative method. One group was exposed to the Modified Al-Madinah Program and the other group was under the conventional teaching methods. The quantitative data gathered was analysed by a statistical program (SPSS), while the qualitative data was analysed with NVivo. The results revealed that motivation and self-concept have significant effect after the used of application of the program. self-concept. There was a no statistically significant difference between the two groups with respect to birth order and grade education in both constructs, while age exerted significant effect on self-concept. Finally, the students and teachers' perspectives were positive towards the program. Also, this study evokes the educational sector to give more attention on this group of the society as they can be a great source of society wealth and its development.

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

The main objective of this study is to enhance self-concept and motivation of gifted students in the Kingdom of Saudi Arabia (KSA). This study investigates the effect of the Modified Al-Madinah Program in improving self-concept and motivation of gifted students in Saudi Arabia. Al-Madinah Program is a program developed in 2015 by Abdeen (2016) in the Univeristi Sains Malaysia (USM). This program constitutes a collection of strategies that are organized according to principals and elements of three learning theories: (a) theory of concurrent thinking, (b) brain-based learning theory, and (c) successful intelligence theory. All the program components are directed towards developing creative thinking skills of the gifted students. Many researchers have reported on the importance of self -concept and motivation in the performance of students. Therefore, the researcher has modified Al-Madinah Program to enhance self-concept and the motivation for gifted student. The Modified Al-Madinah Program was then evaluated by experts in the area of education and talent studies. After receiving feedback, the Modified Al-Madinah Program was redesigned to fulfil all experts' recommendations including the viewpoints of the evaluators, their comments, and their corrections that is necessary to be incorporated in the program. After that, the Modified Al-Madinah Program was verified and validated by conducting a pilot study. Self-concept is one of the components of personality and a central element in Carl Rogers' Human Personality Theory is viewed as one of the most significant terms (Mishra, 2016). It denotes the image that a person constructs about himself or herself in terms of physical, mental, and behavioural features. On the other hand, motivation is used to

denote reasons that govern behaviour whose important features are willingness and volition. Motivation can include processes that arouse and direct individual's behaviour. Motivation also keeps individual's behaviour to be repeated. Motivation also involves a pattern of beliefs, perceptions, values, interests, and actions, which are all closely interrelated. Extrinsic motivation is stirred by external something as a reward that might be attained. This study focuses on gifted students in Saudi Arabia. Gifted students are students who possess willingness, some extraordinary skills or impressive performance, when compared to other peers in areas (such as mental superiority, innovative thinking, academic achievement and special skills and abilities) that are valued by the community. This category of students requires special education that are not like the programs provided by the ordinary curriculum found in schools and they need to improve their capabilities (Alatawi et al., 2016). It is reported that 2% is an average estimation of gifted students in Saudi Arabia. Therefore, gifted students in Saudi Arabia may not exceed 80,000 as there are four million students in the schools in Saudi Arabia based on latest records (Bondagjy, 2000).

## **1.2 Background of the Study**

The world is changing rapidly, and all aspects of our lives are changing too. The Educational systems are no exception to all these impressive and remarkable changes and moved along to adapt to these changes and was modified (Beech, 2006). Consequently, and based on these witnessed rapid changes, the educational system's goals were influenced. By considering these issues, there is a consensus that school education is intended to improve and develop learning and thinking skills for the students by the instructions they get from educators. Hence, they can be active

members in their societies, in addition, to help them to take proper decisions to avoid and overcome the difficulties they face in life outside their schools (Beech, 2006).

It is crucial to highlight the importance of taking care of gifted students to help them develop, improve, and build their skills, abilities, and capabilities to cope with difficulties that they may encounter in their lives course. Additionally, when developing the attitude and aptitude of gifted students, the benefits arise by letting them use their talents and abilities (Laine & Tirri, 2016). The value of gifted students is not less important than the national human wealth or other resources in any society (Alfurayh, 2016). Therefore, Alfurayh (2016) insisted on the role of developing the gifted students and noted that any society that is concerned about the development, and advancement should take care of the development of the gifted students as well.

For the advancement of any well-functioning society, providing gifted and gifted students with what they need is a crucial criterion. This is because gifted and gifted students are considered an essential part of future prosperity and a future beneficial resource. Considering these important facts, developed countries have offered various types of efforts to provide proper assistance and programs to gifted and gifted students. Although making proper provision for gifted students in developed countries, not all developing countries have given an interest in programs offered to the gifted students. For example, KSA, which is one of the under-developed countries, has witnessed growth in the interest given to gifted and gifted students since 1998. This interest has been translated into establishing programs that were designed to identify gifted students. Furthermore, the Ministry of Education in KSA established the General Administration for Gifted Students (GAGS) in 2000 (Bondagjy, 2000). Despite the attempts that have been offered so far in the country to

add and improve gifted education in KSA, issues related to research and development in gifted education have received little attention from the researcher.

Bondagjy (2000) pointed out that 2% is a moderate estimation of gifted students in KSA. Based on this percentage gifted students in KSA may not exceed 80,000 as the latest census revealed that there are four million students in the country schools. Thus, the current available specific programs that are given to gifted students may not meet the needs of all gifted students in the country. Rather the current existing programs for gifted students may provide programs for almost half of all gifted students (KACFG, 1999). Expectations have indicated that the number of gifted students is expected to rise. Concerning this, (Bondagjy, 2000) pointed out that the percentage of increase in the number of gifted students is 5%, a percentage that represents an increase in the population. (Bondagjy, 2000) argued that KACFG cannot deal with the increasing number of gifted students.

This number is about 200,000 students. As a result of this, schools need to have more specialised programs for gifted students to meet the demand of the increasing number of gifted students. Furthermore, the researcher informal communication with many teachers and practitioners in the country revealed that there is an urgent need for more specialised gifted programs that should be designed to offer services and facilities for gifted students.

### **1.3 Problem Statement**

The education of gifted children is given great attention by authorities, related organizations, and gifted students' centres in KSA. However, previous studies have highlighted different obstacles to identify and support gifted students in KSA. First,

scientific research on gifted students in the context of Saudi Arabia is scarce. Suliman (2006) confirms the scarcity of conducting scientific research on gifted students and the lack of financial support for such research. This was also supported by the Gifted Regional Scientific Conference held in KSA (Suliman, 2006). Some of the outcomes addressed in this work are the dearth of scientific research and obstacles that hinder researching gifted students in Arabian countries. More importantly, Sulaiman (2013) pointed out that previous studies addressing aspects of affective and emotional aspects (e.g., motivation and self-concept) among gifted students suffer various shortcomings and there is a need to comprehensively research the impediments of effective programs (Al-Ghamdi, 2007; Alqefari, 2010). Also, there are very few programs designed for gifted students and managed by the Ministry of Education in KSA (Al-Ghamdi, 2007). Although the government of KSA is aware of the importance of nurturing gifted students in the country (Mawhiba, 2007), the programs are new and need evaluation to get the maximum benefits. Therefore, it is important to proceed with the research on gifted students especially in the case of Saudi Arabia context.

Another issue is the lack of special programs designed to enhance the performance of gifted students. The authorities in KSA have declared that the existence of schools that are committed to creating opportunities for gifted students would result in identifying more gifted students and creating a successful future for society (Abdeen et al., 2016). Additionally, the current situation in KSA indicated that gifted students who have special qualities, skills, capabilities, or abilities require programs with better levels of services. However, through the researcher's informal communication with practitioners in some Saudi school, it is noticed there is a dire need for well-developed, highly organized and customised special programmes that

can better serve the gifted students. This lack of specialized programs for gifted students in KSA was indicated by Alqefari (2010), who emphasized the urgent need of reviewing and evaluating specialized programs offered to gifted students with the need to understand their ambitions and practitioners' points of views. Furthermore, Al-Ghamdi (2007) noted that gifted students have low self-efficacy and low levels of motivation that are attributed to environmental factors and conditions surrounding students, which their effects appear in the methods used in teaching and learning. This gives a rise to calls for creating special programs that meet the ambitions and consequently motivate the gifted students (Sulaiman, 2013). Hence, this research aims to develop a training program to enhance gifted students' motivation and self-concept.

Al-Madinah Program which was developed in 2015 was formulated to enhance the creative thinking skills of gifted students. It is noteworthy that creative thinking improves feelings of self-esteem and works to stimulate motivation (Al-Ghamdi, 2007); Furthermore, Jabeen and Ahmed Khan (2013) reported that mental ability impacts shape the image of the individual, his/her awareness, and other attitudes. Since mental capacity is one determinant of personality, creative thinking would add specific abilities that affect the personality. The mental abilities and style of creative thinking would influence greatly the self-concept as reported by Abdeen et al. (2016). In the same vein, Justo (2008) conducted an experiment to test the relationship between affective factors and creative abilities and found that self-concept is positively influenced by creative capacity. In addition, it is found in other works that excessive assessment of gifted people and continuous interest to reach their ideal state may yield dissatisfaction with their work due to their desire to achieve the best performance (Al-Ghamdi, 2007).

AL-Madinah Program emphasizes that abilities and skills of gifted students can be enhanced through an appropriate and systematic training. However, Abdeen (2016) have highlighted that for this training to be successful the gifted students should be motivated and have eagerness, self-concept and trust in his/her own talent abilities. AL-Madinah Program needs to be modified to make it easier for students by using only five strategies focusing on motivation and self-concept rather than the five strategies that focused on the creative thinking. Also, to choose the activities that improve motivation and self-concept which is the objective of the study. Finally, to be proportionate for the Saudi gifted students. Therefore, this study examines the improvement of self-concept and motivation among gifted students through modifying and developing a training program that contains strategies that are based on the capabilities and the latest theories of creative thinking of the modern theory of synchronous thinking. In this study, Al-Madinah Program was selected to be modified to achieve the main objectives of this research.

Many studies have been carried out to examine self-concept and its impact on the academic performance of students. A line of these works has reported that the functions of academic self-concept are an important factor that can be used to predict students' academic motivation (Liu, 2012). Another intended to examine the causal relationships between self-concept and academic motivation (O'Mara et al., 2006). An important finding in previous works revealed a mutual relationship between academic self-concept and achievement. Marsh et al. (2006) affirmed that an academic self-concept may vary depending on one's and peers' academic achievement. Also, they indicated that enhancement of academic self-concept can be achieved when applied in a high-achieving group. Moreover, the assimilation effects are another important finding in this case (O'Mara et al., 2006). However, distinction



effects occur when the above-average performance of peers can negatively affect the students' academic self-concepts. Hence, Marsh and Hau (2003) came up with the Big-Fish-Little-Pond effect (BFLPE) to explain the effects of this frame of reference. Although they argued that self-concept and students' performance are positively correlated, the average ability level of students' peers in class adversely impacted specific academic self-concepts building. Also, Emmanuel et al. (2014) investigated the relationship between achievement motivation and academic self-concept with academic achievement. They reported that high motivation and high self-concept among most of the participants and that the student's performance in the Mathematics Achievement test was highly good. However, the positive correlation between achievement motivation and academic achievement was not statistically significant. Yet, the findings of the study affirmed the role played by both achievement motivation and academic self-concept when academic achievement is the main concern. Therefore, this research focuses on these two dimensions, self-concept and motivation, to achieve better performance of gifted students. Also, this research aims to reveal if there are differences compared with the above-mentioned work in the context of KSA.

Many studies have highlighted the effect of students' demographic characteristics (age, birth order, and grade) on the relationship between students' academic self-concepts and motivation, and academic performance. In this context, Coetzee (2011) conducted a study to reveal the controversial findings in previous works concerning the relationship between students' academic self-concepts and motivation, and academic achievement. Although there was a significant correlation between academic self-concept, motivation and academic achievement, this was not reached to all students in all levels (year of study) of students. Similarly, Liu, (2012)

investigated the relationship between self-concept and motivation and their relationship with the performance of first-year university students from 4 different proficiency levels. Results affirm the significant correlation between self-concept and motivation for all participants. However, the study reported that lower-level students tended to have higher correlations between these two variables compared to a higher level. Also, the students' self-evaluation has a moderate correlation with academic self-concept and learning motivation. Based on the above findings, the researcher articulated to measure the effect of the Modified Al-Madinah Program in improving the self-concept and motivation of gifted students as well as the impact of their demographic characteristics. The study is conducted on the gifted students in the selected schools at Al-Jauf region in KSA. This research aimed to better understand these factors and their effects and to expand the knowledge of literature in another context other than the Western culture.

#### **1.4 Objectives of the Study**

This study mainly aims to investigate the effect of the Modified Al-Madinah Program in improving the self-concept and motivation of gifted students in KSA. To attain this general objective, the specific objectives were formulated and categorised as follows:

1. To investigate the impact of using the Modified Al-Madinah Program on the self-concept domains (behavioural adjustment, intellectual and school status, physical appearance and attributes, freedom from anxiety, popularity, and happiness and satisfaction) and the differences between the experimental group and control group.

2. To investigate the impact of using the Modified Al-Madinah Program on the motivation domains (obedience, tendency, responsibility, social and warmth) and the differences between the experimental group and control group.
3. To examine the impact of demographic characteristics of the experimental group of gifted students on self-concept and motivation.
4. To examine the perspective of gifted students on the Modified Al-Madinah Program.

### **1.5 Research Questions**

The following research questions were formulated and associated with research objectives to find out the outcome of the study:

- i. Is there any significant difference in the overall score of self-concept between the experimental group and control groups after using the Modified Al-Madinah Program?
- ii. Is there any significant difference in the score of self-concept domains (behavioural adjustment, intellectual and school status, physical appearance and attributes, freedom from anxiety, popularity, and happiness and satisfaction) between the experimental group and control group after using the Modified Al-Madinah Program?
- iii. Is there any significant difference in the motivation score between the experimental group and the control group after using the Modified Al-Madinah Program?
- iv. Is there any significant difference in the score in the motivation domains (obedience, tendency, responsibility, social and warmth) between the

experimental group and control group after using the Modified Al-Madinah Program?

- v. How do the demographic characteristics of the gifted students affect the self-concept scores at pre-sessions and post-sessions using the Modified Al-Madinah Program?
- vi. How do the demographic characteristics of the gifted students affect the motivation scores at pre-sessions and post-sessions using the Modified Al-Madinah Program?
- vii. What are the students' views and perspective on the Modified Al-Madinah Program?

## **1.6 Research Hypotheses**

Based on the explanation of the problem addressed by the study as given above, the null hypotheses that were formatted to be tested in this study are:

H<sub>01</sub>: There is no significant difference in the overall score of self-concept between the experimental group and control group after using the Modified Al-Madinah Program.

H<sub>02</sub>: There is no significant difference in domains of self-concept (behavioural adjustment, intellectual and school status, physical appearance and attributes, freedom from anxiety, popularity, and happiness and satisfaction) between the experimental group and control group of the gifted students after using the Modified Al-Madinah Program.

- H<sub>03</sub>: There is no significant difference in motivation score between the experimental group and control groups after using the Modified Al-Madinah Program
- H<sub>04</sub>: There is no significant difference in domains of motivation (obedience, tendency, responsibility, social and warmth) between the experimental and control groups of the gifted students after the intervention using the modified Al-Madinah Program.
- H<sub>05</sub>: There is no effect of demographic characteristics (age, birth order and grade) of the gifted students in the modified Al-Madinah Program on differences of self-concept scores at pre-sessions and post-sessions.
- H<sub>06</sub>: There is no effect of demographic characteristics (age, birth order and grade) of the gifted students in the modified Al-Madinah Program on differences of motivation scores at pre-sessions and post-sessions.

## **1.7 Significance of the Study**

This research expects to be significant concerning the improvement of gifted students' performance in schools in KSA in the following ways. It is expected that this study would contribute significantly to enhance the education of gifted students within KSA. In Saudi Arabia, it was found that the establishment and provision of effective programmes for gifted students face many impediments. In addition, there is a need for in-depth and comprehensive studies to be developed. Therefore, these highlighted issues shed the light on the importance of this study as it aims to examine the impact of the application of the Modified Al-Madinah Program on enhancing and improving the self-concept and motivation of gifted students in KSA.

Furthermore, this study is significant as it will provide libraries and research centres in Arab countries and Arabic literature with an enriched program to improve self-concept and motivation for gifted students and consequently better academic performance. In addition, the outcome of the current study is expected to offer the Ministry of Education (MoHE) in KSA an enriched program that meets the requirements of the learning system of gifted students.

The major achievement of this study can have positive consequences that are associated with the encouragement of gifted students to have fruitful involvement in their societies. This due to that this study promotes the awareness of gifted students on the importance of both self-concept and motivation and their inevitable effects on positive progress in learning and academic achievement. This category of students should be trained properly and prepared appropriately to be vibrant members of their societies Hence, it is highly expected that gifted students will most probably have an important contribution in various sectors in their societies.

Finally, the Arab world, specifically in KSA, still has a dearth of comprehensive studies on promoting the self-concept and motivation of gifted students. Thus, this study can be considered as important research for both the KSA and the Arabic environment. Moreover, this study will theoretically contribute to the body of knowledge in both aspects contextually and practically. Besides, this study can be regarded as a guide and reference for the stakeholders and policymakers in KSA.

## **1.8 Definition of Key Terms**

This section would present the definitions of the key terms used in this research, these terms would be categorised into two main categories; General categories which would include the general terms that are used generally in the research such as self-concept, and motivation, whereas the second category; Special terms, would include the specific terms that are going to be used in this research, this category would include the gifted students, Al-Madinah program, and the Modified Al-Madinah Program, as follows:

### **1.8.1 Motivation**

Motivation is defined as the attribute that leads one to do an action or not intrinsically– by strengthening activities through satisfaction– or extrinsically– by reinforcement contingencies– by his/her own volition of self-regulated learning strategies (Deci et al., 1999; Gredler et al., 2004; Turner, 1995). It is an internal state that strongly encourages the learner consciously to observe educational situations, perform activities related to these situations, and continue to perform these activities to achieve learning objectives.

The current study employed the Questionnaire of Motivation-to-Learn to assess students' motivation-to-learn. This questionnaire was constructed and developed by (M. F. Suleiman, 1993). This questionnaire was used on the targeted gifted students of this study to measure their motivation toward learning via Al-Madinah Program.

### **1.8.2 Self-Concept**

Self-concept is one of the components of personality and a central element in Carl Rogers' Human Personality Theory and it is viewed as one of the most significant terms (Mishra, 2016). It denotes the image that a person constructs about himself or herself in terms of physical, mental, and behavioural features. The image a person builds about himself/herself is the outcome of a complex interaction among social factors — a process that starts in earlier stages of a person's childhood. These social factors may be related to the way parents treat their child, the observation of children's speech and communication with others if what they say about them is bad or good, and their daily and continuous evaluation of all of their behaviours. As time progresses, these social factors accumulate to form the image of child personality in the future (Bong & Skaalvik, 2003).

The current study employed the Questionnaire of self-concept to assess students' components of personality. The present study used the Piers-Harris2 self-concept scale. This questionnaire was constructed and adopted from the Piers-Harris2 self-concept scale. This questionnaire was used on the targeted gifted students of this study to measure their motivation toward learning via Al-Madinah Program.

### **1.8.3 Gifted Student**

Gifted Student is a term that is used to denote an individual student who possesses willingness, some extraordinary skills or impressive performance when compared to other peers in areas (such as mental superiority, innovative thinking, academic achievement and special skills and abilities) that are valued by the



community (García-Guardia et al., 2019). This category of students requires special education that is not similar to the programs provided by the ordinary curriculum found in schools and they need to improve their capabilities (Alatawi et al., 2016).

In this study, the gifted students used to refer to students enrolled in the 7<sup>th</sup>-9<sup>th</sup> grades at Al-Jjof centre. By referring to the performance of these students in an international test assessing talented students, the selection of these students was carried out. This test was administered by the Ministry of Education in KSA.

#### **1.8.4 Al-Madinah Program**

Al-Madinah Program is a training program that refers to a set of classified and objective strategies that are informed by and linked to three significant theories (Alherbawy, 2017):

- 1) Theory of concurrent thinking,
- 2) Successful intelligence theory, and
- 3) Brain-based learning theory.

According to Abdeen and Ghani (2016), the Al-Madinah program has 16 sessions that cover the following: 1) training objectives, 2) an organized context, and 3) targeted skills. In addition to that, the program contains many activities to achieve the objective, the teaching aids to help educators, schedules, and evaluation tools. All these facilities are aimed to improve, enhance, and develop the gifted students' creative thinking abilities.

### **1.8.5 Modified Al-Madinah Program**

The Modified Al-Madinah Program is a program developed by the researcher based on the Al-Madinah program to enhance self-concept and the motivation for gifted student. It comprises 16 lessons for the gifted student in KSA. The Modified Al-Madinah Program includes the techniques, activities and instruments. These are aimed to enhance self-concept and the level of motivation of the students. This program will be used with the experimental group.

The Modified Al-Madinah Program is a training program that refers to a set of classified five strategies targeted the gifted students in seventh to ninth-grade levels, in Al-Jawf gifted centre in KSA in terms of improving their self-concept and motivation qualities. These five strategies are brainpower, synchronization, self-generation, creative acceleration, and exploration. Strategies contained activities that are designed based on the educational situations using the short story that comprises elements and activities. There are 20 sessions in the MAL-Madinah Program, and they are implemented in nine weeks, with two lessons in the first seven weeks followed by three lessons in the last two weeks. The duration of each lesson is 45 minutes. Various teaching aids were included in the program such as academic posters, data show device, sketches, picture flapper, drawings, educational maps, CDs, educational videos, and plays. Various teaching methodologies are introduced in the activities of the Program. These methodologies include problem-solving activities, cooperative learning, imagination, group discussions, brainstorming, and brain maps.

The Modified Al-Madinah Program is a program developed by the researcher based on the Al-Madinah program to enhance self-concept and the motivation for

gifted student. It comprises 16 lessons for the gifted students in KSA. The Modified Al-Madinah Program includes the techniques, activities and instruments. These are aimed to enhance self-concept and the level of motivation of the students. This program will be used with the experimental group.

## **1.9 Conceptual Framework**

As mentioned earlier, the conceptual framework of this study was informed by Al-Madinah Program which based on new theories such as concurrent thinking theory. Al-Madinah Program implemented five strategies:

- Brainpower
- Self-generating
- Creative acceleration
- Operational
- Synchronization

The Modified Al-Madinah Program was presented to experts in the area of education and talent studies to evaluate it. After receiving feedback, the Modified Al-Madinah Program was redesigned to include the recommended amendments such as the viewpoints of the evaluators, their comments, and their corrections that they feel it is necessary to include. After this evaluation procedure, the next step is to validate the Modified Al-Madinah Program by conducting a pilot study.

The Modified Al-Madinah Program is a program that comprised of multiple training sessions. It is administered in 2 months in the region of Al-Jawf talent centre, in KSA. The Modified Al-Madinah Program administered to include male students in the grades of 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup>. This study is an experimental study. There were two groups included in the research. The first is the control group and the

second is the experimental group. The experimental group was exposed to the Modified Al-Madinah Program; on the other hand, the control group followed the regular talent. This program was specifically designed by the Ministry of Education in the KSA and was provided to Al-Jawf Talent Center. The Conceptual Framework of the current study is shown in Figure 1.1.

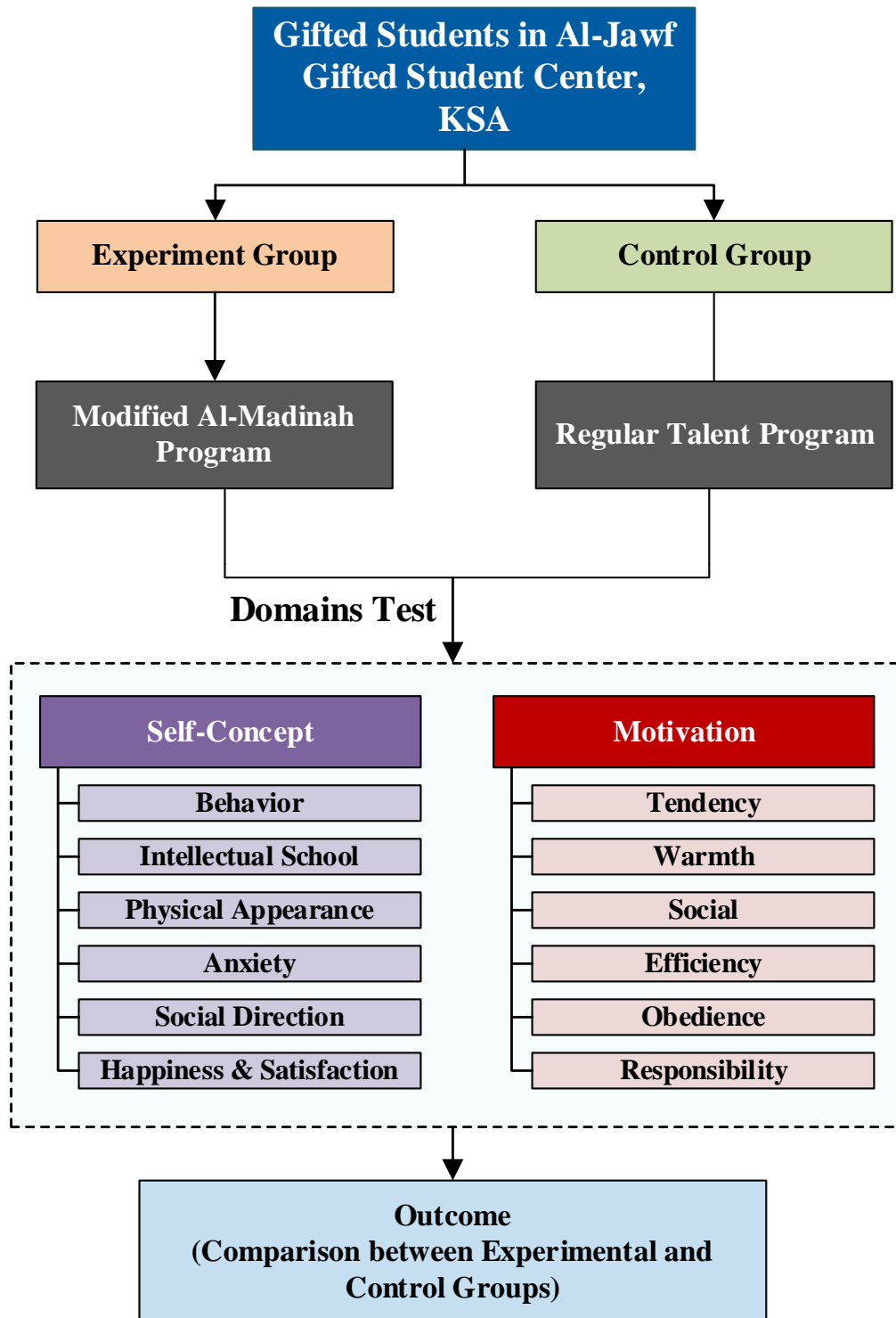


Figure 1.1 The Conceptual Framework of The Study

## 1.10 Limitations of the Study

The current study is limited by the following:

- i. The study attempts to inspect the influence of the Al-Madinah Program in improving the level of self-concept and the level of motivation of gifted student in one area of KSA and did not include other areas of the KSA. They were all in the 7<sup>th</sup> to 9<sup>th</sup> school grade students. This can be said to have a minor segment of the whole school population in the KSA and, therefore, considered a limitation that should be eliminated in future studies. Also, it can be said that the results obtained can limit the generalizability of the study. Future studies in other areas of the country must take place to achieve the generalization of the results.
- ii. The researcher did not include female students in his research due to the restrictions in the Arabian culture as well as the social and religious aspects that hinder the inclusion of both genders in any academic studies. This is reported in the work of other researchers in KSA such as Alrabai, (2017), where he faced this obstacle in researching the KSA. In the current study, the researcher is a male, and, therefore, these considerations were critical to employ different genders. Hence, female students were excluded from this study.
- iii. This study is limited to gifted students in the 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> grade in Al-Jawf centre at Al-Jawf city in KSA. A more balanced and wider scope of the sample is required to make the proper generalization of the findings. Therefore, the sample selected is divided into two groups, namely: the control group that have the regular teaching methods, and the experimental group that was exposed to the Modified Al-Madinah Program.

- iv. The study of the experimental group took place in one semester which is a short time for students to get acquainted with all aspects of the Modified AL-Madinah program and its maximum benefit. Therefore, a longitudinal experiment is more important to implement to maximize the understanding and the coverage of the different topics by the students as well as to make more generalizability of the results obtained.

### **1.11 Summary**

This chapter starts with the introduction followed by the background information. After that, the statement of the problem was highlighted, and the objectives were presented. The hypothesis, research questions, and definitions were expressed. Additionally, the rationale behind the study was presented, significance and limitations were also highlighted. Moreover, the conceptual framework of the study was depicted.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter encapsulated the review of the main conceptual and theoretical background related to the current study. It includes a review of all main domains and factors that are used in this research. This including motivation, self-concept, giftedness and programs related to the learning of gifted students. It also provided a review of the extant studies regarding motivation and self-concept and their effect on the performance of gifted students.

#### **2.2 Education in the Kingdom of Saudi Arabia**

The growth of the population of KSA in a remarkable way is shown in the expansion of cities and villages. Currently, the small cities are more than 11,000. 30,000 schools serve several small villages in the KSA. Alqefari (2010) reported that the gross national product exceeds £30,666 billion in 2004. Therefore, there is a possibility that the government can allocate a high budget for education. Nevertheless, £8486 billion was only assigned to education. This is an indication of the readiness to pay as much as required for education. It is also a piece of evidence that the KSA gives priority in its annual budget to education.

Almost over 50 years ago, the special programs for gifted and gifted students were neglected in KSA and the focus of the government at that time was oriented towards establishing the infrastructure physical buildings (Battal, 2016). After 1960, the Ministry of Education (MoE) in KSA was able to drive more attention to the



special education programs of the gifted students in an aim to reinforce the quality of this category of the students and enhance their functionality in their societies (Battal, 2016). This is an expected step for any country that aims to cope with the modern progress that the world has recently witnessed. Therefore, the gifted students have been given the priority of importance by the Ministry of Education of Saudi authority in the latest decades (Ministry of Education, 2007).

### **2.2.1 Educational System in The Kingdom of Saudi Arabia**

The establishment of the Ministry of Education in KSA was in 1958. Fifteen primary schools were reserved for girls in KSA, and girl's education initiated in 1960. This has been noted in many books on education in KSA. Besides, the following years witnessed a dramatic change in the educational system in the KSA. Seven institutions were established to train the teachers; seventy-two schools were opened (i.e. secondary and intermediary schools), and seven vocational schools were also opened. Interestingly, in 1963 one intermediate schoolgirl was inaugurated. Moreover, the continual inauguration of schoolgirls was witnessed in 1965 with a secondary schoolgirl. Furthermore, two hundred twenty-five schools and institutions were founded in 1965 wherein in 1964 only one hundred fourteen existed.

The period between 1975 and 1985 is regarded as the golden age for educational change in KSA where a noticeable growth of schools and institutions were founded. However, the financial support was not enough and basic. Therefore, the government made further steps to invest in the educational system by increasing the number of staff and teachers in this sector (Madini, 2005). This investment led to an increase in the number of universities, 19 universities, and over twenty-nine