

Investigating the Orientations of the Schoolchildren's Talents in the Algerian Educational System (Exploratory Study)

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Received: 1/3/2023 Accepted: 2/9/2023 Published: 31/3/2024:

Abstract:

It was generally believed that if we want to discover someone's intelligence, this could be determined through an IQ score. It was accepted that people are born with certain level of intelligence and that's what they have their whole life; however, Gardner didn't accept this idea and he found that one intelligence is not static. He argued that this IQ test mainly tests certain type of intelligence. Gardner suggested that we are all different and we have consequently different types of intelligences, he came with the theory of Multiple Intelligences which introduces seven major intelligences. The current study is based on Howard Gardner's theory; it focuses on school acquisition that is always expressed through quantitative average which is the product of the convergence of several talents without any consideration that could be given to the different talents introduced by Gardner. To evaluate and identify the orientations of schoolchildren's talents we have used that scale as a principle tool of research which was applied on 90 pupils representing our sample. The results of the research have shown the following: Pupils having a Social Intelligence 18.94%, Pupils having an Interpersonal Intelligence 16.67%, Pupils having a Linguistic Intelligence 15.22%, Pupils having a Visual and Spatial Intelligence 14.97%, Pupils having Mathematical and Logical Intelligence 14.27%, Pupils having Bodily/Kinesthetic Intelligence 11.94%, Pupils having Musical Intelligence 8.00%.

Keywords: Multiple Intelligences, talent; Orientations; Schoolchildren; Algerian Educational System.

1. INTRODUCTION

A large number of pupils join the Algerian school each year, they all start from the same departure line but they leave it having different levels. If we exclude the school leaving and failure which lead pupils to back stages of learning; we recognize that to reach the end of the secondary schooling period, pupils' evaluation is based on a quantitative assessment of their school acquisition in choosing their streams (major) without taking any consideration of their talents during their long schooling period.

Many researchers were concerned with studying the phenomenon of talents and showing its importance in the educational and schooling field. Among them, Howard Gardner 1983 in his Theory of Multiple Intelligences; He considers the talent or the competence as: "the ability of the individual to see a specific problem and solve it or through it he gives something interesting to a group of individuals (Adel Abdellah Mohamed 2005:06). Through this definition Gardner put the intelligence and the talent in the same position.

To know this talent he used a number of lists gathered in seven (07) categories of children's intelligences as follows: - Verbal-linguistic intelligence, - Logical-mathematical intelligence, - Spatial-visual intelligence, - Bodily-kinesthetic intelligence, - Musical intelligences, - Interpersonal intelligence, - Intrapersonal intelligence. In 1997 he added another category that he called, - Naturalist intelligence, he came later in 1999 to add another type, and named it the Existential intelligence. According to Gardner all the above mentioned intelligences are present in every child without exception, but their degree and level differ from one child to another according to the individual differences.

This study tries to answer the following major research question, which is:

- What are the Orientations of the Schoolchildren's Talents in the Algerian educational system?

The present study seeks to show the orientation of the schoolchildren's talents in our educational system; the main concern of this study is not the discovery of the talented pupils and try to make them all equal at the beginning of their schooling, or lists the different talents in specific patterns neither. This study focuses on school acquisition that is always expressed through quantitative average which is the product of the convergence of several talents.

The study aims at highlighting the following points:

- Knowing the orientations of the different talents that characterize the schoolchildren.
- Showing the talents which have low orientation.
- Evaluate the competences and talents of schoolchildren.
- Discover the schoolchildren's talents in the light of the Multiple Intelligences Theory.
- Know the different salient talents outside the familial environment control.
- Discover the schoolchildren's talents in the purpose of refining and directing them instead of losing them.

- To exploit the pupils' talents and their attitude in the orientation process towards their streams (major) at the secondary school.
- To investigate the differences between children's talents according to the gender.

2. Theoretical consideration and study concepts

2.1 Concepts on the Talent

Plato introduced the concept of competences and talents, he had the idea that individuals cannot be all equal in terms of talents and competences from their birth, they cannot inherit that. The philosopher Francis Bacon emphasized the natural talent, yet he admits the role of education in developing and refining the capacities. Contrarily to those philosophers, Thomas Hobbes and John Locke criticized deeply the idea of talents' and capacities' inheritance, at that time a new era began on talents and competencies study in 19th century with the emergence of psychological test and the psychology of individual differences as a new scientific trend. The contribution of the English scientist Francis Galton with the publication of a series of work remains in the same direction of the talents' inheritance from parents to children.

The German scientist William Stern used the test battery of Alfred Binet with which he distinguished between two kinds of talents: the efficient talents and the spontaneous talents. He sees that children having efficient talents need all the time an outside consultancy and the scientific performance is best suited to them. Concerning children possessing the spontaneous talents have more tendencies towards mental and theoretical performance. According to Stern, the principle idea in explaining the talent is through the combination between the internal factor of the talent and the external one in terms of education and the surrounding environment and under the influence of the development and the external factors, the talents are transformed into characteristics as a result of the inter-influence of the internal and the external facts; however, the German scientist "Ernest Millman" (1917) considers the external factors as the only ones to strengthen or to weaken the inherited talents (Mohamed Beni Younes, 2009).

In the late 50's psychologists used the concept of competence for children, yet the use of the term "talent" was restricted in literature and artistic studies only under what is so called artistic psychology. From the time white (1959) introduced the term competence in psychology, there have been a kind of an inter-relation between the two concepts: competence and talent up to now (Pierre Oleron et Al, 1981).

Many researchers merge the talents with the studies of intelligences and competences in general and consider the competence "represents the higher level from the development of general and special knowledge constituents and skills and competences that ensure reaching success in different kind of activities" (Mohamed Beni Younes, 2009). Thus, scholars do not deal with only one competence but a number of inter-related competences in which each one is influenced by the following factors:

- Active influences and exchangeable with the surrounding environment.
- Educational and learning processes.

These factors lead to the emergence of two kinds of competences and talents: general competences and talents and special competences and talents. This issue is rejected by other researchers in terms of the origin of talents' and competences' emergence; this is due to the divergence of many views and schools of psychology. Some of them claim that competences and talents are already determined from birth and genetically programmed. There is a third view which gathers between both the genetic factors and acquired ones in the emergence of distinguished talents and competences. The talent is individual that characterizes one person from another and it is psychological at first level, it needs the combination of several mental cognitive and non-cognitive processes with the essential needs to practice the performance (Mohamed Kacim Abdellah, 2009).

Psychologists gave importance to the study of talents and creativity as a specific phenomenon; from an early time they have designed scales and tests to evaluate the different talents (Benesch Hellmuth, 2003). Scientists consider the artistic genius and the ability to produce come to the early ages of childhood (Mustapha Souwif, 1999).

The theory of Multiple Intelligences of Haward Gardner 1983 made a revolution in the field of psychology, it is considered as the most important theory that could stat as many intelligences and talents. It could stat lot of details as follow:

2.2 Description of the Intelligences

According to Gardner, an intelligence refers to someone's ability to solve a problem or do something considered valuable in one or more cultures. In the early 1980s, he identified seven intelligences described as follow:

Visual-Spatial – these people have the ability to manipulate objects and things in your mind. They are also good in abstract reasoning puzzles and visualizing abstract objects. As we can imagine architects score very highly in this area and engineer, artists and sculptors, they can see and manipulate things and shapes in the space and they are very visual.

Bodily-kinesthetic - people have the ability to move physical objects and their own body. People owning this ability are generally professional dancer, athletes or surgeons, they have the ability to manipulate their body easily as well as objects.

Musical - people who have this intelligence, they have a very high ability to discern tone, pitch, rhythm and sound, all the things having to do with music. As for kids, they might be the type that are always humming or drumming or tapping their feet to a rhythm. They can often hear sound that other people can't hear, their discernment between sounds is really good. This category of people could have a career as professional musicians, composers, conductors or any profession related to the music field

Interpersonal - this is related to the skill of communicating and interacting with others both verbally or non-verbally. So, people would

having this skill are usually counselors, psychologists. They are good in knowing how someone else is feeling or thinking. They can understand what other want without even using verbal language as body language or tone of voice what other people can't understand. People with this type intelligence can be good politicians or actors.

Intrapersonal - this has to do with understanding ourselves. People having this intelligence can be in harmony with their emotional states, thoughts, reactions to things. They're in tune with their inner feelings; they have wisdom, intuition and motivation, as well as a strong will, confidence and opinions. They can be taught through independent study and introspection. Tools include books, creative materials, diaries, privacy and time. They are the most independent of the learners. These people are spiritual teacher and leaders.

Linguistic- verbal – this intelligence is highly appreciated in society which has to do with written language and how it is spoken, using words effectively, grammar. People who have this intelligence have excellent vocabulary, they are good readers and some of them are good writers. We find novelist and professional journalists

Logical -Mathematical - this intelligence is really close to what it sounds, so those who possess this intelligence are good at numbers, problem solving, coming up with hypotheses, reasoning and calculating. The career is obviously mathematicians, accountants, scientists, they are people who have a very logical mind. They can score high in IQ tests and some standardized tests. This category is generally good at school because the school system is geared towards this type of intelligence.

3. Design of the study

3.1 Research methodology

The present Study adopted descriptive survey which consists on an amount of scientific procedures for collecting data through field investigation then classifying and analyzing them according to descriptive statistics.

Research tool

Gardner's lists for orienting schoolchildren's talents

This scale consists of seven (07) sub-scales next to each we have a specific pattern of multiple intelligences patterns. These lists have sixty eight (68) expressions gathered in seven (07) patterns of intelligence or talent, these are:

Verbal-linguistic intelligence, Logical-mathematical intelligence, Spatial-visual intelligence, Bodily-kinesthetic intelligence, Musical intelligences, Interpersonal intelligence, Intrapersonal intelligence.

Application of the scale

The scale was applied by the researcher on the sample according to the same conditions and for the same reasons mentioned above.

Reliability and Validity of the instrument

The researcher Adel Abdellah Mohamed translated the said lists to the Arabic language and applied them on the Arab context as a diagnostic scale. Reliability was calculated where the reliability coefficient varied between

(0.67-0.92) at the significance level 0.01. The Internal Consistency method was applied on the same sample and the results varied between 0.58-0.93 at the significance level 0.01.

In order to ensure validity of the instrument, different ways have been used on the Arab context: 1. Criterion Validity where the values varied between 0.71 and 0.93 from each dimension at the significance level 0.01. 2. We have calculated the distinguishing validity too and "T" value varied between 8.65 and 17.23 this was at the significance level 0.01.

Population and Sample

A number of teachers participated in this study from different primary schools of the same directorate in the municipality of Bordj El Kifane – Algiers. The teachers were asked to fill out the form of the scale for each pupil; The number of forms was initially 300, which were given to a number of teachers who accepted to collaborate with the researcher, The process needed more time then we have planned for since it coincided with the third term exam, so we decided to extend the collection of the scale to a whole month. However, after the collection and selection of the scale we have excluded 210 forms and kept 90 for the following reasons:

- Some of the forms were empty.
- Fill in some pages of the scales' form and leaving others.
- Exclude the uncompleted forms.
- Exclude forms containing incomprehensible or uncompleted information about the pupils.
- Some forms were not handed back for unknown reasons.

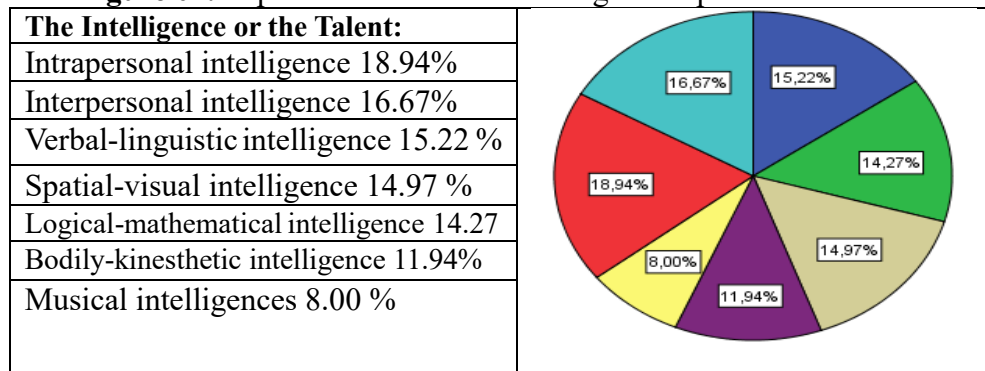
Table 1.Sample according to the school and gender

Sex	Si Ismail School	Rass Essouta School	Fernane Fethi School	Total
Male	29	08	10	47
Female	31	02	10	43
Total	60	10	20	90

Research Result and discussion

The details of the schoolchildren's talents orientations were shown in the following table as follow:

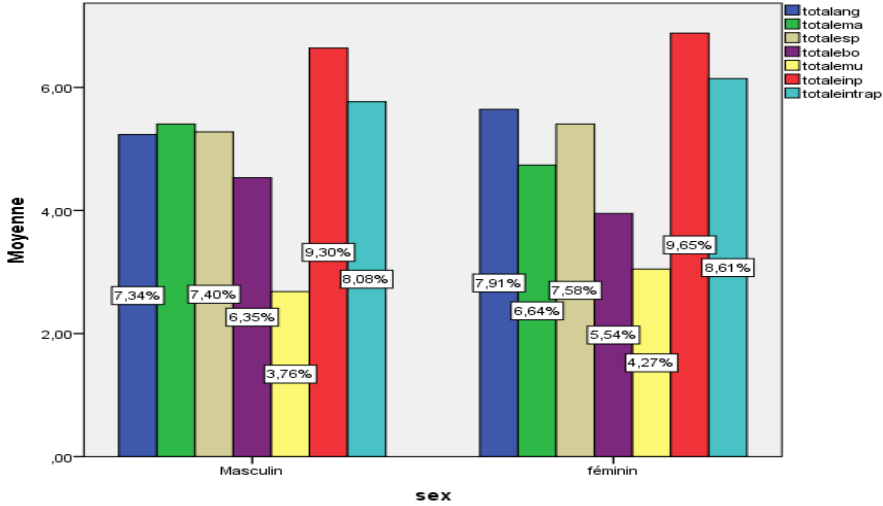
Figure 01. Pupils' Distribution according to the patterns of talents



As we can see from the table and chart, the results have shown the highest percentage of the Intrapersonal intelligence with 18.94 %. After comes the Interpersonal intelligence with 16.67 %, then the Verbal-linguistic intelligence 15.22%, in the fourth position we have Spatial-visual intelligence 14.97 %, right after we can see Logical-mathematical intelligence 14.27% which is followed by the Bodily-kinesthetic intelligence with 11.94 %; in the last position we have the Musical intelligence with a lower percentage 8.00 %. From the results we can see that there isn't a great different between them, the rates are close to each other but the lowest one is the Musical intelligence.

Comparison of the talent between males and females:

Figure 02. Percentage of talents' rates according to the sex



From the chart we recognize a slight difference between boys and girls; they had almost the same rating (in the same order): the Intrapersonal intelligence, the Interpersonal intelligence, the Spatial-visual intelligence, the Bodily-kinesthetic intelligence and the Musical intelligence (consecutively). Yet, there have been a different order in the Verbal-linguistic intelligence where the girls exceeded boys but regressed in the Logical-mathematical intelligence as the following table shows:

Table 02. Comparison of the talents between males and females

Talents	Males	Order	Females	Order	Percentage
Verbal-linguistic intelligence	7.34%	5	7.91%	3	0.63%
Logical-mathematical intelligence	7.58%	3	6.64%	5	0.94%
Spatial-visual intelligence	7.40%	4	7.58%	4	0.18%
Bodily-kinesthetic intelligence	6.35%	6	5.54%	6	0.81%
Musical intelligence	3.76%	7	4.27%	7	0.51%
Intrapersonal intelligence	9.30%	1	9.65%	1	0.35%
Interpersonal intelligence	8.08%	2	8.61%	2	0.53%
Total	*49.81%		50.02%		

*- Missing Value estimated at 01 in the Logical-mathematic intelligence for males.

The above table shows a slight difference between boys and girls which did not exceed 0.94 % as the highest rate in the Logical-mathematical intelligence whereas the lowest rate was in the Spatial-visual intelligence with 0.18%.

Although the sample was not equal in number between boys (47) and girls (43) but we have remarked that girls exceeded in the Intrapersonal intelligence with 9.65% against 9.30% for the boys. As they have exceeded in the Interpersonal intelligence as well with 8.61% against 8.08% for boys. The same thing for the Spatial-visual intelligence where they exceeded again with 7.58% against 7.40%. The results have shown also the girls' rating in the Musical intelligence with 4.27% against 3.76 for boys. The position of the girls regressed in the Bodily-kinesthetic intelligence where boys exceeded with 6.35% against 5.54% for girls.

3.2 General discussion of the results

From this research we reached a number of results that has shown general orientations of schoolchildren's talents; it revealed close rating with different order, where the order was as follow: Intrapersonal intelligence, Interpersonal intelligence, Verbal-linguistic intelligence, Spatial-visual intelligence, Logical-mathematical intelligence, Bodily-kinesthetic intelligence, Musical intelligences. This order was the same with the only difference in the Verbal-linguistic intelligence in-favor the girls and the Logical-mathematical intelligence in-favor boys.

According to the cultural and social data, these results go with Gardner's definition of the talent through which he considers each ability or biological and psychological Potential for the treatment of information, which can be activated in a cultural environment to solve problems or find outcomes that have value in whichever culture (Khir Soulaïmane Chouahine, 2014)

According to Slimane Medhar, the Algerian society is based on a traditional social system. Both Cote Marc and Camilleri Carmel consider speaking, the social communication network, the statement and group living as pillars for its existence and continuity. Within this social system that still existing, we can explain the results of this research where the importance was given to the Intrapersonal intelligence, the interpersonal intelligence, the Verbal-linguistic intelligence, the Spatial-visual intelligence; they were in the first positions whereas the Musical Intelligence which consists on creativity (individual and social) and artistic appreciation, still restricted by the social, cultural and religious codes (Slimane Medhar, 1992).

3.3 Limitation of the study

- The sample was limited to a specific geographic area which doesn't represent the whole statistic population, even if it has the same educational program designed by the Algerian educational system.

- There were not any continuous follow up of the sample neither before nor after the research to investigate better the orientation of the schoolchildren's talents and intelligences.

- The study was originally conducted in Arabic language and applied

on the Arab environment, and then it was translated to English. For this reason we have kept the references in their original version.

- The teachers were the only source of information which is due to the fact that they work in a governmental institution with a steady presence, in the contrary to the parents who can be reached only through informal relations. In addition, children are too young and they can't be an authentic source of information; thus, the results of the survey came from one side only.

- As a follow up of the previous point, the teacher may not know everything about the pupil's artistic and musical capacities.

- In the Algerian educational system, the physical(sport) and musical activities are practiced under what is called physical-corporal and musical education (limited only in practicing sport, drawing and recitation), the number of hours allocated to these subjects is limited and they have the lowest coefficients at the end of the primary schools' exams. As a result, the teacher's knowledge about the pupils' levels in terms of the bodily- kinesthetic and musical talents and intelligences still relative.

- The large number of pupils and crowded classes handicap the teacher to have a perfect knowledge about the talents of all the pupils.

3.4 Suggestions and recommendations

- This study helps to the early discovery of children's talents.

- The results of the present study can be used to design academic programs that fit the need and the future view of the Algerian educational system.

- The results of this survey can contribute in adjusting the weak and wrong orientations of the schoolchildren's talents.

- The results of this study can be used to help the pupils in choosing their streams and majors in the secondary school (general and vocational), taking the talent as the major criteria in the orientation.

- Conducting research with a larger sample of pupils from the primary school to the end of the secondary school to follow the development and the change in the schoolchildren's talents and intelligences seeking the goals of evaluating and adjusting them.

- Conducting research with a larger sample of pupils from the primary school to the end of the secondary school with the contribution of the three partners: teachers, parents and the pupils themselves.

- This research can be used to setup popularization and orientation programs.

- Develop the weak talents of the schoolchild and reinforce the strong ones.

- Conduct socio-cultural studies to have an in-depth view about the value scales according to the social, cultural and religious data having as an ultimate goal the orientation, control and the development of the talents according to the Arab and Islamic specificities.

The Algerian educational system adopted free education policy after the independence for all the stages which limited and led the educational process

to various organizational problems and the mismanagement of the material tools. It tried to catch up with the project of the pupil through a number of reforms and established infrastructures for evaluating the schooling and the vocational training by providing pupils with all the information needed for their schooling or vocational career, this will help them to take a decision about their future and plan for their career. The most important decision that is taken by the pupil with the help of his parents is the choice of the subject or major at the secondary school or the vocational training, this will be according to his choice or desire and the information provided, yet the decision taken will be based mainly on the results reflecting the capacities of the pupil which is expressed through an average of the different modules taught, after comes the desire of the pupils in the second position for the evaluation (Ministry of National Education, 1993). It is important to include the knowledge and control of the pupils' talents in the reform of the educational system.

4. CONCLUSION

The present exploratory study was concerned with discovering and showing the orientations and the schoolchildren's talents in the Algerian Educational System, which takes the school acquisition as the only mean to evaluate pupils' talents and competences.

The aim of this study was to show and investigate the orientation of the talents that characterize the schoolchildren in the Algerian school in the light of the Multiple Intelligences theory.

The results had shown a general orientation of schoolchildren toward the Intrapersonal intelligence, after the Interpersonal intelligence, then the Verbal-linguistic intelligence, after that the Spatial-visual intelligence, the Logical-mathematical intelligence came in the fifth position, which was followed by the Bodily-kinesthetic intelligence and the Musical intelligences which represented the lowest rate. This order did not change between boys and girls but only in the Verbal linguistic intelligence in favor the girls and the Logical-mathematical intelligence in favor the boys.

5. Bibliography List :

- 1- Armstrong, T. (2010). Multiple intelligences. http://www.thomasarmstrong.com/multiple_intelligences.htm
- 2- Gardner, H. (2010). Multiple intelligences. <http://www.howardgardner.com/MI/mi.htm>
- 3- Gardner, H. (2011a). Multiple intelligences: The first thirty years. Harvard Graduate School of Education. https://howardgardner01.files.wordpress.com/2012/06/intro-frames-of-mind_30-years.pdf
- 4- Gardner, H. (2011b). Frames of mind: The theory of multiple intelligences. New York: Basic Books.
- 5- Gardner, H. (2011c). Creating minds: An anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi. New York: Basic Books.
- 6- Gardner, H. (2001). Cracking open the IQ box. The American Prospect. <https://prospect.org/civil-rights/cracking-open-iq-box/>

- 7- Gardner, H. (1999). Intelligence reframed: Multiple intelligences for the 21st century. New York: Basic Books.
- 8- Gardner, H. (1995). Creativity: New views from psychology and education. RSA Journal, 143(5459), 33-42. Gardner, H. (1991). To open minds. New York: Basic Books.
- 9- Gardner, H. (1989). The Key in the slot: Creativity in a Chinese key. The Journal of Aesthetic Education, 23(1), 141-158.
- 10- Gardner, H. & Moran, S. (2006). The science of multiple intelligences theory: A response to Lynn Waterhouse. Educational Psychologist, 41(4), 227-232.
- 11- GILLES, Amado et GUÏTTET, Andrée. (1993). dynamique des communications dans les groupes (2em éd). Paris : éd Armand colin
- LEVY, André. (1972). psychologie sociale (t o m e 1) . paris : dunod
- 13- Hunter, A. (2021, April 9). Recognizing multiple intelligences: An interview with Dr. Howard Gardner. Brain World. <https://brainworldmagazine.com/recognizing-multiple-intelligences-qa-howard-gardner/>
- 14- OLERON, Pierre et All. (1981). Savoir et savoir faire Psychologiques chez l'Anfant .Bruxelles :éd pierre mardaga
- 15- LEYENS,Jacques- Philippe.(1979). Psychologie Sociale (4em éd) .Bruxelles : éd pière mardaga .
- 16- MEDHAR, Slimane . (1992). Tradition Contre Développement. ALGER: ANEP.
- 17- الانصاري، بدر محمد.(2009) . قياس الشخصية . القاهرة: دار الكتاب الحديث.
- 18_ اسماعيل محمد، عماد الدين.(1970). المنهج العلمي وتفسير السلوك. مصر: مكتبة النهضة المصرية.
- 19_ القادري، محمد حسن الرشيد، والشويكات، منى عطا الله.(2014). مبادئ الاحصاء و الاحتمالات و معالجتها باستخدام برنامج SPSS . (ط2).الأردن: دار الصفا.
- 20_ انجريس، مورييس. (2006) . منهجية البحث العلمي في العلوم الإنسانية (ترجمة بوزيد صحراوي وآخرون) (ط2) الجزائر: دار القصة.
- 21_ بني يونس، محمد .(2009). مبادئ علم النفس . عمان .الأردن: دار الشروق.
- _بوحفص، عبد الكريم.(2013). الأساليب الإحصائية و تطبيقاتها يدويا و باستعمال برنامج spss. (الجزء 1). الجزائر: ديوان المطبوعات الجامعية.
- 22 _ بينيش، هلموت .(2003) . علم النفس (ترجمة أنطوان الهاشم). بيروت: المكتبة الشرقية.
- 23 _ تركي، راجح .(1984). مناهج البحث في علوم التربية وعلم النفس. الجزائر: المؤسسة الوطنية للكتاب.
- 24_ زهران، حامد عبد السلام .(2003) . علم النفس الاجتماعي (ط6). القاهرة. مصر: عالم الكتاب.
- 25_ زيدان، محمد مصطفى. (1979). معجم المصطلحات النفسية والتربوية (ط1). جدة: دار الشروق.
- 26_ سويف، مصطفى. (1999). دراسات نفسية في الابداع والتلقي. القاهرة: الدار المصرية اللبنانية.
- 27_ سويف، مصطفى. (1959). الأسس النفسية في الابداع الفني (ط 2) .مصر: دار المعارف
- 28- شاكر محمود، جودت .(2013). الاتصال في علم النفس (ط1). عمان. الأردن: دار صفاء.

- 29_ شواهين، خير، سليمان. (2014). الذكاءات المتعددة و تصميم الناهج المدرسية. الأردن: عالم الكتب الحديث.
- 30_ شواهين، خير، سليمان. (2014). نظرية الذكاءات المتعددة: نماذج تطبيقية. الأردن: عالم الكتب الحديث.
- 31_ عامر، مصباح. (2011). علم النفس الاجتماعي في السياسة والاعلام. القاهرة: دار الكتاب الحديث.
- 32_ عبد الله محمد، عادل. (2006). قوائم جاردنر لتقييم مواهب الأطفال في سن المدرسة. القاهرة. مصر: دار الرشاد
- 33_ عبد الله محمد، عادل. (2006). قائمة الذكاءات المتعددة لتقييم الموهبة. مصر: دار الرشاد
- 34_ محمد قاسم، عبد الله. (2009). الشخصية (ط.2). دمشق. سوريا: دار المكتبي.
- 35_ منورة مصري، عبد الحميد. (2000). علم نفس الفن وتربية الموهبة. القاهرة: دار غريب.
- 36 _ ميزونوف، جون. (1980). ديناميكية الجماعات (ترجمة فريد انطونيوس) (ط.2). بيروت: منشورات عويدات
- 37_ وزارة التربية الوطنية. (مارس 1993). مجموعة نصوص التوجيه الخاصة بتنظيم الحياة المدرسية. الجزائر: مديرية التوجيه والاتصال.
- 38_ وزارة التربية الوطنية. (1993). مجموعة نصوص التوجيه المدرسي والمهني من 1962 إلى 1992. الجزائر: ديوان المطبوعات المدرسية.