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Level of Creative Self-Efficacy among Deaf and Hearing Students at Al Ain University

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Abstract--- *This study aims to identify the level of creative self-efficacy among deaf and hearing students at Al Ain University. The sample consists of (145) undergraduate male and female students as follows: (70) deaf students divided into (33) males and (37) females. The other (75) hearing students are (36) males and (39) females. Therefore, Abbott (2010) scale is adopted to measure the level of creative self-efficacy. The results show a high creative self-efficacy level, they also indicate statistically significant differences in favor of the hearing students on the total score of creative self-efficacy and on the dimension of self-efficacy in creative performance. Finally, the study concludes several recommendations discussed in the last section.*

Keywords--- *Creative Self-Efficacy (CSE), Deaf Students, Hearing Students.*

I. INTRODUCTION

It is a fact that the human capital is the driving force behind all other forces and resources. In the event we lack such an element, then other wealth resources and potentials become of no value. Such resources will be turned into enormous energy only with the existence of the creative human being who is able to discover and exploit them. Indeed, this is not by a mere coincidence rather than as a result of systematic thought and concerted efforts. Creative students are the human capital that the country should recognize, unleash their energies and invest in them in advantage of the country's progress world wide where mental and intellectual thought and the optimal exploitation of human and financial resources will be the decisive factors. Competition among countries is in point of fact a competition among their nationals' minds with a view to achieve scientific precedents and technological progresses ensuring these countries' leadership and power. Hence, the current and ultimate goal of education is to develop creativity and intellect in all their patterns, and this justifies the increasing role of educational institutions in developing creative individuals who are able to solve the problems facing them in their lives and have the ability to think about multiple alternatives forever changing circumstances (Albo Enain, 2009)

Given the fact that developed countries have set caring for creative and distinguished persons as one of their most important duties and priorities in order to maintain their progress, the Arab countries has also granted this sector a special attention through providing it with several programs. Such interest is crystallized through the Arab Strategy of Talent and Creativity of 2009 (AlSrour and AlOwaidi 2013).Educating creative and distinguished persons is one of the major educational priorities in UAE. Although such an interest in educating them is relatively recent trend in UAE, there is an urgent need for a plan to organize the programs dedicated for the talented. The National Plan for Gifted Programs in the UAE is an ideal framework for planning and implementing the programs

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dedicated for the gifted in UAE over the next five years. The National Plan for Gifted Programs in the UAE is based on the up-to-date practices in the field of educating the gifted persons. The said plan is referred to as methodological and systematic framework that regulates all practices and guide the efforts dedicated for promoting talents and caring for the talented and gifted. (Ellala, Zaitoun, 2019).

In this regard, the UAE has moved towards the education of the deaf in public schools and higher education in response to the initiatives on the integration of individuals with special needs in public schools (Aturky, 2005). The UAE Ministry of Education has implemented such integration program in public education schools with a view to raise their academic level and bridge the gap between them and those with hearing abilities in academic and linguistic aspects all the way through to the higher education level. In UAE, deaf students are integrated by assigning separate classes to them attached to regular schools. However. (Marschark, 2001).

II. LITERATURE REVIEW

2.1 Definitions

Creativity is featured by thinking out of the box. It is difficult to set a specific definition for creativity, as it is resisted in most environments, especially school environment that considers creativity a mere waste of time and money (Caropreso and Couch, 1996).

The linguistic meaning of Creativity: In *Lisan Al Arab Dictionary*, the expression of *create indicates inventing something, i.e.* developed and initiated that thing. As for creating thing means inventing it in a completely different way. In *Al Mojam Al Waseet Dictionary*, the term creativity means finding new way contrary to the methods adopted by the old generations by developing new methods, or that the creative thing is what it reached the utmost in its field. In *Webster's Dictionary* (2019), the word creativity comes in the sense of the ability to create or invent. Thus, Creativity can be defined as a combination of abilities, aptitudes and personal characteristics that, if existing in an appropriate educational environment, turns the learners to be more sensitive to problems and more flexible in thinking, rendering the outputs of their intellect more prolific and authentic compared to their personal or their peers' experiences. (Jarwan, 2013, El-Lala, 2012)

According to Al Souror (2014) creativity is producing something new, unique and different featured by being useful intellectually, verbally or practically. Creativity is an important aspect of talent and excellence that is difficult to be defined and measured; yet it facilitates individual access to high academic achievement, as confirmed by Renzulli's research in 1981. Also, Torrance (1986) suggests that creativity should be one of the criteria used to identify gifted students. (Caropreso & Couch, 1996).

Creativity is a lifestyle, personal trait and a way of perceiving the world. Creative life is the development of an individual's talents and the use of their abilities. For an individual to be creative, it means enticing new ideas, developing sensitivity and appreciation to the problems of others. (Al-Souror, 2009)

2.2 Creative Self-Efficacy

Creative self-efficacy is a relatively recent subject in psychology and education literature, which gained interest and attention since early years of the current century from a number of researchers, such as Phelan (2001) and

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Tierney & Farmer (2002). Creative self-efficacy is described as a special case of the General self-efficacy. General self-efficacy represents the degree of the person's belief in their own ability to perform a specific task successfully within a particular context, regardless of the level of difficulty of that context. On the other hand, creative self-efficacy is one of the most important factors of motivation to establish creativity. It refers to the beliefs of the individual about their creative abilities, motivation to creativity and possessing the knowledge necessary for creativity, as well as the work channels required to meet the individual's different creative demands, in order to come up with new products (Hailat, 2017, Al Zoubi, 2014).

Zhou, Shin & Cannella (2008) defined the term creative self-efficacy as the individuals' realization to produce novel and useful ideas. It is also defined as "the special beliefs in the individual's abilities following motivation, cognitive resources, and the channels of action as necessary to deal with the different circumstances" (Chuang, Shiu, & Cheng, 2010). Then again, Delillo, Houghton and Dawley (2011) found that self-efficacy is a self-assessment through which the individual evaluates his creative potential, which involves, in particular, his self-vision in solving creative problems and inventing new ideas (Hailat, 2017)

Abbott (2010) identified two main areas of creative self-efficacy, as follows: (1) The field of self-efficacy in creative thinking, which represents the effectiveness of the internal mental state; such as the expression of creativity through creative thinking skills: fluency, flexibility, authenticity and detail, which enable the individual to produce new and appropriate ideas. (2) The field of self-efficacy in creative performance, which represents the effectiveness of the external social status, such as the expression of creativity through individual's internal and external systems, which interact with each other during creative performance; e.g. motivation, personality, mood, social context, … etc.

Several previous studies have tackled the issue of creative self-efficacy and sought to reveal its relationship with many variables. (Hailat, 2017) has conducted a study that aimed at measuring the relationship between creative self-efficacy and metacognitive thinking of the students of education diploma program at Abu Dhabi University. The results of the study indicated that the level of both creative self-efficacy and metacognitive thinking was high, in addition to the existence of statistically significant differences in creative self-efficacy with the variety of specializations in the bachelor's stage, in favor of the scientific majors, along with the absence of differences in metacognitive thinking.

Malik, Butt and Choi (2015) conducts a study that aims at revealing the role of external rewards in the field of creativity. The study includes (181) factors and the results conclude that external rewards for creativity predict creative performance whenever the workers enjoy high creative self-efficacy.

Al Zoubi (2014) conducts a study that aims to reveal the relationship between creative self-efficacy of the students and teachers in Jordan. Results indicated that creative self-efficacy of the gifted students and their teachers was high, in addition to the existence of differences between teachers, attributed to their academic specialization, favor of those with scientific specializations.

Jaussi and Randel (2014) conducts a study that aims at identifying the requirements and processes leading to progressive creativity and rooting creativity. The study was conducted on eight (8) organizations and the results

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indicated positive relationships between creative self-efficacy and rooting creativity, since the individuals with high creative self-efficacy may enjoy rooting creativity as well.

Karwowski (2012) works on a study that aims to reveal the relationship between the indicators of the manifestations of curiosity, creative self-efficacy and creative personality. The results of the study indicated the existence of a strong relationship between high curiosity, creative self-efficacy and creative personality.

Ghalia (2012) conducts a study that aims at recognizing the achievement motivation, self-efficacy and metacognitive thinking as predictive indicators to the problem-solving skills of Arab students in west bank universities. Results also indicated the existence of a statistically significant relationship to the motivation of achievement at the percentage of (1.30%), self-efficacy at (6.92%) and metacognitive thinking at (46.75%), to predict problem solving skills.

Based on the above discussion, it is evident that there is a diversity in the goals, population, sample and the variables of the studies conducted previously and procedures, tools used, findings and their results. The current study is featured by handling a sample of two categories of students (deaf and hearing) in a manner that has not been applied by any other previous foreign or Arab studies on these two undergraduate categories.

III. Problem And Questions Of Study

The current study aims to spot the level of creative self-efficacy of deaf and hearing students a tAl Ain University. To the best knowledge of the researchers, no studies have been conducted on the deaf and hearing undergraduates in the UAE environment except this current study. Hence, the problem of this study is conducted to identify the level of creative self-efficacy of the deaf and hearing undergraduates from the point of view of the students themselves, by answering the following study questions:

3.1 Research Questions

Q 1: What is the level of creative self-efficacy of the deaf and hearing undergraduates from the students' own point of view at Al Ain University?

Q 2: Are there statistically significant differences at the level of(0,05>a)in the performance of students on Abbott scale of creative self-efficacy, attributed to the student category variable (deaf and hearing)?

3.2 Research Objectives

This study aims to spot and identify the level of creative self-efficacy of the deaf and hearing undergraduates from the students' own perspective according to students' category variable (deaf and hearing) and gender variable (male and female) at the undergraduate level.

3.3 Research Significance

The importance of this research stems from the importance of the category subject matter of the study, i.e. the deaf and hearing students who enrolled the higher education level. Also, there is a lack of studies to identify the level of creative self-efficacy of the deaf and hearing students, especially with the opportunity provided by Al Ain

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University to deaf students to enroll in their programs along with the hearing student and so it is important to spotthe level of creative self-efficacy to benefit the deaf students' supportive and interested parties.

3.4 Procedural Definitions

Creative Self-Efficacy**:** the individual's beliefs about his/her creative abilities, including their beliefs on their own creative thinking and performance. In terms of procedures, it is known as the scores achieved by the deaf and hearing students at Al Ain University from the students' own point of view, on (Abbott, 2010) scale of measuring creative self-efficacy, used in this study. Scores on the scale range from (21) to (105), on the following skills: (Creative Thinking Self-Efficacy, Creative performance self-efficacy).

Deaf Students: A deaf person is medically defined as a person who is deprived of the sense of hearing right from birth, to the point that speech becomes impossible to hear with or without hearing aids; or a person who lost his hearing ability before learning to speak,(Hamdash and Zolal, 2015).As for the procedural definition: They are the male and female students enrolled as undergraduates, at the Al Ain University in the UAE, who have been classified as deaf based on their files in the educational institution in which they were diagnosed.

IV. METHODOLOGY

4.1 Study Society and Sample

Study society is composed of all male and female students of Al Ain University. The sample consists of (145) undergraduate male and female students distributed as follows: (75) hearing students divided into (36) males and (39) females. The other (75) deaf students are (33) males and (37) females. The purposive sample is selected during the academic year 2018/2019; due to the fact that the sample selected are students of one of the researchers, who expressed willingness to respond to the tool of study, in addition to the presence of an understanding and cooperative management to apply the study to the sample. Table (1) shows the distribution of sample members according to study variables.

Table 1: Distribution of Study Sample Members by Variables

Variables	**Levels**	**Number**
Hearing Students	Male	36
	Female	39
Deaf Students	Male	33
	Female	37
Total		**145**

4.2 The Research Instrument

The researchers adopted the(Abbott, 2010) scale for creative self-efficacy, which consists of (21) paragraphs and includes two main fields: Creative Thinking Self-Efficacy, which includes four dimensions (self-efficacy in fluency, flexibility, authenticity and details), and the field of creative performance self-efficacy, which includes three dimensions (self-efficacy in education for creativity, communication and promotion of creativity and preservation of

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the creative personality), where each includes three paragraphs. This scale is suitable for adults and young people due to the fact that its paragraphs generally address the individual about his self-beliefs about creativity, regardless of age, and the alternatives (always, often, rarely, never) and the degrees (4,5, 3, 2, 1), respectively, similar to the original scale and it has been adapted to suit the UAE environment.

4.3 Credibility of the Instrument

The scale, in its foreign form, enjoys high credibility and stability coefficients. In order to verify the credibility of the tool, the trustees' credibility tool is used by presenting it to a panel of specialized trustees consisting of nine specialties who enjoys a vast experience in the fields of talent, excellence, creativity, special education and educational psychology at Al Ain University, University of Tabuk. They are requested to express their opinion on the scale and the researchers reflected the amendments proposed by the panel of trustees on the scale. The validity of internal consistency is calculated through the correlation between performance on the dimensions and the two main fields, as shown in Table (2) below:

		d1	d2	d3	d4	SET		d5	d6	d7	SEP
d1	Pearson correlation coefficient	1	.532**	-.051	.209*	.649**	d5	1	-.058	.253**	.662**
	Significance		.000	.540	.012	.000			.486	.002	.000
	Sample	145	145	145	145	145		145	145	145	145
d2	Pearson correlation coefficient	.532**	1	-.077	.236**	.631**	d6	-.058	1	.156	.527**
	Significance	.000		.354	.004	.000		.486		.062	.000
	Sample	145	145	145	145	145		145	145	145	145
d3	Pearson correlation coefficient	-.051	-.077	1	.123	.504**	d7	.253**	.156	1	.732**
	Significance	.540	.354		.142	.000		.002	.062		.000
	Sample	145	145	145	145	145		145	145	145	145
d4	Pearson correlation coefficient	.209*	.236**	.123	1	.639**	SEP	.662**	.527**	.732**	1
	Significance	.012	.004	.142		.000		.000	.000	.000	
	Sample	145	145	145	145	145		145	145	145	145
SET	Pearson correlation coefficient	.649**	.631**	.504**	.639**	1					
	Significance	.000	.000	.000	.000						
	Sample	145	145	145	145	145					

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The table indicates that correlation coefficients are statistically significant, which implies a valid acceptable internal consistency.

4.4 Instrument Stability

The stability of the tool isalso verified by using it with an exploratory sample out of the sample of the study by means of test-re-test. The sample consists of (57) male and female students, with a time difference of two weeks. Cronbach Alpha coefficient is calculated at a value of (0.82), which is a suitable value for the purposes of the study. In the final application, stability is calculated by Cronbach Alfa for the first field at (0.803) and for the second field at (0.805).

Correction of the Scale: The scale, in its final form, consists of (21) five-step scale variant paragraphs, where the individual obtains 5 degrees for *always* response; 4 degrees for *often* response, 3 degrees for *sometimes* response, 2 degrees for *rarely* response and 1 degree for *never* response. Note that all paragraphs are positive and to judge the levels of creative self-efficacy, the following criteria are adopted: **For paragraphs**: Low (1-2.499), Average (2.5-3.74) andHigh (3.75-5). **For dimensions:** Low (3-7.99), Average (8-11.99) and High (12-15). **For both fields:** Low (4-30),Medium (30.1-55) and High (55.1-70). **For creative performance**: Low (5-20), average (35- 20.1) and high (35.1 -45). **For total score**: Low (21-70), average (70.1-90) and high (125,90.1).

V. DATA ANALYSIS AND RESULTS

In order to answer the first research question (What is the level of creative self-efficacy of the deaf and hearing undergraduates from the students' own point of view**?**),averages and standard deviationsare calculated for the sample responses on the scale of creative self-efficacy, as shown in table (3).

Paragraph	Min.	Max.	Average	Standard Deviation	Level
1	2.00	5.00	3.7793	.84549	High
2	2.00	5.00	3.7931	.65507	High
3	2.00	5.00	3.5172	1.00763	Medium
d1	7.00	15.00	11.0897	1.82923	Medium
4	2.00	5.00	3.6276	.70656	Medium
5	1.00	5.00	3.9103	.84094	High
6	3.00	5.00	3.9379	.82681	High
d2	8.00	15.00	11.4759	1.66701	Medium
7	2.00	5.00	3.4759	1.00749	Medium
8	1.00	5.00	3.1448	1.23029	Medium
9	1.00	5.00	2.7862	1.15582	Low
d3	4.00	14.00	9.4069	2.31690	Medium
10	1.00	5.00	3.4207	.94037	Medium
11	2.00	5.00	3.4483	.72582	Medium
12	1.00	5.00	3.5379	.85814	Medium

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d4	6.00	15.00	10.4069	1.88376	Medium
Creative Thinking Self Efficacy	32.00	56.00	42.3793	4.60988	Medium
13	2.00	5.00	4.0207	1.07023	High
14	3.00	5.00	3.8966	.85573	High
15	2.00	5.00	4.0345	.93105	High
d5	8.00	15.00	11.9517	2.27404	Medium
16	1.00	5.00	3.3379	1.02889	Medium
17	1.00	5.00	3.4345	.84831	Medium
18	1.00	5.00	3.6276	1.00654	Medium
d6	4.00	14.00	10.4000	1.94865	Medium
19	2.00	5.00	3.6552	.93823	Medium
20	1.00	5.00	3.6000	.98178	Medium
21	2.00	5.00	3.1655	.94291	Medium
d7	5.00	15.00	10.4207	2.09718	Medium
creative performance self-efficacy	26.00	42.00	32.7724	4.06671	High
total	61.00	97.00	75.1517	7.81854	High
Valid N (list wise)					

As shown in table (3), the arithmetic average of the responses of the deaf and hearing students at Al Ain University on the scale of creative self-efficacy of the total score amounted to (75,1517) at a high level, with a standard deviation of (7,8185).The arithmetic average for the self-efficacy dimension in creative performance amounted to (32.7724) at a high level, with a standard deviation of (4,06671). The arithmetic average of the self-efficacy dimension in creative thinking amounted to (42.3793) with average level and standard deviation of (4.60988). This result may be attributed to the nature of the programs and activities provided to the students, who are granted opportunities to practice the activities that lead them to creativity and the tasks that require creative thinking. The students' high levels of creative self-efficacy may be based on the existence of compulsory courses for the students (e.g. talent, mental excellence, thinking skills and self-evaluation). These courses promote the development of students' creative skills and personality, in addition to focusing on modern methods in presenting the courses and the lectures that move students from the stage of acquiring knowledge to the stage of knowledge production. This result may also be explained by the fact that these students are on the verge of university graduation, as they are at the fourth year, along with the accompanying sense of pride, achievement and self-confidence for reaching that level of life, reflecting on their positive motivation and their creative beliefs and effectiveness. Hsu, Msheng-tsung, H., & Hsueh -liang, F. (2011) confirm that the individuals with a high level of creative self-efficacy feel more confident and understand the difficulties as a challenge.

The level of self-efficacy in creative performance has been ahead of self-efficacy in creative thinking. The reason may be that self-efficacy in creative thinking remains within the individual, whereas creative performance is an external product that can be judged by the individual himself and by others who promote and encourage the

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individual in terms of his/her performance and skills, which is reflected greatly on the assessment and impression of the individual's creativity and excellence.

The current result agrees with the result reached by the study conducted by Al-Zoabi (2014), which indicated that the level of creative self-efficacy of gifted students and their teachers was high, as well as the study of Hailat (2017), which indicated that the level of both creative self-efficacy and metacognitive thinking was high among the female students of educational diplomat Abu Dhabi University.

In order to answer the second research question (Are there statistically significant differences at the level of (0,05>a) in the performance of students on Abbott scale of creative self-efficacy, attributed to the student category variable (deaf and hearing)?Performance averages are calculated on the tool of the study according to the variable of student category (deaf and hearing), as in the following table (4).

Hearing Status		N	Average	Standard Deviation	Average Standard Error
1	Deaf	70	3.5429	.81090	.09692
	Hearing	75	4.0000	.82199	.09492
2	Deaf	70	3.6143	.49028	.05860
	Hearing	75	3.9600	.74326	.08582
3	Deaf	70	3.1429	.74767	.08936
	Hearing	75	3.8667	1.09462	.12640
d1	Deaf	70	10.3000	1.41780	.16946
	Hearing	75	11.8267	1.86991	.21592
4	Deaf	70	3.4143	.69141	.08264
	Hearing	75	3.8267	.66522	.07681
5	Deaf	70	3.6714	.67505	.08068
	Hearing	75	4.1333	.92024	.10626
6	Deaf	70	3.7143	.70491	.08425
	Hearing	75	4.1467	.88062	.10169
d2	Deaf	70	10.8000	1.35775	.16228
	Hearing	75	12.1067	1.68918	.19505
7	Deaf	70	3.3857	.82168	.09821
	Hearing	75	3.5600	1.15361	.13321
8	Deaf	70	3.7857	.69975	.08364
	Hearing	75	2.5467	1.31820	.15221
9	Deaf	70	3.2857	.70491	.08425
	Hearing	75	2.3200	1.29615	.14967
d3	Deaf	70	10.4571	1.56673	.18726
	Hearing	75	8.4267	2.47787	.28612
10	Deaf	70	3.4429	.87866	.10502
	Hearing	75	3.4000	1.00000	.11547

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11	Deaf	70	3.5286	.75607	.09037
	Hearing	75	3.3733	.69308	.08003
12	Deaf	70	3.4571	.65244	.07798
	Hearing	75	3.6133	1.01200	.11686
d4	Deaf	70	10.4286	1.87718	.22437
	Hearing	75	10.3867	1.90230	.21966
Creative Thinking Self Efficacy	Deaf	70	41.9857	4.09132	.48901
	Hearing	75	42.7467	5.04599	.58266
13	Deaf	70	3.6286	1.16931	.13976
	Hearing	75	4.3867	.82024	.09471
14	Deaf	70	3.4429	.75442	.09017
	Hearing	75	4.3200	.71961	.08309
15	Deaf	70	3.8714	.77873	.09308
	Hearing	75	4.1867	1.03576	.11960
d5	Deaf	70	10.9429	2.35222	.28114
	Hearing	75	12.8933	1.74428	.20141
16	Deaf	70	3.4857	.77540	.09268
	Hearing	75	3.2000	1.20808	.13950
17	Deaf	70	3.6143	.70798	.08462
	Hearing	75	3.2667	.93481	.10794
18	Deaf	70	3.4286	.57914	.06922
	Hearing	75	3.8133	1.25949	.14543
d6	Deaf	70	10.5286	1.25942	.15053
	Hearing	75	10.2800	2.42487	.28000
19	Deaf	70	3.6429	.85186	.10182
	Hearing	75	3.6667	1.01786	.11753
20	Deaf	70	3.3429	1.08862	.13011
	Hearing	75	3.8400	.80606	.09308
21	Deaf	70	3.2857	.74489	.08903
	Hearing	75	3.0533	1.08918	.12577
d7	Deaf	70	10.2714	1.89524	.22652
	Hearing	75	10.5600	2.27347	.26252
creative performance self efficacy	Deaf	70	31.7429	3.74818	.44799
	Hearing	75	33.7333	4.14055	.47811
Total	Deaf	70	73.7286	6.81627	.81470
	Hearing	75	76.4800	8.48108	.97931

According to the table, there is an apparent difference, and to find out if the difference is statistically significant, "T" Test is conducted for the difference between the averages, as in Table (5):

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		T		Level of Significance	Variable	Standard error variation	Min.	Max.
1	Equal variances assumed	-3.368	143	.001	-.45714	.13572	-.72542	-.18887
	Equal variances not assumed	-3.370	142.555	.001	-.45714	.13566	-.72530	-.18898
2	Equal variances assumed	-3.282	143	.001	-.34571	.10535	-.55396	-.13747
	Equal variances not assumed	-3.327	129.010	.001	-.34571	.10392	-.55133	-.14010
3	Equal variances assumed	-4.617	143	.000	-.72381	.15676	-1.03368	-.41394
	Equal variances not assumed	-4.676	131.288	.000	-.72381	.15480	-1.03003	-.41759
d1	Equal variances assumed	-5.510	143	.000	-1.52667	.27706	-2.07433	-.97900
	Equal variances not assumed	-5.562	137.350	.000	-1.52667	.27448	-2.06941	-.98392
4	Equal variances assumed	-3.660	143	.000	-.41238	.11267	-.63510	-.18966
	Equal variances not assumed	-3.655	141.351	.000	-.41238	.11283	-.63542	-.18934
5	Equal variances assumed	-3.426	143	.001	-.46190	.13482	-.72840	-.19541
	Equal variances not assumed	-3.462	135.590	.001	-.46190	.13342	-.72576	-.19805
6	Equal variances assumed	-3.249	143	.001	-.43238	.13306	-.69540	-.16936
	Equal variances not assumed	-3.274	139.812	.001	-.43238	.13205	-.69346	-.17130
d2	Equal variances assumed	-5.111	143	.000	-1.30667	.25563	-1.81197	-.80136
	Equal variances not assumed	-5.150	139.975	.000	-1.30667	.25373	-1.80831	-.80502
7	Equal variances assumed	-1.041	143	.300	-.17429	.16739	-.50516	.15658
	Equal variances not assumed	-1.053	133.887	.294	-.17429	.16550	-.50161	.15304
8	Equal variances assumed	6.997	143	.000	1.23905	.17709	.88900	1.58910
	Equal variances not assumed	7.134	114.259	.000	1.23905	.17368	.89500	1.58309
9	Equal variances assumed	5.518	143	.000	.96571	.17502	.61975	1.31168
	Equal variances not assumed	5.623	115.854	.000	.96571	.17175	.62553	1.30589
d3	Equal variances assumed	5.850	143	.000	2.03048	.34708	1.34440	2.71655
	Equal variances not assumed	5.938	126.150	.000	2.03048	.34195	1.35377	2.70718
10	Equal variances assumed	.273	143	.785	.04286	.15678	-.26706	.35277
	Equal variances not assumed	.275	142.493	.784	.04286	.15609	-.26568	.35140
11	Equal variances assumed	1.290	143	.199	.15524	.12035	-.08265	.39313
	Equal variances not assumed	1.286	139.605	.201	.15524	.12071	-.08342	.39390
12	Equal variances assumed	-1.096	143	.275	-.15619	.14251	-.43790	.12552
	Equal variances not assumed	-1.112	127.472	.268	-.15619	.14049	-.43418	.12180
d4	Equal variances assumed	.133	143	.894	.04190	.31414	-.57904	.66285

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	Equal variances not assumed	.133	142.550	.894	.04190	.31399	-.57877	.66258
Creative Thinking Self Efficacy	Equal variances assumed	-.993	143	.322	-.76095	.76615	-2.27540	.75349
	Equal variances not assumed	-1.000	140.306	.319	-.76095	.76067	-2.26481	.74291
13	Equal variances assumed	-4.544	143	.000	-.75810	.16684	-1.08790	-.42829
	Equal variances not assumed	-4.490	122.784	.000	-.75810	.16883	-1.09229	-.42390
14	Equal variances assumed	-7.165	143	.000	-.87714	.12242	-1.11912	-.63516
	Equal variances not assumed	-7.153	141.082	.000	-.87714	.12262	-1.11955	-.63474
15	Equal variances assumed	-2.060	143	.041	-.31524	.15302	-.61771	-.01277
	Equal variances not assumed	-2.080	136.918	.039	-.31524	.15155	-.61492	-.01556
d5	Equal variances assumed	-5.697	143	.000	-1.95048	.34237	-2.62725	-1.27371
	Equal variances not assumed	-5.640	126.847	.000	-1.95048	.34584	-2.63485	-1.26610
16	Equal variances assumed	1.681	143	.095	.28571	.16992	-.05016	.62159
	Equal variances not assumed	1.706	127.171	.090	.28571	.16748	-.04569	.61712
17	Equal variances assumed	2.511	143	.013	.34762	.13845	.07394	.62130
	Equal variances not assumed	2.534	137.293	.012	.34762	.13716	.07640	.61883
18	Equal variances assumed	-2.335	143	.021	-.38476	.16475	-.71042	-.05911
	Equal variances not assumed	-2.389	105.518	.019	-.38476	.16107	-.70411	-.06542
d6	Equal variances assumed	.766	143	.445	.24857	.32431	-.39249	.88963
	Equal variances not assumed	.782	112.847	.436	.24857	.31790	-.38125	.87839
19	Equal variances assumed	-.152	143	.879	-.02381	.15646	-.33307	.28545
	Equal variances not assumed	-.153	141.362	.879	-.02381	.15550	-.33122	.28360
20	Equal variances assumed	-3.139	143	.002	-.49714	.15837	-.81018	-.18410
	Equal variances not assumed	-3.108	126.739	.002	-.49714	.15998	-.81372	-.18057
21	Equal variances assumed	1.489	143	.139	.23238	.15604	-.07607	.54083
	Equal variances not assumed	1.508	131.370	.134	.23238	.15409	-.07244	.53720
d7	Equal variances assumed	-.827	143	.410	-.28857	.34891	-.97827	.40112
	Equal variances not assumed	-.832	141.244	.407	-.28857	.34674	-.97404	.39690
creative performance self efficacy	Equal variances assumed	-3.028	143	.003	-1.99048	.65746	-3.29007	-.69088
	Equal variances not assumed	-3.038	142.871	.003	-1.99048	.65520	-3.28561	-.69534
Total	Equal variances assumed	-2.144	143	.034	-2.75143	1.28344	-5.28839	-.21447
	Equal variances not assumed	-2.160	139.971	.032	-2.75143	1.27389	-5.26997	-.23288

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Table (5) indicates that there are statistically significant differences in favor of the hearing students on the total score of the creative self-efficacy scale and on self-efficacy in creative performance of the deaf and hearing students at Al Ain University in favor of the hearing students, with statistical significance at (a<0,05,0) level and less. This result may be attributed to the ability of the hearing students, compared to the deaf students, to dialogue, interaction and participation in the various activities held by the university, unlike the deaf students who usually exist together and participate only in the activities that bring them together. These activities are not several compared to the activities of the hearing students. The reason for the excellence of the hearing students to the deaf students in the total score of the creative self-efficacy scale and the dimension of self-efficacy in creative performance may be attributed to the fact that hearing students believe in their creative abilities, which may help them achieve creative results, if not for the time being then in the future, when they are in charge and at work. On the other hand, the deaf students' beliefs about their creative abilities may be influenced by the reality they live in terms of some of the obstacles facing them in their studies, at work or in their life in general. Such reality does not grant them opportunities for such abilities to appear as needed, which may negatively affect their beliefs about their self-efficacy.

While there are no differences in the dimension of self-efficacy of creative thinking on the scale, since the differences are not statistically significant at the level of (a<05,0) and less, so there are no significant differences at the level of (a<05,0) significance in the dimension of self-efficacy of creative thinking of deaf and hearing students at Al Ain University. Such result may be attributed to the lack of interest and focus on the development of creative thinking skills, especially for deaf and hearing students, despite the existence of courses that support the skills of creative thinking (such as talent, mental excellence and thinking skills). This may be due to the lack of teachers specialized in the training on the multiple creative thinking skills.

VI. Conclusion And Recommendations

In conclusion, based on the results of this study, the following are the recommendations:

1) To conduct courses and training programs to further develop the creative self-efficacy among faculty members and deaf and hearing students.
2) It is important to pay attention to the education and development programs on creative self-efficacy, introducing and activating such concepts in university curricula.
3) Conducting a comparative study to identify the impact of social, economic and cultural factors on creative self-efficacy among deaf and hearing undergraduates.
4) Conducting more studies to further explore the concept of creative self-efficacy and its relationship with other variables (e.g. human and scientific disciplines, other disability categories, such as students with kinetics disabilities)

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