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Understanding of Creativity within Graphic Design Context in Middle-East

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Abstract:

Creativity has long been a debatable topic among researchers and scholars alike. The present research aimed to study the element of 'Creativity in the context of Graphic Design in the Middle East'. The study comprised of three broad realms i.e. creativity, graphic designs and the relationship between the two. Creativity in graphic design is often regarded as a problem solving feature. The concept of creativity varies from culture to culture. Most graphic designers involve themselves effectively in solving social, communication and cultural issues. In order to adequately explore the topic; a qualitative research design was used. The results of the study clearly indicate that creativity in the context of graphic design has not been given much importance in the Middle East. Most educators believe that creativity can be taught to students. However, some believed that it is an inborn characteristic and cannot be induced by instruction alone.

Key Words:

Creativity, Designs, Graphic Designing, Middle East, Teaching

1. INTRODUCTION

Creativity is a quite complex phenomenon. Williams, Ostwald & Askland (2010) asserted that "creativity is usually venerated above all other personal prospects and material properties" [p.ix]. The concept of creativity often intersects a number of disciplines i.e. art, knowledge, education, psychology, cultural studies and sociology. "As a society, there exist no common definition of the term; neither there exist any clarity on its assessment" [p.ix]. Certain examples of the common effects of creativity are: it is a vital component for the society and individuals; it allows people to increase their productivity [DTI Economics Papers, 2005] and raises their self-confidence [Barron, 2007, p.20], and self-esteem [Banaji, Burn and Buckingham, 2006].

Amabile (1997) believed that "the development of novel and relevant ideas in different realms of human activity i.e. Arts, science, business and education" [p.40]. Hence, the idea of 'creativity' is a quite contested notion and a diversified field of study [Williams, Ostwald and Askland, 2010]. Creativity is a vital component in different fields of study. Hence, the development of a generally accepted definition of the term across disciplines is quite difficult.

1.1 Overview of Creativity in Graphic Designs

In the Middle East, creativity continues to be regarded as a major component in the education of contemporary design. The idea of creativity in graphic design is quite uniform across the globe. However, in the Middle East research on "Creativity in the context of Graphic Design" has been quite limited. Educational institutions across the Middle East continue to disregard the inclusion of design in curriculums [Khaleefa, 1999]. Perhaps, this issue has surfaced due to a limited number of Middle Easterners in the field and also due to cultural norms.

Presently, the Arabic education system relies on the orthodox modes of teaching and knowledge continues to be passively transferred from the instructors to the students. Such an orthodox educational environment has not encouraged creativity; primarily because being creative in old fashioned classrooms is quite difficult for students. They become

afraid to explore new horizons and are afraid of failure [Kawenski, 1991]. The orthodox educational systems continue to refrain students from being creative [Cole, Sugioka and Yamagata-Lynch, 1999].

1.2 Contemporary Scenario

An analysis of the present scenario in the Middle East reveals that such weakness in the education system of Middle East; primarily the “understanding of creativity in the context of Graphic design” has not flourished due to unclear educational objectives. For example, in most higher education institutions in the Middle East, teachers follow a practice of pursuing their own educational objectives [Alhadi, 2008]. On the other hand, in the United Kingdom, higher education institutions follow a uniform educational system for the courses in graphic design. It is called ‘Subject Benchmark Statement’ which is issued by The Quality Assurance Agency for Higher Education [QAA] in the United Kingdom. The system formulates the final anticipated outcomes expected to be achieved in design and art schools [QAA, 2008].

2. PURPOSE OF THE STUDY

The purpose of the present study was to develop a better understanding on “Creativity in the context of Graphic Design in the Middle East”. In order to cater the purpose of the study; relevant literature on the topic was thoroughly reviewed. A qualitative approach was adopted to study the underlying variables and concepts associated with creativity in the field of graphic design.

3. AIMS & OBJECTIVES OF THE STUDY

The following were the aims and objectives of the study:

- To thoroughly understand the concept of creativity in graphic design
- To understand the element of creativity among Middle Easterners and in Graphic Design education.
- To adequately identify the creative-thinking techniques used by Arabic students to enhance their creative thinking.
- To highlight the major issues which have hindered advancements in Graphic Design education in the Middle East.

3.1 Research Questions

The following were the proposed research questions in the study:

1. What is the Present Understanding on the Concept of Creativity in the Middle East?
2. What do Graphic Design Teachers feel about Inducing Creativity among their Students?
3. How can Graphic Design Teachers improve the Creative Thinking Process among Graphic Design Students?

4. LITERATURE REVIEW

4.1 History of the Term ‘Creativity’

In order to thoroughly understand the topic, it is vital that an adequate understanding of the term is developed. The word ‘creativity’ is not an old term. Two of the main scholars who attempted to study the historical perspectives of creativity were Williams [1961] and Williams, Ostwald and Askland [2010]. Their research and inferences would be repeated throughout the paper as the inferences drawn in their research are quite concrete. Williams’ book *The Long Revolution* was published in 1961. It continues to be one of the most important texts in the study of culture and creativity. William’s book provides a concise and critical conceptual analysis on the concept of creativity.

The term ‘Creativity’ dates back to the early 16th Century in English language. However, there was no ‘creative’ word in ancient Greece. According to Williams (1961), the term “‘mimesis’ was used to assert “what others have not done”, or “making something like something else” [p.20]. Williams [1961] reminded of the French

philosopher Jacques Ranciere's observation that "In Ancient Greece, the development of new knowledge was primarily established by crossing boundaries" [Williams, 1961]. At that time, the orthodox meaning of Art was merely a 'skill'. The word 'creative' in the interpretations of Aristotle and Plato held quite different meanings [Williams, 1961]. Similarly, during that period, a notion prevailed that "creativity roots from an irrational unconscious and leads to rational deliberations in the process" [ibid, 2010]. Theories and approaches to studying 'creativity'.

4.2 Creativity in the Middle East

Not many studies have been conducted on creativity in the context of Middle East. Although, creativity could be regarded as a well researched topic; yet it continues to be a very unclear phenomenon. It should be realized that the element of creativity is quite subjective and holds no universally accepted mode of study. Presently, there is no mutual consensus among experts if creativity is a product, process or confines within individuals. However, there is an agreement that creative work tends to be valuable and novel [Petrowski, 2000]. The issue arises when an already existent phenomenon needs to be assessed in terms of creativity.

4.3 Creativity in Socio-Cultural Perspectives

The concept of creativity has been studied in different cultural contexts. It can be ascertained that different cultures have different perspectives on the idea of creativity. Hence, the value and true perspective of creativity varies from culture to culture. Unfortunately, due to a lack of research in the field of creativity and graphic design; not many studies have been conducted on creativity and its role in the field of graphic designing in the Middle East.

Due to the varied definitions of creativity, cultural elements are vital to thoroughly understand the concept of creativity. However, many cultures have understood the idea of creativity and use it effectively to give rise to new concepts. Based on this perspective, a cross-cultural study was conducted in this research to understand the concept of creativity from Western and Middle Eastern perspectives. The purpose of the present study was to ascertain the impact of differences in culture in creativity and its use in graphic design in the context of Middle East. Berry [1980] defined cross-cultural research as a "... scientific study of the ways in which cultural and social forces have an impact on human behavior" [p. 21]. Khaleefa [1999] suggested in his study that there is exists a "need for both cross-cultural studies and indigenous research on creativity, [...] which can induce a better understanding on the concepts" [p.21].

Al-Sulaiman [2009] asserted that "studying the cultural environmental factor is vital to understanding the associated expressions of creativity and their effect on creative thinking development in different cultures" [p.3].

4.4 Creativity as a Process

A number of psychologists [e.g. Osborn, 1952; Torrance, 1963] continue to advocate that they perceive creativity as a systematic process where each process has a number of essentials. It could also be considered as "...an act of human cognition which is manifested in our systems as a process and allows us to think and solve problems" [Santagata, 2004, p.6]. Villalba [2008] argued, "Research in cognitive psychology has attempted to understand the processes of creative thinking" [p. 7]. Similarly, Lau [2009] asserted that "Creative is a vital process and should be regarded more than a mere collection of ideas" [p. 161].

One of the earliest studies under the paradigm of creativity was conducted by Wallas [1926]. Later, based on the main components of the theory Osborn [1952] articulated "one of the most influential" models to understand the creative process [i.e. 'Creative Problem solving' [CPS]] [Lau, 2009, p.162]. The model asserts that the process of creativity is fourfold: firstly, it requires preparation, which is the first distinct stage

which identifies the problem and its related data. Secondly, the process goes through incubation which serves as an important phase in the creativity process. Creative individuals tend to tap in their unconscious minds during the process. Thirdly, Illumination serves as the stage of Insights, during this stage, relevant ideas and concepts emerge suddenly in this stage. Finally, Verification tends to occur when individuals consider the possibilities of executing their insights to real life experiences [Lau, 2009]. In the book, *Creativity*, written by Torrance [1963], the author has shared valuable with respect to on the process of creativity. He asserted that the essential stages in the creative process include "a thorough sensing, testing, modification and communication phase" [Stouffer, Russell and Oliva, 2004, p.2].

4.5 Processes involved in Graphic Design

Graphic design is a broad area of study. It is believed that graphic designing is a quite 'creative' practice and requires thorough problem solving skills. In the field of graphic design, most literature entails the processes used in the field. Bessant, Whyte and Neely [2005] believed that "design is a purposive application of creativity and leads to a vast array of innovations" [p.2].

A number of complex processes take place during the problem solving process involving designs. The practice of Graphic design is not an exception and the diverse problem-solving contexts in the field of graphic design are addressed by the use of a particular design language [Meggs, 1992; Noble and Bestley, 2005; Resnick, 2003, cited in Tan and Melles, 2010, p.462].

Graphic designers play a vital role in communicating their 'experiences' [Barnard, 2005]. So, the communication of ideas is an integral part of the creative process in graphic design. Barnard [2005] argued, "One cannot argue that problem solving is itself a creative activity in the sense that 'creativity' has hitherto been understood, as irruptive or expressive" [p. 172].

Similarly, Sevak [2003] in his research asserted that the main purpose of graphic design is to communicate "Graphic design assists in communicating our concepts, ideas and information in a visual form" [p.1]. Hence, Graphic design could be considered as a process of problem solving in its standard terms. The field requires a consistent addition of innovative ideas as well as communication of concepts and principles [Erdurak, 2002].

Erdurak [2002] asserted that "problem solving is a common feature in the creative process and evolves out of the basic study of designs" [p.11]. Therefore, it is pertinent to argue that design processes have a tendency to identify common structures which guide students in solving design problems more systematically.

4.6 Creativity in Graphic Design Education

The field of graphic design is quite new in the Middle East. Hence, not many studies have been conducted on creativity in the context of Middle East. Due to a lack of statistics and data, no proper regulations have been developed to adequately teach students of graphic design in the Middle East. The lack of regulations in graphic design education has hindered the advancement in the Middle East and continues to yield a low turnout of competent and creative graphic designers.

4.7 Comparison: Developed World Vs Middle East

Compared to the universities in the developed world i.e. United States and United Kingdom, universities in the Middle East do not have a suitable infrastructure for design schools. Due to this reason, there has not been enough literature which explains the present status of creativity in the Middle East i.e. Saudi Arabia, Qatar, Bahrain etc.

Due to a lack of literature on the history of graphic design education in Arabic, there is a consistent shortage of credible resources to thoroughly understand the issues in understanding creativity and graphic design education in the Middle East. The main reason behind this is the fact that graphic design education in Arabic has not been around

for a long while. In most countries of the Middle East, education in graphic designs was initiated in the 1990s when the availability of computers and Internet had become common [Abu-Awad, 2008]. Hence, between 2000- 2006, a number of graphic design graduates from the developing world i.e. United States and United Kingdom returned and started looking for jobs in their respective field. The job market was quite limited due to a small market in the Middle East.

In the present research, students from different departments of Art and Education positively added to the contributions in the study. Some students had started their own businesses to sustain development in the field of graphic design. Such roles are often defined as 'art worker' roles in Western societies. Recently, across universities in the Middle East, graphic design programmes have been initiated and have become a popular choice among university students. The programmes were first offered in private institutions.

4.8 Teaching and Encouraging Creativity among Students

A number of studies have attempted to address if 'creativity be taught or enhanced?'. The answer can be understood by Nickerson's [1999] article, "Enhancing Creativity" [cited in Kaufman and Sternberg, 2010]; the article asserts that enhancements in creativity are quite possible in all sectors [Adams, 2005, p.15]. Cropley [1992] and Nickerson [1999] are two main scholars who studied the idea of creativity enhancement and its major techniques. Also, Edwards [2000] asserted that people can learn to be more creative in their fields. There seems to be a consensus among researchers that by offering the right working environment and conditions, creativity could be improved as a problem solving skill. Several other educational studies [e.g. Torrance, 1974; Gardner, 1993; Harpe, 2006; Mich, Franch and Berry, 2006] have also asserted that creativity could be taught and enhanced.

4.10 Enhancing Creativity

There exists a widespread belief that creativity cannot be enhanced in individuals. Creativity is considered as a rare gift or an exceptional talent which is embedded in human beings and cannot be manipulated. For instance, Fryer, [1996] conducted a research in 1989 on 1028 lecturers and teachers and asserted that creativity is a very unique trait which only exists in certain people. Based on this idea, creativity is considered as an 'innate' capability in individuals which can be learned by employing different techniques.

4.9 Students of Graphic Design

Students of Graphic design education can play an important role in improving the existing knowledge on creativity; primarily in the context of graphic design education. It is believed that if graphic design students can understand the characteristics of creative people, then they could be able to imitate the characteristics of creative people.

Antonenko and Thompson [2009] specifically highlighted the major prerequisites of creative graphics students. The attributes are: knowledge of the respective field, which can be achieved by "an extensive research in the discipline which leads to a better understanding of its core principles" [p.18]. Students of graphic design regardless of their culture and background need to be involved in the processes of understanding critiques and managing the access to data [Antonenko and Thompson 2009].

5. METHODOLOGY

5.1 Qualitative Research Design

In the present research, a qualitative research design was used. A qualitative analysis was used to analyse the data. An indicative approach was best suited considering the purpose of the study. The processes in qualitative analyses are designed to collect raw data from qualitative techniques i.e. interviews and then are divided into different categories [Zhang and Wildemuth, 2009].

5.2 Inductive Approach

The present research was entirely inductive as it categorized the collected information into different themes. In order to draw credible inferences from the collected information; careful examinations were done to identify different themes from the responses. To sum it up, the present research made use of an inductive survey approach with an interpretive methodology.

5.3 Use of Interviews and Questionnaires

The research used two qualitative methods i.e. interviews and questionnaires. According to Blaxter, Hughes and Tight, [2006] there are two main types of research 1) Quantitative (i.e. deskwork); and 2) Qualitative (i.e. fieldwork).

5.4 Semi-Structured Questionnaires

The online questionnaire comprised of four open-ended questions that were generated from qualitative data. It also included six closed-ended questions which were developed from semi-quantifiable information. Graphic design lecturers were asked questions on the topic. The open-ended questions in the questionnaire were i.e. questions 4, 5, 6, and 7. The respondents were allowed to give a rich response on the topic.

Open ended questions allow participants to provide rich information on a given topic. Cohen, Manion and Morrison [2000] believed that "... qualitative, less structured and word-based questionnaires have a tendency to bring out specific information on a particular topic" [p. 247].

5.5 Development of Questionnaire

The questionnaire used in the study was developed by using an online service provided by 'Bristol Online Surveys' by Loughborough University. The online link of the survey can be accessed at <https://www.survey.lboro.ac.uk/creativitydesign>. The questionnaire was accessible between 21/02/2011 to 21/05/2011. Three months were deemed enough to gather a considerable number of responses.

The participants were thoroughly briefed on the purpose of the research. The questionnaire introduced the purpose of the questionnaire and provided general instructions on its execution. The questionnaire included a list of topic related concepts and terminologies that were used in the questionnaire. The participants were required to answer a total of ten questions.

5.6. Population

All the participants were university lecturers and taught different design courses. Most of the participants had graduated from foreign universities. Their nationalities also varied, but most of them were Arabic speakers i.e. Egyptians, Jordanian and Lebanese. Graphic design education is quite new in the Arab world. The participants comprised of 39 graphic design lecturers both males and females.

5.7 Sample

The population of the present study comprised of 50 graphic design experts and educators. After the administration of the questionnaires, 33 completed questionnaires were returned. The response rate was calculated to be 66%.

5.8 Interviews

The actual interviews were conducted with 36 participants and their responses were carefully recorded. The interview process started with a plan in which the timing of the interview was decided based on participant preferences. The interviews started in March 2011 and continued until Mid-June 2011. The participants were interviewed in their work places (i.e. colleges and institutions). Most of the interviews lasted between 10 to 20 minutes. The duration of the interviews was sufficient to gather the required information. In order to collect relevant information, the interviews were recorded in MP3 format.

5.9 Conducting Interviews

The interview questions were asked in English language. Most of the participants were qualified teachers and had obtained foreign education. They were quite proficient in English language. Most of the interviews were conducted in the Arabic language only to make sure that the interviewees thoroughly understood the questions and were able to provide their insight on the questions. In total, seven interviews were conducted in English language.

After completing the interviews, the collected information was carefully interpreted. A total of 32 interviews needed to be translated from Arabic language to English. The translation was carried out carefully and cultural connotations were carefully considered. The translation process was quite time consuming and required much efforts on part of the researcher.

6. ANALYSIS

6.1 Graphic Design Education in Middle East

Over the past few decades, the Middle Eastern governments have attempted to seek investments from private sector in higher education. Hence, a number of private institutions have been developed in Saudi Arabia, Qatar and Syria. Most of these institutions offer courses and degree programs which have a broad job market i.e. engineering, computer sciences and business administration. The colleges in the Middle East are not extensions of foreign universities, but most of them are affiliated with Australian, American or European Education institutions. Similarly, the medium of instruction at these schools is English. It allows the students to become familiar with the language. In the year 2005, only a quarter of secondary-school students were able to acquire admission in these universities, but now the scenario has changed drastically. The government in the Middle Eastern countries have started to invest more in higher education programmes and continually seek support from universities in the Western world. Presently, the variety of courses offered by at these institutions in different fields is higher than ever before. Hence, Middle Eastern studies have more career opportunities in the field of Graphic Design and other disciplines which rely on a student's creativity.

6.2 Degree Programs in the Middle East

From the literature review discussed in the paper, it is evident that Graphic design education is a primarily young field in Middle Eastern countries. Throughout the Middle East, private institutions started offering graphic design degrees before the governmental education institutes. In the academic year of 2003-2004, more than three private institutions i.e. Dhofar University, Al Zahra College and the Scientific College of Design were established in Oman. The universities started offering graduate programs which included a Bachelor's Degree in graphic design.

It should be noticed that before 2004, only a few governmental and private institutions offered graphic design specialization; as a comprehensive degree program. Only two design-related courses i.e. basic and advanced designs were offered by the Department of Art Education.

Question 1: Do you think creativity exists in graphic design education?

From the responses on the questionnaire, out of 33 questionnaire participants, 28 participants responded with a 'Yes', and only 1 participant responded with a 'No'. 4 participants chose the 'Other' option and other opinions were also expressed. For instance, Participant 16 explained its perspective by saying, "Sometimes". Hence, a majority of interview participants [i.e. 38 out of 39] answered the question with a 'Yes' while only one percent responded by a 'No'. No interview participants chose 'Other' to answer the question.

An analysis of the participants' response on the first question on the questionnaire reveals that a majority of local and international design lecturers realized the importance of creativity in the field of graphic design education.

Question 2: If the answer to the previous question was 'Yes' do you believe that creativity can be encouraged or taught?

The second question attempted to ask the participants if they believed that creativity can be taught or enhanced in individuals. Out of the 33 questionnaire participants, 30 answered the question with a 'Yes', while only 2 participants answered with a 'No'. From the response on the question, it is evident that most students in the Middle East firmly believe that with proper education creativity in students can be enhanced and taught. Only one participant chose the 'Other' option i.e. Participant 22 who said, "It can definitely be taught". Similarly, the majority of interview participants (31 out of 39) answered this question with 'Yes', and only 2 participants answering with a 'No'.

Question 3: Can Creativity be Enhanced?

When asked if creativity could be enhanced; out of the 33 questionnaire participants, 32 answered the question with a 'Yes', and no one responded with a 'No'. The only respondent who selected 'Other' was Participant 12. The participant asserted that creativity can be enhanced. In the interviews, 36 out of the total 39 participants responded to the question with a 'Yes', while only two participants responded with a 'No'. Only one respondent selected the 'Other' option who believed that creativity could be enhanced, but it cannot be encouraged.

From the response on the question, it is evident that creativity enhancement and creativity encouragement are two different concepts. The encouragement often comes from the teacher. There was some degree of confusion among the participants in answering the question. This was deemed as a probable limitation to the question.

A vast majority of participants agreed to the idea that creativity can be enhanced by employing certain specific methods. This consensus among the participants was supported by the literature discussed in the paper. For instance, Craft [2003] asserted that "graphic design discipline is a perfect field which allows students to practise and enhance their creative thinking processes" [p. 124].

Question 4: How do you define creativity within graphic design education?

This question attempted to study how local and international graphic design teachers define and perceive creativity with respect to graphic design education. The participants' response varied on the question. Hence, it led to a number of different codes and themes. All responses to the questions were coded and then were categorized in different themes. The question asked a number of graphic designers about their opinion; hence the researcher was not responsible for any manipulations in their response.

From the response on the questionnaire, it was ascertained that the most dominant definition of creativity emerged as a problem solving skill among graphic design students. On the other hand, graphic design teachers believed that the element of creativity needs to be studied with respect to the cultural background of students. In response to the question, participants described the solution as an "interesting way" to understand the role of creativity in graphic designing.

Question 5: What are the creative-thinking techniques that can foster the creativity of graphic design students?

This question on the questionnaire attempted to study the techniques which foster creativity among students. It primarily aimed to highlight the creative-thinking techniques used by graphic design students which enhance their creative thinking. The responses to the question were coded first then they were categorised based on the student's roles. The participant response on the question was quite varied as the lecturers had a broad range of

answers. Hence, different codes were generated. In order to adequately understand the responses, a total of eight themes were developed.

The techniques suggested by the respondents were categorized under different themes so that inferences could be drawn based on the participants' response. It is commonly believed that creative-thinking techniques are quite different from pedagogical strategies as highlighted in the next question. From the review of literature, it is evident that creative-thinking techniques are more cognitive and are often employed by students outside classroom settings.

Question 6: What are the pedagogical strategies usually used by graphics lecturers to foster students' creativity?

The sixth question on the questionnaire attempted to highlight the pedagogical strategies which are used by teachers of graphic design to increase creativity among students. Hence, the question was aimed at highlighting the pedagogical strategies employed by lecturers to foster creativity in graphic design students. Such strategies are quite different from creative-thinking techniques discussed in the paper. In order to gain an insight on the question, the responses were coded first and were later categorized. The most important suggestion on teaching methods came out in the form of teaching methods. Almost all participants came up with a combination of tools and techniques under different themes.

Question 7: What should a graphic design curriculum contain to promote creativity?

On question 7, the most dominant response was related to design and art education. The participants on both the interviews and questionnaires responded in a positive manner so that their responses were comprehended adequately. Hence, it was hypothesized that the responses would be helpful in the development of a pedagogical model. The thematic analysis conducted in the research highlighted that eight common themes emerged from the collected responses.

Question 8: Do you think creativity can be assessed within the graphic design discipline?

This issue was studied by question eight in the questionnaire. It enquired about the possibility of assessing creative outcomes among graphic design students. The data clearly indicates that a vast number of lecturers believed that it is quite possible to assess the creative abilities of graphics students. However, their assessment depends on how creativity is defined. Since the questionnaire defined 'creativity' as a problem solving skill, the majority of instructors asserted that there are always ways to study creativity. Some participants of the research believed that creativity is an element which does not need to be studied. The idea has already been discussed in the literature review chapter [e.g. Torrance, 1974; Guilford, 1979]. For instance, a social-personality approach to the assessment of creativity was outlined in Sternberg, Jarvin and Grigorenko [2010], "Developed in parallel with the cognitive approach, works in the social-personality approach have focused on motivational, personality variables and socio-cultural environments as sources of creativity" [p.93].

Question 9: Are you utilising any framework, in your pedagogy, to assess students' creativity?

The majority of questionnaire participants responded to the question with a 'Yes', while 11 participants responded with a 'No'. Interestingly, 9 participants selected the 'Other' option. The vast array of responses mostly described the different assessment frameworks. For instance, Participant 01, who believed that, "He uses specific scoring rubrics which vary based on projects". On the other hand, Participant 14 said, "Creativity (or lack thereof) is often apparent when assessing the student's work.

Question 10: Do you think criterion-referenced tests can assess the creative outcome of graphic design students?

On the last question of the questionnaire, a few participants believed that criterion-referenced tests could assist in studying the creative outcomes of graphic design students. For instance, 9 out of the 33 participants replied with a 'Yes' to the question, while 11 replied with a 'No', and 13 out of 33 participants answered this question with the 'Other' category.

On the other hand, the majority of interview participants (i.e. 33 out of the 39 participants) answered 'Yes' to the question. Five said 'No', and two participants answered the question with 'Other'. Of those participants who selected the option 'Other'. For instance, Participant 36 said that "There are certain limitations and boundaries in satisfying the standards". Participant 22 said "Yes, but the criteria should be agreed upon between the lecturers and the students".

6.3 Creativity Enhancement and Creativity Encouragement

From the participants' response and the interviews, it can be ascertained that Creativity enhancement is quite different from creativity encouragement. In the process of enhancement, the student has a role to play in his/her creativity. While, Creativity encouragement comes from the instructor to the student.

As discussed in the literature review, Craft [2003] identified that the field of graphic design allows students to practice their creative thinking.

It was hypothesised that creativity in the context of graphic design education involves problem solving skills which can be explained through cultural phenomenon [Williams, 1961; Wolff, 1981; Barnard, 2005]. A similar perspective has been argued regularly by several recent design researchers i.e. Ryan and Conover [2007] asserted that "all designs are a problem solving process. They embrace the idea of deviancy and change and require students to take risks" [p.xv].

From the analysis conducted in this section, it is evident that a number of scholars have attempted to study the differences and similarities between creative artists and creative designers. Barnard [2005] argued that "one of the most common similarities is between creative artists and creative designers is that they make and produce 'experiences' in visual forms and later communicate those 'meanings' within specific cultural and social contexts" [p. 178].

It is also clear that no major or effective difference exists between the creative designer and a creative artist. Creative designers frequently engage in a cross-domain transfer of abstract design ideas. Similarly, they also recognise alternative functions or uses of common designs. Sawahata [1999] argued that, "Creative designers have a tendency to respond to new stimulus, introduce the elements of surprise and solve specific problems to achieve their targeted goals" [p. 9]. Hence, they acquire new ideas and grow enthusiastically as the process moves forward.

Pibernik, Milcic and Bota [2010] inferred that the "goal of creativity in graphic design is not to seek the right answer, but to explore the wide range of available possibilities" [p.1]. Antonenko and Thompson [2009] also argued, "Being creative is seeing the world [...] from different perspectives and not being narrow-minded in a one-way alley ..." [p. 10].

7. DISCUSSION

A review of literature on the topic and the analysis conducted in the research confirms that creativity can be taught. Raymond Williams [1961] suggested certain ways in which the creativity of human beings could be enhanced. It includes learning, work and decision-making etc [Williams, 1961]. On the other hand, some participants believed that creativity is a talent which only exists in certain students.

In a broader perspective, creativity is regarded as a cultural activity or a product of the culture. Talent could be defined as a specific aptitude, attribute or skill which an individual possesses. For instance, the Romantic era embraced the idea of creative genius which was developed to enhance the human ability to analyze.

An individual's talent involves a better intuition about a certain area of study. A talented individual is expected to perform above average in their particular tasks as compared to regular individuals with the same expertise. Talents are not necessarily linked to the artistic areas of expression. Creative talents emphasize on a person's ability to think outside the box and to capitalize on their cognition and ideas.

From the analysis section, it is evident that a group of participants believed that creativity is an entirely psychological process. For instance, some cognitive characteristics should be common among creative people, who can capitalize on new information and generate new ideas. Understanding creativity in this manner is a psychometric approach which has been discussed in detail by psychologists i.e. Guilford [1979] and Torrance [1974]. The scholars talk about the different dimensions of creativity i.e. flexibility, fluency, elaboration and originality.

However, such an approach to understanding creativity cannot be deemed beneficial for the present research.

8. CONCLUSION

The present research aimed to study 'Creativity in the Context of Graphic Design in the Middle East'. A thorough review of literature was conducted on the topic. Creativity is a vital concept for both the society and individuals. As discussed in the initial sections; the term creativity is quite difficult to define. There seems to be a consensus among scholars that creativity is culturally oriented and defined. Creativity is a culturally defined and orientated subject. Graphic Design education falls between the paradigm of Science and Arts. Graphic designers tend to seek solutions to the problems; often in the context of different cultures. The present study made use of the definition of Creativity provided by Williams' in 1961.

The main purpose of the present investigation was to understand Creativity in the Context of Graphic Design in the Middle East. From a review of the literature, it is clear that only limited studies have been conducted on the topic in the context of Middle East. The present research primarily capitalized on three major concepts i.e. creativity in graphic design education as a problem solving process i.e. cultural activity, creativity could be taught and enhanced to graphic design students and the creative outcomes of students can be assessed in the context of graphic design education.

From the analysis conducted in the research, it is evident that the role of creativity in the field of education has not been explored adequately in the countries of Middle East. The graphic design education in Middle East continues to follow orthodox modes of education. Due to a lack of research, the graphic design curriculum in most Middle Eastern universities is outdated and relies on the orthodox modes of teaching. In order to improve the present situation with regards to graphic design education; a more systematic approach needs to be followed in graphic design education.

The study followed a qualitative approach to answer the proposed research questions. A thorough analysis of the differences in creativity in graphic design education was conducted between the Eastern and Western cultures. The data in the present research was collected by the administration of semi-structured questionnaires and interviews. The participants in the study were graphic design teachers who were selected for the administration of questionnaires and interviews. After the administration of the questionnaire and the interviews, the collected information was analyzed using a thematic analysis. The participants' responses were coded and then were categorized in different themes.

All in all, the processes involved in the research remained focus to catering the purpose of the study and at answering the research questions. In order to adequately explore the concept of creativity in the context of Middle East, the present research regarded creativity as a problem solving skill. Relevant studies on creativity and graphic design education were reviewed in the literature review section to enhance the readers' understanding on the topic. In a broader perspective, more research is needed on creativity and graphic design education to bring improvements in graphic design education. Readers can capitalize on the inferences drawn from the present research. The governments of Middle Eastern countries must allocate sufficient funds and put in a decent infrastructure to enhance creativity and to bring improvements in the graphic design education.

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