

CREATIVE LEARNING IN THE MARKETING CLASSROOM: BUSINESS PRACTICE, COMPARATIVE ANALYSIS, AND STUDENT PERSONALITY TYPE

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Abstract

The purpose of the study is to identify the importance of creativity skills for students and practitioners, as well as measure student creativity. Our results support the fact that students and practitioners alike recognize creativity as significant skills for current business practice. The study did show that students ranked the importance of creativity skills higher than practitioners.

Another key finding is that our business students have a relatively low creativity score.

According to the Torrance Test of Creative Thinking, student fluency scores the ability to produce a large number of alternative ideas, is low in comparison to the Torrance norm. The findings support the idea that creativity skills can be learned and the study also compared the student creativity level with a student personality profile. Our research identifies that Explorers, as a type of personality, demonstrate a low creativity score and Negotiators show a relatively high creativity level. Furthermore, the authors offer recommendations for educators.

Introduction

In the Harvard Business Review, authors Amabile and Khaire (2008) declared that “American organizations could use a bigger dose of creativity.” The same authors made the point that creativity is essential to entrepreneurship to get a new business started and also essential to sustain the best companies after they have reached global scale. To establish an overall understanding of creativity, we analyzed the differences between existing creativity theories, as well as definitions of creativity.

For the last decade, the creativity literature has had substantial growth in volume and scope, as well as methodological and theoretical sophistication (Hennessey and Amabile, 2010). A great deal of previous research has tried to answer the following questions: “What is creativity? What are the factors that affect creativity? Can creativity be taught?” One remarkable stream of research has been done by Paul E. Torrance. The Torrance Test of Creative Thinking (TTCT) is one of the most commonly used and well known tests of creativity. Many researchers

have varied his methodologies to perpetuate their results (Torrance, 1990). Paul Torrance defines creativity as “a process that involves sensing the gaps or disturbing the missing elements, hypotheses, communicating the results and possibly modifying and retesting these hypotheses.” TTCT includes many different terms related to creativity with the most common being fluency, flexibility, and originality.

Fluency is acknowledged as the ability to produce a large number of alternative ideas (O’Neil and Drillings, 1994). To measure fluency, Torrance simply counts the number of answers a student has for the proposed question. Another way of looking at fluency is by selecting an object and trying to come up with as many different purposes and uses for the item as possible; the more uses thought up, the most fluent person is. Flexibility is defined as the ability to produce a variety of ideas or use of variety of approaches (O’Neil and Drillings, 1994). By the Torrance research, flexibility is presented as the different answers that person gives. In a way, answers can be similar, for instance "the boy caught the ball" as opposed to "the ball was caught by the boy." This representation is not flexible, because is it the same meaning. To determine flexibility, Torrance examines answers and sees how one answer varies from the other. Originality is defined as the ability to produce new, unusual, and innovative ideas (O’Neil and Drillings, 1994). The TTCT has a construct of common answers and methods to determine if one answer is defined for originality. The simplest way to identify originality is that it is an original thought, something that has not been thought of before.

Torrance’s extensive research which spans more than four decades, with over 2,000 research studies, allowed him to collect valuable data. Based on this data, Torrance developed the norms of creativity, including the average creativity score for age of 20 to 39 years old. Our research will use the TTCT, as a methodology, to measure business student creativity level.

Hypothesis 1: The creativity score for our business students will be close to the Torrance's Norms of creativity

Another creativity paradigm is the Guilford Model of the Structure of Intellect, which used similar terms that Torrance created. The Torrance model was solely for educational purposes while Guilford’s model was difficult to apply in educational and training sessions. The Guilford Model (Table 1) follows eight abilities in the definition of creativity: sensitivity to problems, fluency, novel ideas, flexibility, synthesizing, analyzing, complexity, and evaluation (Guilford, 1968).

Table 1. Guilford's "Structure of Intellect" Primary Abilities

Ability	Description
Sensitivity to problem	See problems which are not seen by noncreative people
Fluency	Produce large numbers of ideas
Novel idea	Have unusual ideas
Flexibility	Use a variety of approaches
Synthesizing	Organize their idea into large and more inclusive ones
Analyzing	Break down "symbolic structure" to build a new ones
Complexity	Can work with a number of interrelated ideas
Evaluation	Easily define the values of new ideas

Our study shows that Torrance terms and ideas correlated with Guilford's Structure of Intellect concept. For instance, sensitivity to problems is present in both models, as well as fluency and flexibility. Another author defined creativity as "*a combination of flexibility, originality and sensitivity to ideas which enables the thinker to break away from usual sequences of thought into different and productive sequences, the result of which gives satisfaction to himself and possibly to others*" (Jones, 1972). Creativity is not a rare commodity and everyone has creative ability to some degree. In addition to the definition of creativity, other studies have identified various levels of creativity. According to the Taylor study (1959), there are five levels of the creativity: expressive (nearly everyone participates in this level), productive, inventive, innovative, and emergentative (the highest and rare level of creativity). The same study shows that most college students successfully move through the first two levels and, with effective teaching and satisfactory motivation, can enter the third stage of the inventive.

Hypothesis 2: Students and practitioners will recognize creativity as a significant character trait for current business practice

Ability to Learn Creative Skills

The 60s and 70s have seen an evolution in theories of creativity and creative-problem solving. Today's universities are facing enormous challenges as they strive to actually implement creativity concepts into the education process. Inattention to creativity in pedagogical research is surprising in light of the importance of creativity in the popular press and academic journals. Recent studies of creative skills and how to develop these skills through education supports that student creativity has been developed by education and extended through education (Bleedorn, 2003; Darling-Hammond, 2009; McIntyre et al., 2003; McCorkle et al., 2007; Ramocki, 2006;). Further study is needed on the role of business schools and marketing professors in preparing students to be more creative.

Hypothesis 3: Creativity skills can be gained by learning

Personality Profile and Creative Skills

To continue to understand a relationship between creativity and other factors, this study compares student creativity level with student personality profile. To identify the student personality profile we used the Helen Fisher Personality Profile methodology. Based on Fisher's paradigm, there are four scales that need to be completed, each scale has 14 statements on a Likert scale - strongly disagree to strongly agree. Each answer has a point value and each scale gauges a different personality type. The scale with the highest score is the participant's predominant personality type. The personality scales are as follows: scale one measures one's abilities as an Explorer, scale two measures ability as a Builder, scale three measures Director abilities and scale four measures ability to Negotiate. Explorers are individuals who have goal-oriented, impulsive, creative, curious, and adventurous characteristics. Builders are individuals who are detail-oriented, social, self-confident, and loyal. Those who score high on the Director score are analytical, yearn to succeed, and resourceful. Negotiators have imaginative, theoretical, emotionally expressive, and intuitive characteristics. In our case we focus on Explorer as a personality type which should be more creative in comparison to other personality types.

Hypothesis 4: Explorer, as personality type, has a higher creativity score than other personality types.

Methodology and Results

The first part of the study is to understand, from both business professionals' and students' view, which creative characteristics are perceived as significant for current business practice. To collect the feedback regarding the importance of various character traits for a business professional today, we developed a survey which includes 10 character traits. Participants rated items on 7-point Likert-type scale, where 1= extremely unimportant and 7= extremely important.

A total of 74 completed student surveys were analyzed for this study and the data were collected from a convenience sample of 55 business practitioners: product and project managers in various medium and large corporations. Results of the student and practitioner preference are present in Table 2.

The results supported Hypothesis 2 that students and practitioners recognize the *creativity skill* as a significant character trait for current business practice. In addition, the study compared the student perceptions to the practitioner perceptions. Findings suggest that students ranked the importance of creativity skills higher than practitioners. At the same time, both groups identified the characteristic of *Dependable* as a number one character trait for current business practice. The results show that *dependable, honesty, ethical, and listens* are the most significant character traits for practitioners. However, students considered that the most important traits are *dependable, responsible, honesty, and listens*. Interestingly, the study identified a good correlation between opinions of the two groups.

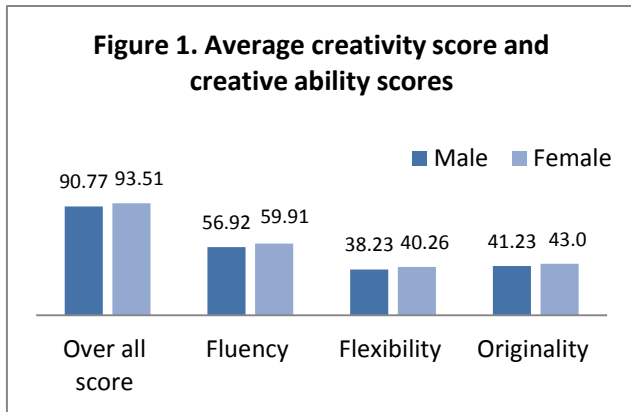
Table 2. Meanings of the character traits for students and practitioners

Character Traits	Mean* (rank)	
	Practitioners	Students
Cooperative	5.95 (5)	5.80 (5)
Compassion	4.64 (8)	4.76 (8)
Creative	5.64 (6)	5.88 (4)

Dependable	6.38	(1)	6.30	(1)
Ethical	6.25	(2)	5.80	(5)
Honesty	6.25	(2)	6.07	(3)
Listens	6.38	(1)	6.07	(3)
Open-minded	6.17	(4)	5.88	(4)
Responsible	6.18	(3)	6.25	(2)
Risk taking	5.42	(7)	5.12	(7)

* 7-point scale, 1= extremely unimportant to 7= extremely important

Next, we tested the Hypothesis 1. We measured student creativity level by using the

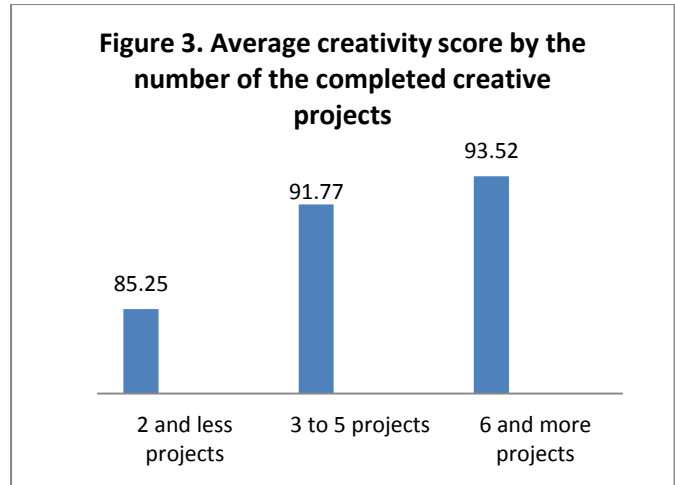
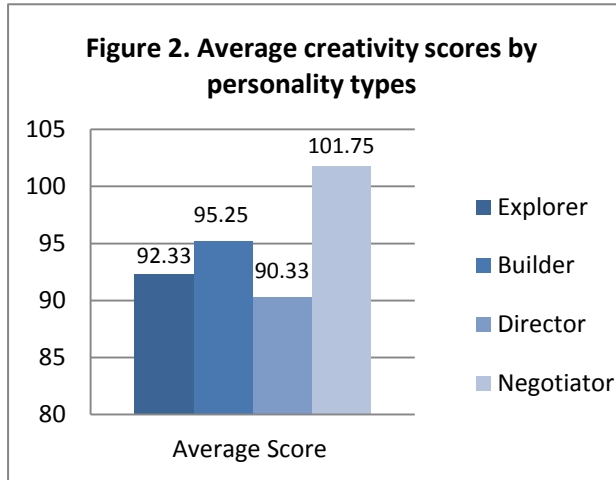


Torrance Test of Creative Thinking (TTCT). Torrance methodology, “Thinking creatively with words,” includes six activities for the student, each designed to tap different aspects of creative functioning: asking questions, guessing causes, guessing consequences, product improvement, unusual uses of cardboard boxes, and just juxtaposed activities. TTCT also emphasizes the three dimensions of creative

thinking: fluency, flexibility, and originality (Torrance Tests of Creative Thinking by E. Paul Torrance, 1990). The study used the same sample of 74 undergraduate business students from a western U.S. university from marketing and other business majors. The respondent characteristics were 53% male, average age of 22 years old and senior or junior class standing. Results of our study indicate the average creativity score for students was 92.1, which is somewhat low in comparison to the average standard score of 102.0 by the Torrance norms (Torrance Tests of Creative Thinking by E. Paul Torrance, 1990). As a result of this, Hypothesis 1 is not supported since the creativity score for business students is lower than Torrance’s average creativity score. At the same time, the student flexibility and originality scores are similar to the average scores of flexibility and originality for the Torrance norms. The study also indicates that the student fluency score, as the ability to produce a large number of alternative ideas, is very low (58.4), compared to the Torrance norm of 81.8. Interestingly, Silvia research (2008) found that fluency significantly predicted person’s intelligence. This raises a concern about business student creative skills. However, the study did not indicate differences between male and female creativity scores.

The study also considered the relationship between personality type and creativity. In previous studies, personality affects creativity and in turn creativity affects personality. The four types of personality derived from the Helen Fisher personality profile test included: Explorer, Builder, Director, and Negotiator. From the 74 student respondents 70% were either Builder or Explorer. This is a very interesting fact, because according to the Helen Fisher personality profile descriptions the Explorer is more impulsive, creative, curious, and adventurous compared to the other personality profiles of Builder, Director, and Negotiator. Our sample has 37% Explorers, which according to the Fisher concept, should indicate a high average creativity

score. However, Figure 2 shows the opposite results and Explorer has a lower creativity score than the other two personality types: Builder and Negotiator. Thus, there is no support for Hypothesis 4. Based on previous research, it was hypothesized that Builders' natural drive to create and build new, unique things would lead a higher creativity score.



This is also not the case. In fact, Negotiators scored the highest in creativity, with an average score of 101.75. Builders came in second with an average creativity score of 95.25. Directors had the lowest score of 90.33 with an 11.42 point gap between the bottom and top personality performance. Our study also supports a greater disparity between personality type and creativity score than between gender and creativity score.

To test the Hypothesis 3, we asked students how many creative projects they completed in classes during the time they have attended college. Figure 3 shows the results of the test of Hypothesis 3. The results support the notion that creativity skills can be gained by learning through course materials and projects. The creativity score is high (93.52) in students who completed 6 and more creative projects compared to students who worked on 2 and less creative projects (85.25).

Discussion and Recommendations

The primary results of this research are that students and practitioners recognize the creativity skill as a significant character trait for current business practice. More specifically, students ranked the importance of creativity skills higher than practitioners and the study identified a good correlation between opinions of the two groups regarding the importance of the other character traits. This importance was noted by the previous research (Amabile, 1996;

Hennessey et. al., 2010; McCorkle et. al., 2008). Out of 42 character traits in the Heiser and Frontczak (2002) study, creativity was ranked 27th. The results indicate that students do seem to understand that creativity skills help them to pursue a business career. On other hand, educators should give students the opportunity to develop or gain creative skills during their academic career.

Another relevant finding is that our business students have a relatively low creativity score. The results of this study provide evidence that marketing educators need to engage in serious dialogue on the importance of student creative skills. Students also demonstrate a low fluency score, the ability to produce a large number of alternative ideas. To stimulate this creative ability, educators should convince students to: provide their opinions, critically think, think in new ways, be concerned about a problem, and be willing to take risks.

Also, our finding supports the previous research that creativity skills can be improved by learning. Our study notes the high creativity score in students who have completed 6 and more creative projects in classes.

To increase student creative skills by learning, educators should:

- Motivate students with intellectual challenge (Amabile and Khaire, 2008; Chonko, 2004)
- Identify the student personality type using the Helen Fisher Personality profile or other test, to recognize student strengths and use these to develop creative ability, such as a fluency, originality, and flexibility
- Allow students to pursue their passions (Amabile and Khaire, 2008), allow students to learn in their preferred way (Torrance, 1971)
- Enhance diversity by organizing teams with different student backgrounds and experiences to work together (Darling-Hammond, 2009); give students diverse experiences through a variety of research, projects, opinions, and other academic activities (Gardner, 2009)
- Grant as much student independence as possible, because creative individuals have displayed a good deal of self-sufficiency, self-initiated and task-oriented behavior (Amabile, 1996; Jones, 1972)

- Be an appreciative audience and listener of what students say. Reward student creativity (McCorkle, 2007)

It is important to note that the present study is preliminary research and has a number of limitations. First, we need a greater exploration of the relationships between personality type and creativity. Future research may want to expand our sample size and further explore the issue to measure student creativity level by using different creativity tests. Furthermore, it would be necessary to compare student creativity in variety marketing courses, as well as educational level.