



Barriers to organizational creativity

The marketing executives' perspective in Saudi Arabia

Received 17 March 2006
Revised 16 January 2007
Accepted 26 January 2007

Muhammad Asad Sadi

*College of Industrial Management,
King Fahd University of Petroleum and Minerals, Dhahran,
Saudi Arabia, and*

Ali H. Al-Dubaisi

*Electrical Maintenance Division, Saudi Electricity Company,
Dammam, Saudi Arabia*

Abstract

Purpose – The purpose of this paper is to examine the significance of some barriers in Saudi organizations from the perspectives of marketing executives.

Design/methodology/approach – A range of contemporary literature is presented to help define the term “organizational creativity,” and describe “barriers to creativity” from the marketing executives' perspective within the organizational culture of Saudi Arabia.

Findings – Self-confidence and task achievement are the most significant barriers to the creativity of marketing executives in Saudi Arabia.

Research limitations/implications – This paper is primarily based on a survey questionnaire, the contents of which were derived from previous studies on this subject or related themes. The barriers to creativity surveyed in this study were identified by Osborn. They were grouped into six constructs: self-confidence; need for conformity and risk taking; use of the abstract; use of systematic analysis; task achievement and physical environment.

Practical implications – Throughout this paper the concept of “barriers to creativity” was explored. The results indicated that self-confidence is considered a slightly higher barrier to creativity among Saudi executives compared to non-Saudis who rate task achievement higher. To improve self-confidence among executives, both Saudi and non-Saudi organizations must improve positive behavioral elements such as optimism, passion, and self-image and minimize negative behavior elements such as sarcasms, destructive criticism, status consciousness and fear of evaluation.

Originality/value – The celebrated Osborn model is used to identify the creativity barriers among organizations from the perspective of marketing executives. This paper concludes that creativity is an important issue for any organization to survive and excel, and knowing the barriers that diminish creativity is an essential step towards the objective of creating a culture of creativity within an organization in the Saudi Arabian context.

Keywords Organizational culture, Marketing, Saudi Arabia

Paper type Research paper



Support provided by King Fahd University of Petroleum & Minerals is gratefully acknowledged. The authors would like to thank all the marketing executives who have participated in this study.

The central theme of creativity in organizations

Creativity has been a central concept in many disciplines, ranging from the fine arts and architecture to psychology, sociology, economics, science, engineering and management. The concept of creativity can lead to a new packaging design for a washing powder, a nutritious dairy food item, or maybe more sublimely to an artist creating a painting (Fillis and McAuley, 2000). In marketing like many other disciplines, creativity is the fuel for continuous success. The continuous search for novel marketing ideas and approaches is a central part in marketing efforts. If marketing is seminally about anything, it is about simply satisfying consumers' needs and wants in order to make profits (Peter and Olson, 2005). Marketing is about achieving customer-getting distinctions by differentiating what the marketer does and how he operates. This differentiation has a direct effect on the extent of the profitability of any product or services that he (she) promotes. On the other hand, maintaining product/service distinctions by differentiation is facilitated by ongoing development of creative marketing programs. The role of these programs is to provide the necessary techniques to enhance creativity and at the same time to overcome the barriers that may affect creativity (Andrews and Smith, 1996).

Incidentally, many marketing organizations fall short in terms of creativity in industrializing countries such as Saudi Arabia. This often results in price wars in product categories ranging from disposable diapers to mutual funds. The same thing can be applied to many other consumer product categories, where the competitors have reduced their products to commodities through extensive use of priced-based promotions simply because they cannot accentuate creativity. Consequently, consumers have turned more loyal to the deals than to the novelty. Marketing executives especially can be blamed for their failure to recognizing creativity – launching novel concepts and themes, re-defining product positioning and innovating channels of distribution, etc. (Andrews and Smith, 1996). Certain factors, however, prevent them from being creative. Researchers have argued about these factors extensively in the context of Western industrialized countries (Hellriegel *et al.*, 2005). In a developing country context such as Saudi Arabia there is a dearth of such studies. This study will attempt to bridge that gap. It will examine factors that prevent marketing executives from being creative in the work place. The objectives of this study therefore are:

- (1) to discuss the concept of creativity in the context of marketing executives; and
- (2) to evaluate factors that prevent them from being creative at work place in developing country setting.

In doing so, the study contributes to the literature in a number of ways. By discussing the concept of creativity it will explore the trend amongst marketing executives regarding the ability to visualize, generate and implement new ideas in the context of a developing country. It also helps answer the managerial question of what type of barriers stand in the way of creativity from the perspective of marketing executives.

The rest of the paper is organized as follows. The next section will discuss the basic theme of the concept and its link with marketing. Following this, we present the theoretical background to the study and review the previous conceptualizations. Next, we present the research methodology and hypotheses tests. We then discuss the results and analysis and outline the barriers to creativity that a company face. In the final section, we discuss the study's limitations and offer recommendations.

Creativity and marketing

Creativity has been discussed, analyzed and debated widely by researchers. Although it is not hard to recognize creative ideas or creative individuals, defining creativity can be a bit more challenging. Scientists defined creativity as the process by which individuals or teams produce novel or useful ideas (Greenberg and Baron, 2003). It can be noted that most of these researchers, if not all, indicated to the newness, novelty and originality when they define creativity. For instance, Styhre (2006) looked at organizational creativity from the notion of newness, novelty and originality in the areas of process, product, technology and management. Rickards and Moger (2006) extend this definition to explain that leadership, creativity and innovation are systems which can be more closely integrated for improved theory and practice. Dewett (2004) explains that several researchers have offered "process"-oriented definitions of creativity, focusing on the stages of individual creative production (Amabile, 1996), although most scholars have noted that the typical approach in the literature assumes an "outcome"-oriented definition (Amabile, 1996). Thus, creativity is most often defined as the production of novel and useful ideas (Amabile, 1988). At its core, this outcome-oriented definition stipulates two criteria: novelty and utility. Novelty simply implies newness or originality. Utility implies that an idea or other contribution must be directly relevant to the goals of the organization and it must be something from which the firm can reasonably expect to extract some value. The ideas thus generated may or may not be implemented. Schoenfeldt and Jensen include all those ideas that are generated, yet never implemented. They assert that when researchers consider only those ideas that are implemented, regarded as both novel and useful, they are overly restrictive of what constitutes creative ideas.

While the literature has matured from early studies of creative persons (Osborn, 1963) to the more recent focus on the social psychology of creativity (Amabile, 1988), one thing has largely remained constant: our focus on the same dependent variable, creative outcomes. Thus, Robinson and Stern (1997) suggest that the explicit or implicit question posed by these works is "How do you increase creative outputs in organizations?" An interesting oversight in this dialogue has been the failure to realize that creative outcomes are not easily obtained – creativity often requires considerable time (Amabil, 1988). Stated differently, creativity in the organizational sense – ideas or actions deemed by relevant others to be sufficiently novel and useful – is not a frequently occurring phenomenon relative to the maintenance of the status quo.

Following the work of Amabile (1988, 1996), Robinson and Stern (1997), and others, creative outcomes can be defined as novel and useful ideas, processes, or products offered by an employee, as judged by relevant others (e.g. one's supervisor). In turn, creative efforts can be defined as novel or original ideas, processes, or products offered by an employee, as judged by relevant others. It is through a process of engagement with creative efforts that, occasionally, creative outcomes result. It should be noted that the definition of creative efforts does not include any mention of utility or practicality. The need to recognize the importance of creative efforts is predicated on the primacy of novelty as a requirement for creativity (Brown, 1989). It has been suggested that novelty represents the necessary first step towards the production of a creative product.

Creativity, when employed in marketing and promotion, can maximize aspects of business toward which it is applied. In this way, it serves to add value to products or services, beyond their tangible or obvious features. Value adding is a more practical

alternative to cost reduction in current marketplace (Klein, 1990). On the other hand, creativity and innovation are essential for marketing people in order to manage the speed of change in today's marketing environment. This speed of change is expressed in terms of rapid change in technology, increase in global competition and shortening in product life cycle. All these factors have made marketing organizations more vulnerable to failure than any time in the past.

Therefore, it has become of the utmost importance for them to address business issue creatively (Wong and Pang, 2003). However, Andrews and Smith (1996) claim that despite this importance of creativity in marketing, little has been done to study factors that affect the generation of creative marketing programs, techniques that help enhancing creative culture in organizations (McFadzean, 2000), and barriers that prevent individuals and groups from being creative (Amabile, 1997; Woodman, 1993, Dewett, 2004).

Theoretical background

The traditional theory of creativity states that creativity is something that is done by creative people. In other words, creativity is an ability that creative people are born with. In contrast to this theory, the componential theory suggested by Amabile (1997) assumes that all humans with normal capacities are able to produce at least moderately creative work in some domain, some of the time – and that the social environment (the work environment) can influence both the level and the frequency of creative behavior. According to this theory, creativity of individuals or teams has three major components: expertise or domain skills, creativity thinking skills, and intrinsic task motivation (Amabile, 1997; Greenberg and Baron, 2003). Each part is discussed further below:

The task domain skill

Expertise or task domain skill is the foundation for all creative work. It can be viewed as the set of cognitive pathways that may be followed for solving a given problem or doing a given task – the problem solver's "network of possible wanderings." The expertise component includes memory for factual knowledge, technical proficiency, and special talents in the target work domain – such as expertise in gene splicing, or in computer simulation, or in strategic management.

Creative thinking skill

This component provides that "something extra" of creative performance. Assuming that a person has some incentive to perform an activity, performance will be "technically good" or "adequate" or "acceptable" if the requisite expertise is in place. However, even with expertise at an extraordinarily high level, the person will not produce creative work if creative thinking skills are lacking. These skills include a cognitive style favorable to taking new perspectives on problems, an application of techniques (or "heuristics") for the exploration of new cognitive pathways, and a working style conducive to persistent, energetic pursuit of one's work. The literature reveals two routes to creativity and innovation. One is guided by fantasy, brainstorming, and free interaction; the other is based on knowledge-sharing technologies and implementation of new organizational forms (Tesluk *et al.*, 1997; Dooley *et al.*, 2000; Jeanes, 2006; Haner, 2005). Sorensen (2006) rejects both the routes in his study and asserts that the innovation and creation of new

knowledge always happens from thinking that develops through crises and catastrophes.

Intrinsic task motivation

Although the two skill components determine what a person is capable of doing in a given domain, it is the task motivation component that determines what that person actually will do. Motivation can be either intrinsic (driven by deep interest and involvement in the work, by curiosity, enjoyment, or a personal sense of challenge) or extrinsic (driven by the desire to attain some goal that is apart from the work itself – such as achieving a promised reward or meeting a deadline or winning a competition). Although combinations of intrinsic and extrinsic motivation are common, one is likely to be primary for a given person doing a given task. A number of studies have shown that a primarily intrinsic motivation will be more conducive to creativity than a primarily extrinsic motivation. These components are shown in Figure 1 (Amabile, 1997).

Task motivation makes the difference between what a marketing executive can do and what he will do. The former depends on his levels of expertise and creative thinking skills. But it is his task motivation that determines the extent to which he will fully engage his expertise and creative thinking skills in the service of creative performance. To some extent, a high degree of intrinsic motivation can even make up for a deficiency of expertise or creative thinking skills. A highly intrinsically motivated person is likely to draw skills from other domains, or apply great effort to acquiring necessary skills in the target domain.

Organizational creativity and innovation

Along with the theory of individual creativity, Amabile (1997) makes reference to the theory of organizational creativity and innovation. This theory assumes management practices, resources, and organizational motivation as the components which are analogous to task skills or experience, creativity skills, and task motivation, respectively. Figure 2 shows a simplified schematic diagram depicting the major elements of the

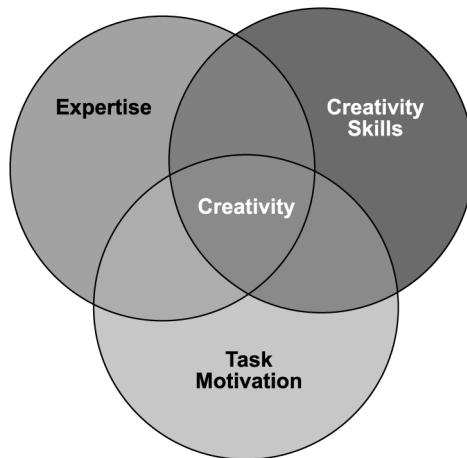
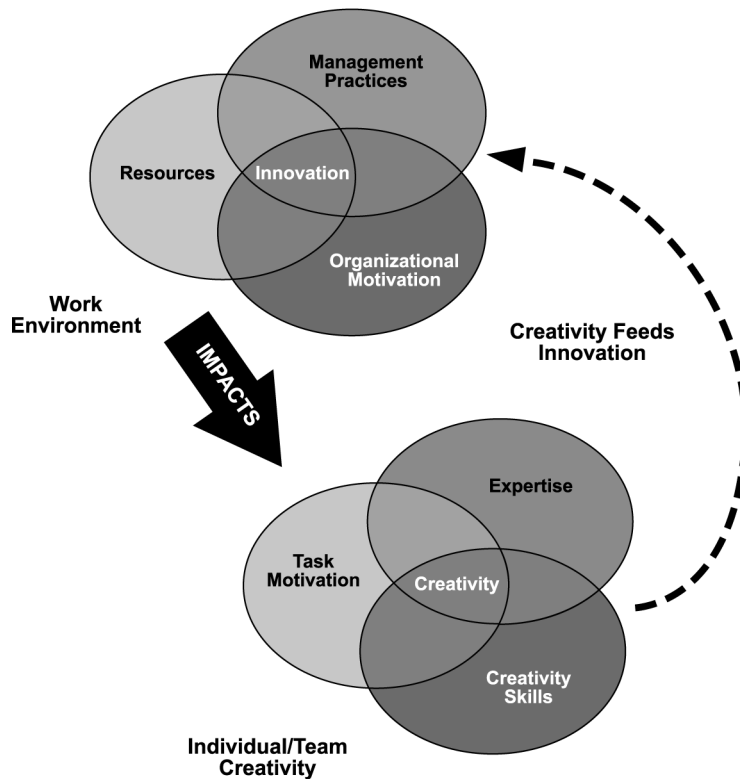


Figure 1.
Components of individual
creativity

Source: Amabile (1997)



Source: Ambile (1997)

Figure 2.
From individual to
organizational creativity

componential theory; integrating individual creativity with the organizational work environment. The three upper circles in the figure depict the organizational components (features of the work environment) that are considered necessary for innovation. The three lower circles in the figure depict the components of individual creativity.

The central prediction of the theory is that elements of the work environment will impact individual creativity (depicted by the solid arrow). The theory also proposes that the creativity produced by individuals and teams of individuals serves as a primary source for innovation within the organization (depicted by the dotted arrow). The most important feature of the theory is the assertion that the social environment (the work environment) influences creativity by influencing the individual components.

Innovation. This component is made up of the basic orientation of the organization toward innovation, as well as supports for creativity and innovation throughout the organization. The orientation toward innovation must come, primarily, from the highest levels of management, but lower levels can also be important in communicating and interpreting that vision. The primary organization-wide supports for innovation appear to be mechanisms for developing new ideas; open, active communication of information and ideas; reward and recognition for creative work; and fair evaluation of work-including work that might be perceived as a “failure.” Notably, the

organizational motivation toward innovation includes the absence of several elements that can undermine creativity: political problems and “turf battles,” destructive criticism and competition within the organization, strict control by upper management, and an excess of formal structures and procedures. Lawson and Samson (2001) extend this notion further. They draw together knowledge of creativity from a variety of fields to propose that creation and innovation management be viewed as a form of organizational capability which excellent companies invest in and nurture, leading to creation and innovation in products, services, and processes.

Resources

This component includes everything that the organization has available to aid work in the domain targeted for innovation. These resources include a wide array of elements: sufficient time for producing novel work in the domain, people with necessary expertise, funds allocated to this work domain, material resources, systems and processes for work in the domain, relevant information, and the availability of training.

Management practices

This component includes management at all levels, but most especially the level of individual departments and projects. In addition, project supervision is likely to foster creativity when it is marked by clear planning and feedback, good communication between the supervisor and the work group, and enthusiastic support for the work of individuals as well as the entire group. Finally, management practices for creativity include the ability to constitute effective work groups that represent a diversity of skills, and are made up of individuals who trust and communicate well with each other, challenge each other's ideas in constructive ways, are mutually supportive, and are committed to the work they are doing.

Creativity techniques

There are numerous types of creative problem-solving techniques. McFadzean (2000) has classified these into techniques that are used by individuals and those that are utilized by groups. In addition, she has also divided them into techniques that use related stimuli and those that use unrelated stimuli. Perhaps, the most popular technique is that of brainstorming, where group members communicate ideas to the facilitator who writes them down on a board or flip chart.

According to McFadzean (2000) and Clapham (2000), creativity can be encouraged by changing a person's mindset or paradigm. Smith defines a paradigm as a shared set of assumptions, a way people perceive the world and a way of explaining what is going on around about them. Moreover, Smith suggests that if people are in the middle of a paradigm, it is difficult for them to perceive the situation in any other way. Creative problem solving, however, can help people to modify or even change their paradigm suggests that paradigm changes can be made by using three different strategies, namely of freewheeling where group members are encouraged to produce as many ideas as possible and association where members combine related or unrelated previous ideas to generate new one. Stimulation is the second where individuals are encouraged to make a shift in their perceptions to the problems. Last is the expression, where individuals are encouraged to use unusual ways to express their own ideas. The objective of brainstorming, for example, is to develop as many ideas as possible.

According to Osborn (1963), this is because the quantity of ideas will ultimately yield quality. In other words, the more ideas generated, the more likely it is that the group will produce some good quality ideas.

Aside from the various innovative techniques discussed above, some researchers have proposed barriers that impede individual or organizational business activities. The following account identifies some of the salient ones.

Barriers to creativity

Barriers to creativity is a divergent subject because the number of such barriers is multiple and varied. Most of these barriers can be classified according to individual personality, social environment, or work environment (Wong and Pang, 2003). Wong and Pang, for instance, have indicated some of these barriers in their study about the hotel industry. These were functional in nature and focused on the specific industry. Time pressure, insufficient resources, evaluation, and status quo were among the barriers that researchers surveyed and analyzed.

Saadi and Fazal have studied barriers to creativity in an academic setting. In their study, they tested six types of barriers to creativity among faculty members of a Saudi Arabian university. These barriers self-confidence, need for conformity and risk taking, use of abstract, use of systematic analysis, task achievement, and physical environment. In their study, task achievement was found to be the most significant barrier to creativity and the need for conformity was the least significant.

Manion and Haukkala (1994) related some of these barriers to creativity to normal human tendencies that prevent people from being more creative, and some physiological ways the brain works that actually decrease creativity. They classified them into the following groups.

Resistance to change

Creativity and change are closely linked. Creativity is needed to respond to change, and creativity is the result of change. Both creativity and change imply new directions; both are associated with uncertainty and risk. Creativity is about deviating, which is risky. Many people resist change because it involves hard work. It requires alterations in patterns, habits, and approaches. On the other hand, change is positive, because a person's situation can be improved by change, self-satisfaction increased, and the individual's unique capabilities and feelings expressed. Many creativity experts believe that people do not normally resist change, but are conditioned to do so by negative past experiences. In business organizations, change is often promoted as an improvement, and when the implied promise of betterment does not materialize, people become frustrated, cynical, and less likely to embrace change in the future.

Social acceptance

Human beings, as social animals, have a significant need for belonging. One way to be accepted by a group is to adopt the values, norms, and behavior of the group. We recognize and accept this need in adolescents because it is one of the developmental tasks they must master. Whether adults recognize it or not, they, too, have strong needs for social conformity. A well-known social psychology study completed by Asch illustrates this phenomenon. The study concluded that the social needs of human beings strongly encourage social conformity. This has a significant impact on

creativity and the willingness to deviate from a group path. The need to conform is one of the reasons that, in developing a new approach or idea, individual action is usually more creative than group action. In implementing an idea, group involvement tends to add to the idea. But in the beginning, groups tend to stifle creativity.

Habits

Habitual behavior can severely inhibit creativity and change. Physical habits are complicated actions done automatically. The activities involved in driving a car, for instance, are so habitual that it is possible to pull into the garage at home and have little or no recollection of the drive there. Just changing from an automatic to a standard transmission will increase appreciation of how long it takes to break old habits and establish new ones.

Specialization

Specialization has become very important in healthcare. Today's organizations could not function without staff members who have become extremely specialized and proficient in their particular fields. Creativity, however, can be impaired when people tend to undervalue the specialties of others. New combinations of specialties are among the more potent resources for increased creativity and change. Even the way people think has become specialized. For example, some people analyze and others synthesize. Analysis is the separation of the whole into its parts to discover the characteristics of these parts and their relationship to each other and to the whole. The combination of both approaches is essential for creativity and change.

Acceptance the first solution

Another common unconscious tendency of the human brain is "satisficing" (Adams, 1998). This means that the mind accepts the first answer to a problem and does not continue to seek additional solutions. Psychologists have experimented with thinking for years, and have found that once an individual formulates an explanation for an event, he/she has difficulty revising or changing that explanation, even in the face of contradictory information (Adams, 1998; Oldham and Cummings, 1996). One experiment used slides that were out of focus. As the slides were brought back into focus, the subject was asked to identify each object. The study found that if an individual wrongly identified an object when it was out of focus, he/she frequently could not identify it when it was brought into focus. In other words, it takes more evidence to overcome an incorrect impression.

Conceptual framework

A growing body of research exists about creativity modeling in the literature. Unsworth offered four strands of a creativity modeling approach to measure the phenomena. The measurement approaches are termed: responsive creativity; expected creativity; contributory creativity; and proactive creativity and descriptions of each follows.

Responsive creativity

The responsive creativity is posed by closed problem field work where a particular respondent meets the requirements in a given situation. The respondents are presented with a problem and have external demands placed on them to solve the research issues.

This exercise is much like a governmental organization or a private company that sends an occupational problem to a university and asks researchers to solve it under given conditions. The researchers in this type of research work have least control over the problem solving choices. They are presented with a demand for creativity and their autonomy of choosing tasks is limited by the conditions imposed on them.

Expected creativity

This is externally driven creativity where researchers are faced with self discovery challenges and expected to solve issues of a problem. The problem in this experiment is open ended. The objects for the experimentation are not formulated for the researchers and the drivers for engagement are external in this context (Getzels and Csikszentmihalyi, 1976). For instance, the researchers of an experiment present a set of objects to a group of students and ask them to paint a still life after selecting or arranging objects on a table. The issues in this problem scenario are open ended, the researchers do not dictate how to arrange or formulate the objects, and the driver to this experimentation is applied externally.

Contributory creativity

The problem or an issue in this type of research work is clearly formulated. The objects are known and the contribution of the researcher is to solve the problem with a clearly self-determined criteria. The respondents in this type of research work are driven by their internal motives. Saadi and Fazal's study of barriers to academic creativity is an example of contributory creativity. The researchers asked university faculty members to engage in a survey response so as to determine the barriers that impede creativity in their research work. The responses are offered on a voluntary basis. No social pressures are applied in this type of exercise to enable internal motives to be triggered to respond.

Proactive creativity

Within the creativity literature, Frese *et al.* (1999) and Oldham and Cummings (1996) have discussed proactive creativity in detail. Proactive creativity occurs when the respondents that are driven by their internal motives are also asked to offer suggestions to improve the system. A team of creativity researchers at Georgia Tech proposed a computational modeling approach rooted in case-based reasoning. This paradigm is fundamentally concerned with memory issues, such as reminding from partial matches at varying levels of representation and the formation of analogical maps between seemingly disparate situations.

The team views creative thoughts, like all thoughts, as involving processes of problem interpretation and problem reformulation, case and model retrieval, elaboration and adaptation, and ultimately evaluation. Research in case-based reasoning has provided extensive knowledge of how to analyze and reformulate problems, how to reuse solutions to old problems in new situations, how to build and search libraries of experiences, how to merge and adapt experiences, and how to evaluate candidate solutions. They are taking primarily a case-based approach to modeling creativity, complemented by research in model-based reasoning, meta-cognition, visual reasoning, and thought experimentation.

James and Asmus suggest using Christensen, Guilford, Merrifield and Wilson's divergent thinking skills approach and Gough's Creative Personality Scale (Gough, 1979)

of a personality inventory approach and self rating of domain creativity to measure creativity.

Divergent thinking skills approach

Christensen, Guilford, Merrifield and Wilson offered a one item version of the alternate use test. This test was aimed at measuring the originality in thinking. Through this measure the frequency of occurrence of each acceptable (i.e. practically possible) response across the entire sample was first counted. Then the frequencies associated with all the responses given by a particular participant were summed up. The sum was then divided by the number of uses listed by that individual, yielding a score reflecting how unusual, on average, the responses arrived at.

Personality inventory approach

James and Asmus cited Gough's Creative Personality Scale as a good measure to assess personality traits considered relevant to creative abilities. This approach asks both about some of the behavioral tendencies that have been found to be related to creativity (e.g. independence) and motivations that are construed to be creative (e.g. whether the person is inclined toward originality). It yields both a score for personality tendencies supposedly negatively related to creativity.

Self rating of domain creativity approach

Individuals, through this approach, are asked to rate themselves for three different types: every day problem solving; social problem solving (defined here as ability to find novel ways of getting others to like one or of persuading them to agree with one's opinions or chosen course of action); and artistic problem solving (defined here as ability to engage in musical and literary as well as visual arts). These ratings were done on a seven-point Likert-type scale ranging from 1 (not at all creative) to 7 (distinguished creative). The instructions asked individuals to think about and rate themselves on each of these dimensions by comparison to their friends, family members, and fellow students. There was only one item per dimension, so internal consistencies could not be computed. The self-rating items were given twice, though, with an interval of ten weeks between assessments, so test-retest reliabilities could be computed and verifiably ascertained.

The implications of these studies for the personality correlates of creative people suggests that a major step in promoting creativity among executives is the support of activities which encourage self-confidence; need for conformity and risk taking; use of the abstract; use of systematic analysis; task achievement; and physical environment.

Methodology

This study is based on a survey questionnaire, the contents of which were derived from previous studies on this subject or related themes. The barriers to creativity surveyed in this study were identified by Osborn. They were grouped into six constructs:

- (1) self-confidence;
- (2) need for conformity and risk taking;
- (3) use of the abstract;
- (4) use of systematic analysis;

- (5) task achievement; and
- (6) physical environment.

Six survey statement items related to personal and environmental characteristics were generated for each construct to measure perceived barriers to creativity, resulting into a total of 36 statements. Responses to these statements were recorded on a five point Likert scale that ranged from 1 – strongly agree to 5 – strongly disagree. The respondent level of agreement or disagreement indicated the perceived significance of the barrier reflected in each statement. An open-ended question was added to solicit respondent input on any other perceived barriers. The questionnaire also contained four demographic items relating to respondent academic qualifications, organizational rank, sector of business and national origin.

The questionnaire was then distributed to 120 marketing executives from different organizations in Saudi Arabia. Some 53 out of 120 copies distributed were returned and found usable. In terms of origin, Saudi respondents accounted for 78 percent of the sample. In terms of industry sector, the energy sector was the highest represented with 28 percent of respondents followed by 16 percent from the banking sector and then both automobile and electronics with 10 percent of the total sample tested. Hospital, computer and services companies provided the smallest groups with 4 percent only. Most of the respondents were of middle level in terms of organizational ranking (40 percent), 24 percent were in the top level, and 20 percent in the supervisory level. A total of 52 percent of the sample were holding bachelor degrees, 32 percent had a master's degree and 8 percent had a high school education only.

All items on the survey instrument were coded and converted into alphanumerical values and then fed to SPSS data sheet. The statements related to each of the six underlying dimensions measuring barriers to creativity were then grouped to compute individual scores on each construct. The individual scores on the six constructs were summated to determine the overall score for each respondent. Average scores were computed to identify and measure the perceived significance of each of the barriers to creativity. The data set was analyzed using descriptive statistics to identify significant barriers. The demographic characteristics of respondents were used to ascertain variations in perceptions of barriers to creativity across national origin, organizational rank, and academic qualifications.

Results and analysis

To better understand the results and to give a more in depth analysis, we relate the specified barriers to the reasons that surround them. The schematic diagram (Figure 2) by Amabile (1997) shows that there are six possible reasons for the lack of creativity. The first three of these reasons (resources, management practices, and organizational motivation) relate to the work environment and the remaining three (domain skills, creativity thinking skills, and intrinsic task motivation) pertain to the individual himself. In this study, the self-confidence barrier can be related to both the work environment and the individual himself. In Saudi Arabia, work environment, management practices, lack of expertise (or sub-par task domain skills as referred to by Amabile, 1997, Greenberg and Baron, 2003), and the creativity thinking skills of the individuals can be considered the root causes of high ranking for self-confidence barriers. Although this study cannot elaborate exactly how much of an effect

management practices, domain skills and creativity thinking skills among individuals have on the overall lack of self-confidence among Saudis, it is proven from the study that they all exist among Saudi executives.

On the other hand, the task achievement barrier is high among non-Saudis. Task achievement relates to management practices. In Saudi Arabia, the management practice demands that task completion has a top priority and does not leave much room for creative thinking. In our conceptual framework, we described it as proactive creativity (Frese *et al.*, 1999; Oldham and Cummings, 1996). Saudis have a low task achievement barrier ranking, meaning if they do not complete their task their job is not always in danger. Being local citizens and due to governmental policy of “job localization” they enjoy substantially higher job security than non-Saudis. They therefore perceive task achievement to have a low priority and hence tend to be less creative. It is no wonder that companies owned by Saudis or non-Saudis prefer to hire a non-Saudi workforce. In the process of hiring non-Saudi workers, companies are assured employees who accomplish their tasks. They also have a bigger pool of experienced and educated workers. In spite of the fact that the “job localization” policy of the government is enforced, the companies keep recruiting non-Saudi workforce; hence by passing Saudi applicants. The non-Saudis, because of their superior task domain skills and proactive creativity, rank lower in self-confidence barriers. Their low ranking of self-confidence barrier and high ranking of task achievement barrier indicate they are worried about task achievement much more than experimenting with novel approaches, hence being creative.

While, non-Saudis rank task achievement as the highest barrier, self-confidence ranks close to third at 14.4 as shown in Figure 3. This implies that of the three factors

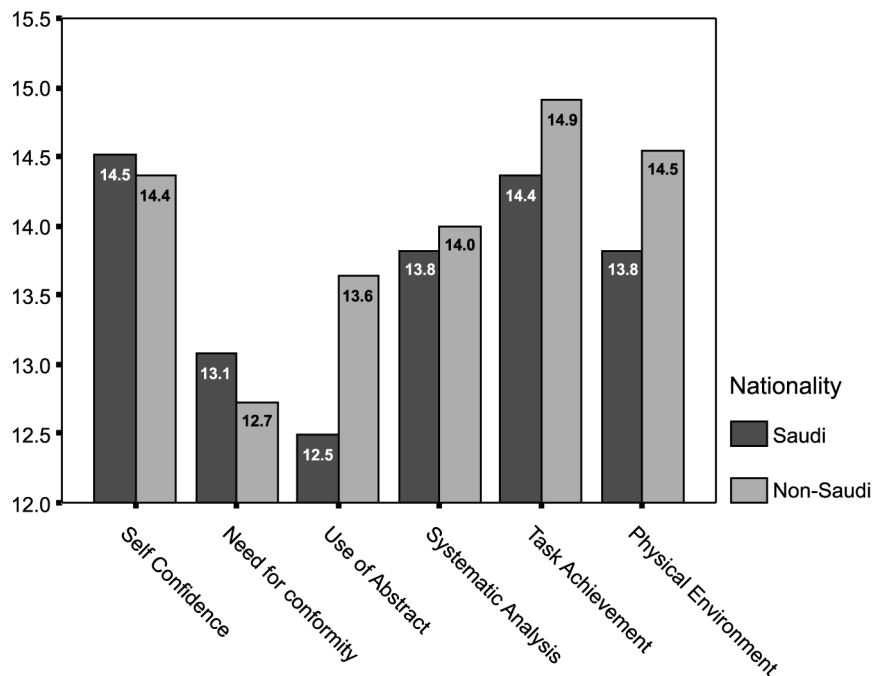


Figure 3.
Means of barriers (by nationality)

contributing to the lack of self-confidence (management practices, task domain skills, and the individual creativity skills) the management practices factor has a much heavier weight on the self-confidence barrier than the remaining two factors. The results also raise three vital concerns:

- (1) task achievement barrier is purely related to management practices;
- (2) management practices are the heaviest contributor to the self-confidence barrier; and
- (3) task achievement and self-confidence are highest ranking barriers.

These three concerns point out the fact that the factor which contributes the greatest to hindering creativity in Saudi Arabia is management practice.

Education level also impacts the perceived barriers in creativity. In our conceptual framework (given in “Conceptual framework”), it is known as expected creativity (Getzels and Csikszentmihalyi, 1976). When we compare the education levels with the barriers, we observe employees with high school or bachelor degree regarding task achievement as their biggest barrier. This can be attributed to the simple fact that individuals with these qualifications are generally assigned low status positions with limited opportunity to get promotions. Under these circumstances their morale tends to dampen, causing low proactive creativity and hence high task achievement barrier. The results also indicate that employees with higher levels of education such as master’s degrees also have a high task achievement barrier. The reason is that their high status requires higher level of creativity, but because of their low self-confidence they are not creative either.

The following results were obtained when we applied statistical analysis of the data using SPSS. Table I represents the average means and standard deviations of the six barriers for the whole sample. Both self-confidence and task achievement score equally high (14.48) compared to other barriers. Physical environment scores 13.98, systematic analysis scores 13.86, need for conformity and risk taking scores 13.00 and the least score was for use of abstract with only 12.74 (Figure 4).

The above results show that respondents perceived self-confidence and task achievement as the most significant barriers to creativity. On the other hand, they perceived use of abstract as the least significant barrier to creativity for a marketing executive. These results partially match those obtained by Sadi (2006) in terms of the significance of task achievement as a barrier to creativity. This also coincides with results from Ambile’s (1997) study which showed that a sense of having to work hard on challenging tasks and important projects is one of the major motives for creativity

	N	Minimum	Maximum	Mean	Std. deviation
Self-confidence	50	7.00	20.00	14.4800	3.3578
Need for conformity and risk taking	50	6.00	19.00	13.0000	3.0706
Use of abstract	50	6.00	20.00	12.7400	3.5272
Systematic analysis	50	6.00	20.00	13.8600	3.7308
Task achievement	50	7.00	20.00	14.4800	3.0921
Physical environment	50	7.00	20.00	13.9800	3.0338
Valid N (list wise)	50				

Table I.
Perceived barriers to
creativity: average means

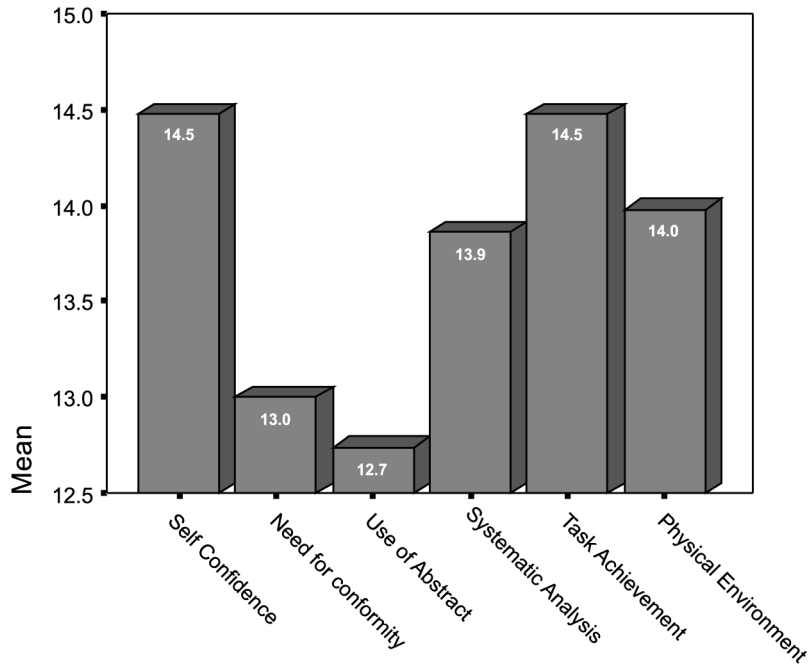


Figure 4.
Average means of barriers

in an organization. If we add this to the fact that there is a strong correlation between the need for achievement and the task achievement construct as a barrier to creativity (Sadi, 2006), we then could justify the correspondence of these results. On the other hand, findings about self-confidence as a major barrier to creativity were not noted in previous studies. Wong and Pang (2003) found this factor to be the least significant barrier to creativity as perceived by hotel industry managers and supervisors. Attributes of this barrier in that study were more or less similar to statements of the construct that describe the barrier in this study, including destructive criticism, fear of losing status, and a threatening evaluation. As an external factor, fear of criticism is a subjective factor and it follows the external conditions and attributes. Relative significance of this barrier among marketing executives in the Saudi market reflects a highly conservative relationship between executives, their superiors, colleagues, and their subordinates in terms of accepting public criticism and retaining status. However, this conclusion needs to be supported by further studies.

Table II and Figure 3 show these barriers as perceived by both Saudi and non-Saudi marketing executives. The objective of this distinction is to monitor the effect of origin and hence the effect of cultural values on the perception of the barriers to creativity. From the data obtained, it can be noted that the self-confidence barrier is a little higher for Saudi executives compared to their non-Saudi counterparts (14.51 vs 14.36), while the task achievement barrier is higher for non-Saudi executives (14.90) compared to Saudi (14.36). Again this is a sign that Saudi marketing executives work with less confidence, but they excel in striving to meet their work objectives. These results contradict those obtained by Saadi and Sayyed in their study on creativity in an academic setting. The main apparent factor differentiating the two studies is the

Nationality		Self-confidence	Need for conformity and risk taking	Use of abstract	Systematic analysis	Task achievement	Physical environment
Saudi	Mean	14.5128	13.0769	12.4872	13.8205	14.3590	13.8205
	N	39	39	39	39	39	39
	SD	3.2271	2.9946	3.4172	3.5009	3.1746	2.9901
Non-Saudi	Mean	14.3636	12.7273	13.6364	14.0000	14.9091	14.5455
	N	11	11	11	11	11	11
	SD	3.9566	3.4667	3.9312	4.6476	2.8794	3.2669
Total	Mean	14.4800	13.0000	12.7400	13.8600	14.4800	13.9800
	N	50	50	50	50	50	50
	SD	3.3578	3.0706	3.5272	3.7308	3.0921	3.0338

Table II.
Perceived barriers to
creativity: comparison of
means by national origin

working environment. However, from the available data, there is no clear explanation for this difference in effect of origin on perception of these two barriers to creativity and it needs more concentrated study to reveal the real factors behind this phenomenon.

Perception of barriers based on academic qualification is shown in Table III and Figure 5. Task achievement is the major barrier for respondents with a high school education or bachelor degree (average mean = 15.0 and 14.73, respectively), while self-confidence is the major barrier for respondents with a master's degree (average mean = 14.75). Doctorate level is not a representative case since there is only one case with this level. From this comparison, it is noticed that respondents with lower academic qualification which is in general associated with lower rank level scores find the task achievement barrier more significant compared to other barriers. Lower rank levels need to be motivated more by their superiors for challenging work and objective accomplishment. It is also worth noting that the physical environment barrier recorded the same significance as task achievement in the case of respondents with a bachelor degree which reflects the high demand for environmental needs in the workplace or a highly disturbed working environment compared to the other qualification categories.

Another comparison was done between these barriers based on rank level within the organizations of the respondents as shown in Figures 6 and 7. Top-level executives perceived self-confidence as the most significant barrier to creativity. A possible explanation is that the top-level rank is capturing the respondent aging effect of risk aversion. As executives cross the ranking levels over their career and get more experience, they become more conservative in applying new approaches and taking risks (Saadi and Sayyed, 2003). Supervisory level respondents could have different reasons for perceiving self-confidence as the most significant barrier. One possible explanation is that at this rank level, executives have less authority or responsibility. People in such conditions may face difficulties in trying new approaches and taking risks; on the other hand, they may be applying ready rules and regulations without a wide area of freedom to apply their own ways and thoughts.

Respondents in the middle-level rank perceived physical environment as the most significant barrier to creativity. Respondents of a level lower than supervisory such as salesmen perceive task achievement as the most significant barrier to creativity. Motivation factors may be behind such perception as explained earlier.

Degree		Self-confidence	Need for conformity and risk taking	Use of abstract	Systematic analysis	Task achievement	Physical environment
High school	Mean	13.5000	13.5000	13.2500	13.2500	15.0000	11.7500
	<i>N</i>	4	4	4	4	4	4
	SD	1.9149	2.0817	2.6300	2.2174	3.8297	1.7078
Bachelors	Mean	14.3846	12.9231	12.0000	13.8077	14.7308	14.5000
	<i>N</i>	26	26	26	26	26	26
	SD	3.1759	3.2239	3.2496	4.0499	3.3294	3.0100
Masters	Mean	14.7500	12.8750	13.1250	13.4375	13.7500	13.3750
	<i>N</i>	16	16	16	16	16	16
	SD	3.7859	3.2634	4.0641	3.6509	2.6204	3.2838
Doctorate	Mean	12.0000	11.0000	14.0000	16.0000	14.0000	16.0000
	<i>N</i>	1	1	1	1	1	1
	SD	–	–	–	–	–	–
Other	Mean	16.0000	14.3333	16.0000	16.6667	16.6667	15.0000
	<i>N</i>	3	3	3	3	3	3
	SD	5.2915	3.0551	3.6056	3.5119	3.7859	2.6458
Total	Mean	14.4800	13.0000	12.7400	13.8600	14.4800	13.9800
	<i>N</i>	50	50	50	50	50	50
	SD	3.3578	3.0706	3.5272	3.7308	3.0921	3.338

Table III.
Comparison of means of perceived barriers to creativity by academic degree

Table IV and Figure 8 show the comparisons between the six barriers based on the industrial sector that the respondents belong to. However, due to the limited size of sample of respondents, numbers are unequal from each sector and comparisons on this basis are thus invalid.

Below, we attempt to integrate the conceptual analysis with the empirical results. The schematic diagram (Figure 2 in the framework) by Amabile (1997) shows us that there are possible six reasons for the lack of creativity. Three of these reasons relate to the work environment and the remainder relate to the individual actors. In the study, the self-confidence barrier can be related to both the work environment and to the individual actors. Management practices in the work environment and the lack of expertise and creativity skills of the individual actors can lead to lack of self-confidence.

Task achievement is purely related to management practices, in which the management makes it a higher priority for completing tasks and does not allow creative thinking. Saudis have self-confidence as the highest ranking barrier because their work environment provides more job security than non-Saudis, therefore Saudis do not take task achievement seriously and, as a result, perceive it as a lower barrier. In the process of hiring non-Saudis, companies have a bigger pool of experienced and educated candidates. They therefore have the choice of recruiting non-Saudis who fit the job description much better than Saudis. This trend not only improves the productivity of the companies but also promotes creativity, resulting in higher self-confidence among non-Saudis.

When we take a look at the connection of educational levels with the barriers to creativity, we notice that employees with high-school or bachelor degree find their task

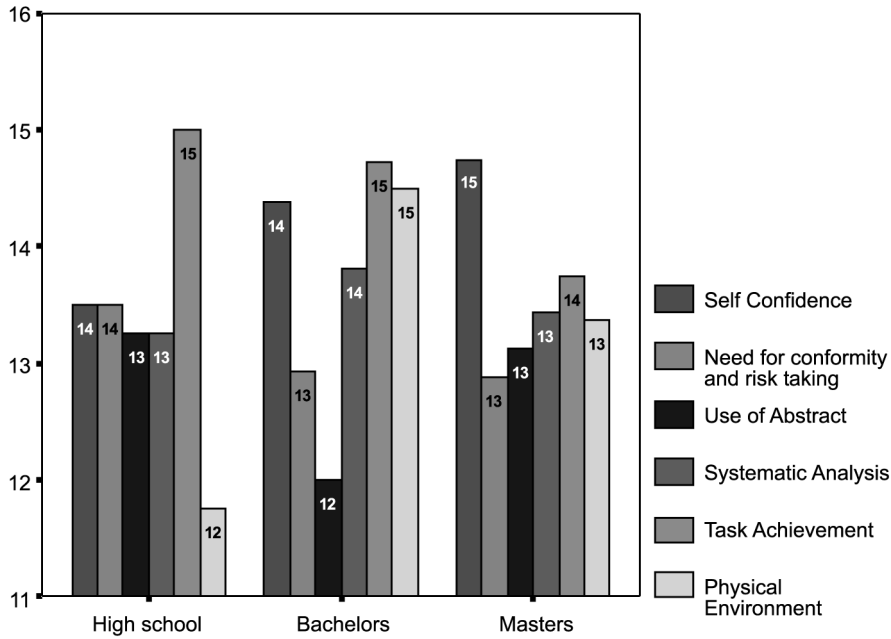


Figure 5. Means of barriers (by degree)

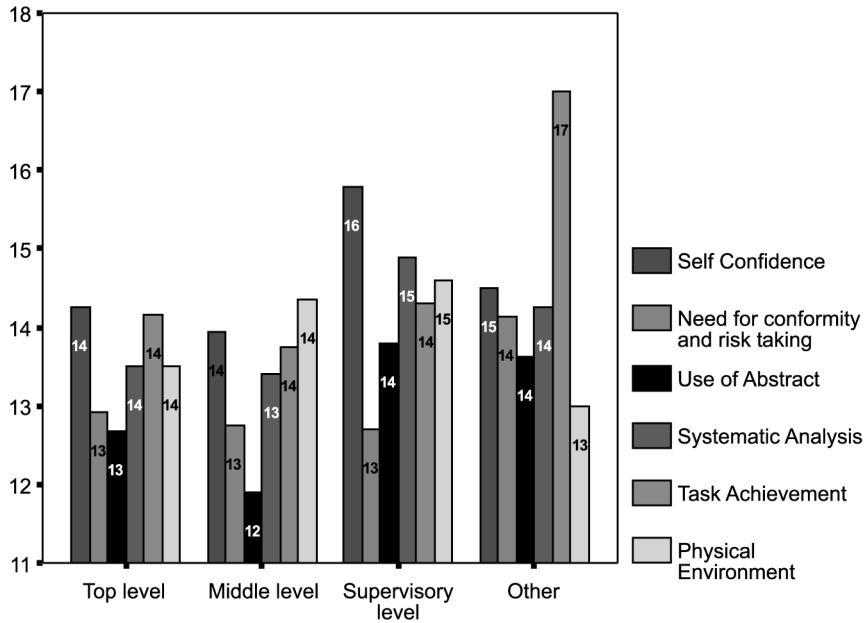


Figure 6. Means of barriers (by ranks)

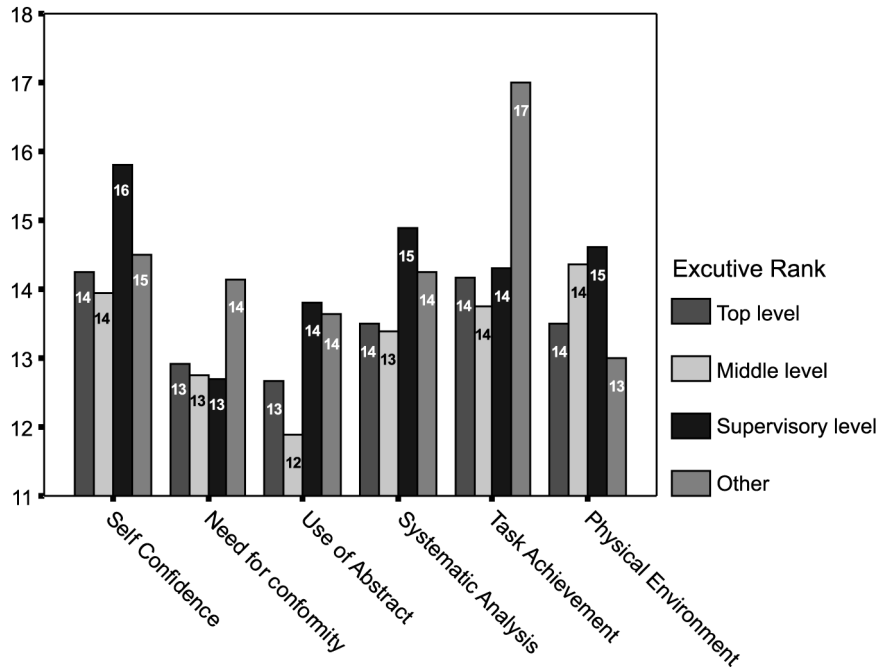


Figure 7.
Means of barriers
(by ranks)

achievement to be the biggest barrier. This can be attributed to the fact that they are assigned to lower ranking positions that require minimal creativity and are task oriented, so therefore task achievement is the highest ranking barrier. Employees with master's degree on the other hand occupy higher positions which require creativity, but because of the work environment, the individual, and the ageing effect of risk aversion, self-confidence becomes the more prominent barrier.

Implications and recommendations

The results indicate that self-confidence is considered a slightly higher barrier to creativity among Saudi executives compared to non-Saudis who rate task-achievement higher. To improve self-confidence among executives, both Saudi and non-Saudi, organizations must improve positive behavioral elements such as optimism, passion, and self-image and minimize negative behavior elements such as sarcasm, destructive criticism, status consciousness, and fear of evaluation. Salesmanship as a skill has gained popularity with Saudi executives over recent years, the main reason being the sales volume generated for owners. Selling merchandise is regarded as the most expedient way of generating revenue to please the ownership. An executive who generates the highest cash revenue is known as the most productive executive within his organization. Therefore, many Saudis have focused on learning the skills that relate to salesmanship. They have not paid much attention to innovative areas such as strategic marketing, integrated communication, and consumer behavior when marketing their merchandise. This behavioral trend has not allowed self-confidence

Industry sector		Self-confidence	Need for conformity and risk taking	Use of abstract	Systematic analysis	Task achievement	Physical environment
Automobile	Mean	16.8000	14.2000	12.0000	13.2000	13.6000	14.8000
	N	5	5	5	5	5	5
	SD	4.1473	2.7749	3.1623	2.2804	1.5166	2.9496
Banking	Mean	13.6250	13.6250	11.5000	13.2500	12.8750	13.6250
	N	8	8	8	8	8	8
	SD	4.2067	3.9978	3.7417	3.2842	3.1820	4.1036
Energy	Mean	15.2500	13.7500	13.7500	16.0000	15.5000	14.5000
	N	4	4	4	4	4	4
	SD	2.6300	2.2174	2.2174	2.3094	1.5000	2.2174
Consumer products manufacturing	Mean	12.000	9.6667	10.6667	9.0000	14.3333	10.6667
	N	3	3	3	3	3	3
	SD	4.5826	3.5119	5.5076	2.0000	5.5076	1.1547
Electronics	Mean	15.8000	13.8000	4.4000	16.0000	14.2000	14.6000
	N	5	5	5	5	5	5
	SD	3.0332	2.5884	4.3932	4.1833	2.6833	3.0496
Computer	Mean	17.0000	13.5000	15.0000	17.0000	15.5000	14.5000
	N	2	2	2	2	2	2
	SD	4.2426	3.5355	2.8284	1.4142	0.7071	3.5355
Hospital	Mean	13.0000	11.0000	12.5000	14.0000	13.0000	15.0000
	N	2	2	2	2	2	2
	SD	1.4142	0.0000	2.1213	2.8284	1.4142	1.4142
Tourism and Hotel	Mean	18.0000	15.0000	20.0000	20.0000	20.0000	17.0000
	N	1	1	1	1	1	1
	SD	-	-	-	-	-	-
Service	Mean	13.7500	12.1250	11.7500	12.7500	15.1875	13.7500
	N	16	16	16	16	16	16
	SD	2.8406	2.9861	2.5949	3.9243	3.7098	2.8868
Total	Mean	14.4800	13.0000	12.7400	13.8600	14.4800	13.9800
	N	50	50	50	50	50	50
	SD	3.3578	3.0706	3.5272	3.7308	3.0921	3.0338

Table IV.
Comparison of means of
barriers (by sector)

to improve significantly among Saudi executives. In other words, behavioral norms such as trusting others, being aware of their own actions and not being defensive about making mistakes, being assertive and decisive, and keeping cool in times of crises are lacking among Saudi executives. Pringle and Binet (2005) in his study mentions all these behavioral norms as necessary to build self-confidence among executives.

In addition, honesty under pressure, including straight talking and commitment keeping have also been found to be sub categories of self-confidence (Johnson, 2002). Johnson states that self-confident executives “walk and talk” and are able to delegate tasks to their followers and activate a two-way flow of information and dialogue. Self-confidence is activated further by actualization (McAlindon, 1980). The sub categories of actualization include strength of personal relationships, quality of mind,

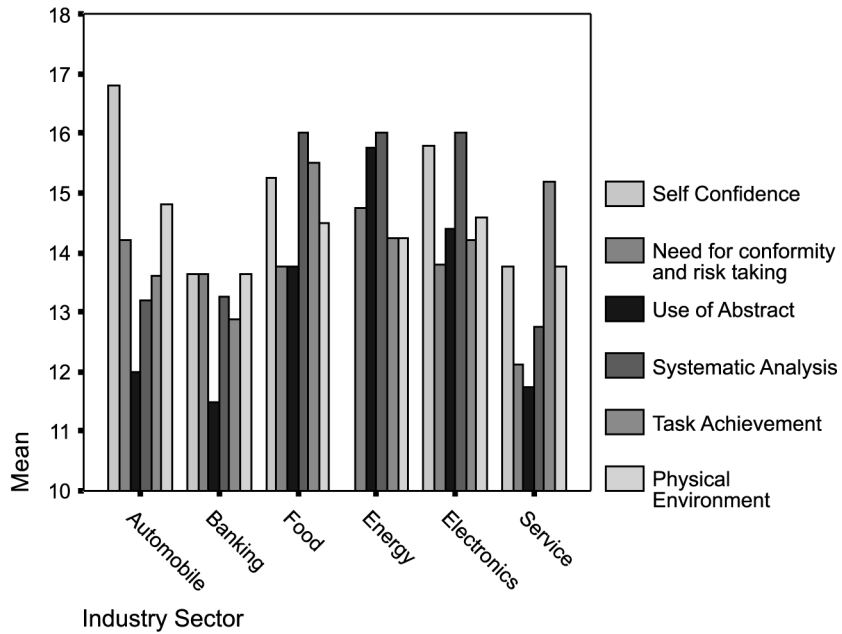


Figure 8.
Means of barriers
(by sector)

and strength of shared values. According to respondents, the Saudi executives lack all the attributes that build actualization which in return boost self-confidence. One implication of the study therefore is that Saudi executives, in order to be creative, must strive to remove the barriers to self-confidence.

Task achievement was another barrier to creativity that was found to be higher for Saudi executives and lower for non-Saudis. To enhance this attribute, an organization must focus on improving task-oriented behavior (supervision of group members to obtain consistent work methods, and accomplishment of work objectives), structures (well defined patterns of organization, channels of communication, and methods of procedures), employee-oriented-behavior (satisfying the social and emotional needs of group members), and showing of consideration (friendship, mutual trust, and warmth in relationship among peers, workers, and superiors) (Cook and Hunsaker, 2001). In terms of relationship behavior, executives are advised to use two-way communication: listening to and satisfying the customers as well as encouraging and involving followers in decision making and giving emotional support. Vance and Deacon (1996) discuss concrete steps that executives can take to improve task achievement such as establishing climates that encourage creativity and high achievement. The main barrier to task achievement is fear of the unknown and Vance and Deacon suggest three ways to combat such fear and promote greater creativity. These are:

- (1) creating participatory environment that encourages task achievement;
- (2) cultivating mutual respect in dealing with the customers and suppliers; and
- (3) developing the ability to help fellow employees to reach their highest potential in such a manner that they enjoy fulfilling their tasks.

Much like self-confidence and task-achievement, the need for conformity and risk taking was found to be a higher barrier to creativity for Saudi executives as compared to non-Saudis. This finding is analogous to Hofstede's (1990) longitudinal study about dimensions of cultural barriers among nations in which he identified Saudis as one of the most highly conformist and status oriented people in the world. Bernheim (1994) also supported this idea when he wrote "status is sufficiently important relative to intrinsic utility, many individuals conform to a single homogeneous standard of behavior, despite heterogeneous underlying preferences."

The use of abstract and systematic analysis were found to be relatively lower barriers to creativity for Saudi executives than the non-Saudis. The abstract attributes represent subjective, intangible characteristics and require cognitive processing, evident in complex products such as automobiles and stereos. Such products are popular among Saudi Arabian youths in these days, but one wonders to what extent Saudi executives really have knowledge about the creative aspects of such products and whether they actually use this knowledge when deciding which products and brands to market. For this purpose, Saudi executives need to have a broader knowledge of cognitive process such as comprehension and decision making.

Saudi businesses which are consumption oriented need executives who can think, venture into unknown areas, make new scientific discoveries, and find more adequate solutions to compelling problems. The executives that integrate creative thinking skills will be able to shape the future orientations and implement reforms in economic, political, and cultural arenas. Executive training programs in Saudi Arabia usually lack philosophies and goals that enhance visualizing abstract and systematic thinking. Dooley *et al.* (2000) proposed an approach which can be applied in a Saudi Arabian context that of managing systems innovation centered on the process of organizational creativity and good management practices. One such example of the use of abstract and systematic analysis can be found in a course at the University of Houston, nicknamed Failure 101, where students are asked to build the tallest structure possible out of ice cream bar sticks and then look for the insight in every failure. The example implies that training executives to learn from mistakes and work with the abstract may be good for their future careers. It is also necessary to build a supportive climate and give people the freedom to create.

In the case of the physical environment for creativity, Saudi executives faced relatively lower barriers than non-Saudis. However, the magnitude of the difference was found to be very small. The physical environment includes all the nonhuman, physical aspects of the field in which executives interact with the stakeholders (Crano and Messe, 1982). The physical environment affects the cognition and behavior of executives with creativity depending on their value creation, scaffolding, imagination, and materialization. The physical environment may enable the free flow of sensory experiences and proximity of other people. These sensory experiences may include emotions that, in turn, facilitate or reduce the enhancement of creativity. A positive physical environment affects the well being of executives, their activities, their channels of information, and the availability of knowledge tools, and sets the stage for coherence and continuity, which may contribute to competitive advantage (Kristensen, 2004).

Conclusion

Creativity is a central concept in organizational behavior studies. Unfortunately, many marketing organizations fall short in terms of creativity. As a result, manufacturer-initiated price wars have arisen in product categories. However, there are so many techniques that can be used to enhance and promote the creativity of employees in an organization. Knowing the barriers that block or undermine creativity helps to improve the situation. This paper is an attempt to make progress in this direction, especially in relatively new developing markets such as that of Saudi Arabia. The study examined six barriers extracted from previous studies namely:

- (1) self-confidence and risk taking;
- (2) need for conformity;
- (3) use of the abstract;
- (4) use of systematic analysis;
- (5) task achievement; and
- (6) physical environment.

Perceptions of marketing executives in Saudi organizations of these barriers suggest the relative significance of both the self-confidence and task achievement barriers. In order to overcome this problem, Saudi organizations need to try to build stronger communication channels between different rank levels and within levels to encourage flexibility and the acceptance of constructive criticism and public evaluation. More motivational incentives are also required to overcome the barrier of task achievement in these organizations.

References

- Adams, C.E. (1998), *Creativity and Successful Aging*, Lexington Books, Lexington, MA.
- Amabile, T.M. (1988), "A model of creativity and innovation in organizations", in Staw, B. and Cummings, L.L. (Eds), *Research in Organizational Behavior*, Vol. 10, pp. 123-37.
- Amabile, T.M. (1996), *Creativity in Context*, Westview Press, Boulder, CO.
- Amabile, T.M. (1997), "Motivating creativity in organizations: on doing what you love and loving what you do", *California Management Review*, Vol. 40 No. 1, p. 39.
- Andrews, J. and Smith, D. (1996), "In search of the marketing imagination: factors affecting the creativity of marketing programs for mature products", *Journal of Marketing Research*, Vol. 33 No. 2, p. 174.
- Bernheim, B. and Douglas, A. (1994), "Theory of conformity", *The Journal of Political Economy*, Vol. 102 No. 5, p. 841.
- Brown, R.T. (1989), *Creativity: What Do We Measure?*, Handbook of Creativity, Plenum Press, New York, NY.
- Clapham, M. (2000), "Employee creativity: the role of leadership", *The Academy of Management Executive. Briarcliff Manor*, Vol. 14 No. 3, p. 138.
- Cook, C.W. and Hunsaker, P.L. (2001), *Management and Organizational Behavior*, 3rd ed., Mc-Graw Hill, New York, NY, pp. 308-12.
- Crano, W.D. and Messe, L.A. (1982), *Social Psychology: Principles and Themes of Interpersonal Behavior*, Dorsey Press, Homewood, IL, p. 15.

- Dewett, T. (2004), "Employee creativity and the role of risk", *European Journal of Innovation Management*, Vol. 7 No. 4, p. 257.
- Dooley, L., Cormican, K., Wreath, S. and O'Sullivan, D. (2000), "Supporting systems innovation", *International Journal of Innovation Management*, Vol. 4 No. 3, p. 277.
- Fillis, I. and McAuley, A. (2000), "Modeling and measuring creativity at the interface", *Journal of Marketing Theory and Practice*, Vol. 8 No. 2, p. 8.
- Frese, M., Teng, E. and Wijnen, C.J.D. (1999), "Helping to improve suggestion systems: predictors of making suggestions in companies", *Journal of Organizational Behavior*, Vol. 20, pp. 1139-55.
- Getzels, J. and Csikszentmihalyi, M. (1976), *The Creative Vision: A Longitudinal Study of Problem-finding in Art*, Wiley, New York, NY.
- Greenberg, J. and Baron, R.J. (2003), *Behavior in Organizations*, 8th ed., Prentice-Hall, New York, NY.
- Haner, U.E. (2005), "Spaces for creativity and innovation in two established organizations", *Creativity and Innovation Management*, Vol. 14 .
- Hellriegel, D., Jackson, S. and Slocum, J.W. Jr. (2005), *Contemporary-based Approach*, 10th ed., South-Western, New York, NY.
- Hofstede, G., Neuijen, B. and Ohavy, D. (1990), "Measuring organizational cultures: a qualitative and quantitative case study across twenty nations", *Administrative Science Quarterly*, Vol. 35.
- Jeanes, E.L. (2006), "Resisting creativity, creating the new Deleuzian perspective on creativity", *Creativity and Innovation Management*, Vol. 15 No. 2, p. 127.
- Johnson, C.E. (2002), *Meeting the Ethical Challenges of Leadership, Casting Light or Shadow*, Sage, Thousand Oaks, CA.
- Klein, A.R. (1990), "Organizational barriers to creativity and how to knock", *The Journal of Services Marketing*, Vol. 4 No. 4.
- Kristensen, T. (2004), "The physical context of creativity", *Creative and Innovative Management*, Vol. 13 No. 2, p. 89.
- Lawson, B. and Samson, D. (2001), "Developing innovation capabilities in organization", *International Journal of Innovation Management*, Vol. 5 No. 3, p. 377.
- McAlindon, H.R. (1980), "Toward a more creative you: developing the whole person", *Supervisory Management*, Vol. 25 No. 3.
- McFadzean, E. (2000), "Techniques to enhance creative thinking", *Team Performance Management*, Vol. 6 No. 4.
- Manion, J. and Haukkala, E. (1994), "Breaking down the barriers to creativity", *Creative Nursing*, Vol. 1 No. 1.
- Oldham, G.R. and Cummings, A. (1996), "Employee creativity: personal and contextual factors at work", *Academy of Management Journal*, Vol. 39, pp. 607-34.
- Osborn, A.F. (1963), *Applied Imagination*, 3rd ed., Scribner's, New York, NY.
- Peter, P.J. and Olson, J.C. (2005), *Consumer Behavior and Marketing Strategy*, 7th ed., McGraw-Hill, Boston.
- Pringle, H. and Binet, L. (2005), "How marketers can use celebrities to sell more effectively", *Journal of Consumer Behavior*, Vol. 4 No. 3, pp. 201-14.
- Rickards, T. and Moger, S. (2006), "Creative leaders: a decade of contributions from creativity and innovation management", *Journal Creativity and Innovation Management*, Vol. 15 No. 1, p. 4.

- Robinson, A.G. and Stern, S. (1997), *Corporate Creativity: How Innovation and Improvement Actually Happen*, Berrett-Koehler, San Francisco, CA.
- Sadi, A.M. (2006), "barriers to organizational creativity: a perspective of national and expatriate academics in Saudi Arabia", *International Management Review Journal*, Vol. 2 No. 4.
- Sorensen, B.M. (2006), "Identity sniping: innovation, imagination and the body", *Creativity and Innovation Management*, Vol. 15 No. 2, p. 135.
- Styhre, A. (2006), "Organization creativity and the empiricist image of novelty", *Creativity and Innovation Management*, Vol. 15 No. 2, p. 143.
- Tesluk, P.E., Farr, J.L. and Klein, S.R. (1997), "Influences of organizational culture and climate on individual creativity", *The Journal of Creative Behavior*, Vol. 31 No. 1, pp. 27-41.
- Vance, M. and Deaco, D. (1996), *Break Out of the Box*, Futurist Bookstore, New York, NY.
- Wong, S. and Pang, L. (2003), "Barriers to creativity in the hotel industry: perspectives of managers and supervisors", *International Journal of Contemporary Hospitality Management*, Vol. 15 No. 1, p. 29.
- Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993), "Toward a theory of organizational creativity", *The Academy of Management Review*, Vol. 18 No. 2, p. 293.

Further reading

- Eriksson, L.T. and Haue, A.M. (2004), "Mind map marketing: a creative approach in developing marketing skills", *Journal of Marketing Education*, Vol. 26 No. 2, p. 174.
- Frazer, L. and Lawley, M. (2001), *Questionnaire Design and Administration: A Practical Guide*, Wiley, New York, NY.
- Giunipero, L. and Flint, D.J. (2001), "Purchasing practices in Saudi Arabia – an exploratory analysis", *International Journal of Physical Distribution & Logistics Management*, Vol. 31, p. 9.
- Keith, J. and Asmus, C. (1999), "Measuring creativity", *Creativity Research Journal*, January 22.
- McFadzean, E. (1999), "Encouraging creative thinking, leadership & organization", *Development Journal*, Vol. 20 No. 7, p. 374.
- Martin, L.P. (1990), "Inventory to barriers to creative thought and innovation action", in William Pfeiffer, J. (Ed.), *The 1990 Annual: Developing Human Resources*, University Associates, San Diego, pp. 138-41.
- Martins, E.C. and Terblanche, F. (2003), "Building organizational culture that stimulates creativity and innovation", *European Journal of Innovation Management*, Vol. 6 No. 1, p. 64.
- Osborn, H.K. (2006), "Creativity and planning: training interventions to develop creative problem-solving skills", *Creativity Research Journal*, Vol. 18 No. 2, pp. 173-90.
- Roffe, I. (1999), "Innovation and creativity in organizations: a review of the implications for Training & Development", *Journal of European Industrial Training*, Vol. 23 Nos 4/5, p. 224.
- Schoenfeldt, L.F. and Jansen, K.J. (2005), "Methodical requirements for studying creativity in organizations", *Journal of Creativity Behavior*, Vol. 31 No. 1, pp. 73-90.
- Shalley, C.E., Gilson, L. and andBlum, T.C. (2000), "Matching creativity requirements and the work environment: effects on satisfaction and intentions to leave", *Academy of Management Journal*, Vol. 43 No. 2, p. 215.

-
- Thomas, J. (1999), "Nine Barriers to Thinking Creative", *Women in Business*, Vol. 51 No. 1, p. 14.
Wheatley, E.W. (1989), "Internal barriers to developing a practice", *Journal of Accountancy*, p. 124.
Whitmor, J. (2002), "Breaking down the barriers to management creativity", *The British Journal of Administrative Management*, September/October, p. 24.
Zikmund, W.G. (2004), *Exploring Marketing Research*, The Dryden Press, New York, NY.

Corresponding author

Muhammad Asad Sadi can be contacted at: amasadi@kfupm.edu.sa

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.