



ORIGINAL ARTICLE

Prioritizing of Entrepreneurial Behavior of Sports Equipment Manufacturing Companies

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KEY WORDS

Entrepreneur;
Entrepreneurship benefits;
Entrepreneurial behavior;
FAHP

ABSTRACT

The purpose of this research is to realize how organizations have been sustaining their growth through applying entrepreneurial behavior factors. Regarding the thematic nature of research model, experts' opinion in Sports equipment manufacturing companies, companies in sports equipment manufacturing companies have been examined in current study included: 1- Nike sportswear company 2- Puma sportswear company 3- Adidas sportswear manufacturing company *have been* brought for this research as statistic population. Numbers of experts participating in the study were 30 persons who were interested in improving discussion. The main tools used for gathering the data in this study were company records and questionnaire. The results obtained from fuzzy AHP method in order to the development of entrepreneurial behavior indicate that Nike Sportswear Company is more important than Adidas sportswear manufacturing company and Puma Sportswear Company. The results obtained from fuzzy AHP method according to the entrepreneurial behavior factors indicate that structural factors are more important than underlying factors and behavior factors. According to the structural factors scale, it is concluded that entrepreneur organization structure is more important than other factors.

Introduction

Entrepreneurship, like every social phenomenon, needs to be provided with a specific environment in order to be up-to-date and to be able to promote itself. Entrepreneurial environment is composed of the factors which are playing an important role in Entrepreneurship development (Gnyawali and Fogel, 1994). There is an intricate relationship between environment and company's development. Three structures are most influential ones on developmental rate of a small business including: 1- improving attitude of company's manager 2- Entrepreneurial attitude of company 3- dynamism of

environment in which the company is performing (Wiklund *et al*, 2009). Entrepreneurial values support the development of new activities within the firm and the renewal of ongoing business activities that have become stagnant or in need of progress. Entrepreneurial activities have also resulted in important consequences for economic growth and national development worldwide during recent decades (Szyliowicz and Galvin, 2010). Entrepreneurship was an immediate action for providing new goods or services and establishing new business which in turn lead to putting existing goods

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and services and relationship away within a market. Nowadays, instead of being considered as an event, Entrepreneurship is more considered as a process which is shaped by organizational culture and is seeking to make value by using existent resources through exploring opportunities (Tajeddini, 2010). Although entrepreneurship mostly has been taken as an individual concept; today our point of view about this subject has changed permanently. Entrepreneurship is not only the characteristic of different, brave, talented, and genius individuals but also an institutional concept. (Özdemirci, 2011). Currently, many countries are experiencing or recovering from economic crises, high unemployment rates, and job shortages. On the other hand, the process of entrepreneurship and creativity is a catalyst for change, transformation (Azizinajad, 2022), and economic development, and its concept is broader than the concept of starting a business (Jedigregori *et al*, 2021) whose goal is to generate and implement new ideas in a highly competitive, complex, and uncertain environment (Górány *et al*, 2021), create job opportunities (Alves & Yang, 2022), economic growth, and national development (Kim-Soon *et al*, 2018) and can encourage younger generations to become self-employed and develop key soft skills (Buzady & Almeida, 2019). Entrepreneurship is a process and purposeful activity that combines risk, creativeness, personal success and/or innovation and requires taking financial, moral and social responsibility to set up a new and profitable business idea (Askun and Yildirim, 2011). New Entrepreneurship starts from some novel companies which introduce new services and goods to the competitive market and are known as SMEs (small and medium enterprises). Nowadays, SME's role in the development of countries all over the world is identified and it is confirmed by the results of studies, researches, and reports presented by media and various press. Entrepreneurship and supporting entrepreneurs is of a discussion which is closely related to small and medium enterprises. Issues such

as development and job creation have been affected by the relationship between Entrepreneurship with SMEs. SMEs have played a vital role in any country's economic health and it is of most importance to support them (Aernoundt, 2004). SMEs are the foundation of the global economy and play a vital role in job creation. The success and vitality of SMEs are recognized as important elements in measuring an economy's progress and future development. Additionally, entrepreneurship has been the topic of scholarship and research in a variety of academic fields. Entrepreneurship has been viewed as an engine of economic growth and social development. It is not only a driver for economic competition and employment creation, but also an instrument for personal development and solving social problem (Tsai and Kuo, 2011). To engage in entrepreneurial activity, persons need to monitor the environmental changes and to evaluate the effects of changes on their own new business. Inability of an entrepreneur to predict the commercial success leads to environmental uncertainty which in turn is able to prevent him for conducting an Entrepreneurial activity (Gold *et al*, 2001). Organizations need to be adapted to be survived and must remain competitive in a complex; demanding and changing economic environment and therefore should adopt a more entrepreneurial approach to manage decision-making process. 'Corporate entrepreneurship' is a process that enhances the level of activity and hence performance (Burgess, 2013). Although entrepreneurial behavior of established businesses is viewed as a crucial prerequisite for growth and performance in dynamic environments Corporate entrepreneurship (or entrepreneurial behavior, to introduce the term used widely and interchangeably in this paper) refers to processes in established businesses leading to (1) innovativeness, (2) pro-activeness, and (3) risk taking. Hence, by showing an entrepreneurial orientation, businesses enlarge their ability to gain sustainable competitive advantage (Weismeyer-Sammer, 2011). Determining structural factors,

underlying factors, behavior factors sub criteria priorities by considering one level of entrepreneurial behavior sub criteria of factors effective on entrepreneurial behavior success is the research problem. The main theme of this study is to determine the priority of companies regarding the structural factors, underlying factors; behavior factors sub criteria priorities by considering one level of the development of entrepreneurial behavior sub criteria.

Entrepreneurship, Entrepreneur and benefits of entrepreneurship

Currently, Entrepreneurship is considered as one of the main driving forces of economy in every modern society which in turn is used as a tool to encounter new competitive insights and changes more quickly (Kraus S & Kauranen I, 2009). Entrepreneurship is the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities. Entrepreneurship as a mechanism that converts economic knowledge into economic growth, (Carlsson *et al.*, 2009). This gradually formed an idea in the literature of entrepreneurship which focuses on organizations, cultures and organizational processes and is entitled "entrepreneurship". According to experts, "entrepreneurship is considered as an instrument for the development and improvement of business, increase in income and interest, pioneering in the development of products, services and novel activities (Safari *et al.*, 2010). The term "Entrepreneurship" encompasses a wide range of definitions. Its definitions include tolerance of ambiguity, new composition of manufacturing resources, abilities of entrepreneurs to compensate markets shortage through activities complementary for manufacturing resources, ability to deal with imbalance and ability to make legitimate decisions about the coordination of scarce resources. Entrepreneurship is a dynamic process towards increasing the capitals. It is also a process which creates a new element using creativity and is

accompanied by using time, resources, risks, and other factors. Entrepreneurship is an endless and fundamental resource in all societies; one which is related to the individual's creativity. It is both cheap and valuable. When entrepreneurship is accepted as a profession by many of the society members, society develops so fast. That is, entrepreneurship affects individuals' social and economic development directly. According to experts, "human resources" are the most important factors among those which affect work and production (Ghasemi *et al.*, 2011). Entrepreneurship is the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities. Entrepreneurship is often a difficult undertaking (Shahhosseini *et al.*, 2011). An entrepreneur is an individual who establishes and manages a business for the principles of profit and growth. Entrepreneurs known as taking at least moderator level of risks such as: economic, social, career, psychological and health risks (Deniz *et al.*, 2011). Briefly, we can classify the definitions in two categories; i-who is the entrepreneur? ; as a particular person or as the product of a particular environment, ii-or what does the entrepreneur do?; as the performer of a particular role in society, or as a specific input to the economy, events and processes. (Dincer *et al.*, 2011). Entrepreneurship is a dominant factor in the economy; researchers have examined a number of factors that may explain entrepreneurial activity, though a good deal of recent research has tended to focus on the characteristics of the business and industrial environment or the characteristics of the entrepreneurial opportunity itself. Our understanding of entrepreneurship will not be complete unless we understand the motivation of the individuals involved. Recent research suggests that motivational traits and creativity are important factors in entrepreneurial activity and success. Research on the motivational traits of entrepreneurs seems especially promising for helping to identify those individuals that might be best

suited for identifying and exploiting entrepreneurial opportunities in the market place (Deniz *et al*, 2011). McClelland's theory stated that achievement motivation is significantly related to both occupational choice and performance in an entrepreneurial role (Farzaneh *et al*, 2010). Although, there are different interpretations about the role of entrepreneur but it is known as function used for exploring available opportunities in market. Such operations are often associated with the allocation of productive inputs. Therefore, there is a relationship between entrepreneur with productivity and initiative (Zhang J *et al*, 2009). According to Schumpeter, entrepreneur is an innovative person that performs five functions:

- Manufacturing a new product with new quality
- Creating a new manufacturing procedure
- Opening a new market
- Capturing a new delivery resource
- Setting up a new organization or enterprise (Zeqiri I, 2010)

Entrepreneurship is a process of discovering, evaluating, and exploring opportunities to produce goods and services in future. Decisions about the new composition of resources are made by entrepreneur based on the evaluation of information and available knowledge. Innovation is one of the essential aspects of entrepreneurship which is simplified by business knowledge. Development of new product improves both profitability and development of the national economy which in turn are associated with development of organizational knowledge (Lee S.H & Williams C, 2005). Entrepreneurs are able to produce wealth through discovering opportunities and then extending competitive advantages to explore these opportunities (TANTAU, 2008). Entrepreneurship is a process which is created by novelty. In particular, entrepreneurship means to mix resources in new ways, to introduce productivity in the form of products and services, processes,

managerial or structural techniques which in turn may be used as source of value (Ireland R.D & Weeb J.W, 2009). The main result of entrepreneurship is to achieve long-term results. It means an organization which is able to be adapted by variable situations and to be survived. This is of most importance in today's unstable and sophisticated world. World economic system makes competition more difficult than before. Productive organizations are better equipped than old ones for competition. They are able to react quickly and effectively against external changes. Environmental changes are originated from different sources including: competitors, costumers, providers, new technologies, governmental institutions, political institutes, and the entire community. Every section of an organization need to be able to react appropriately against emerging different factors implementing changes in an organization. In addition to long term results (adaptability and survival) two other benefits assumed for entrepreneurship are as follow:

First, the relationship between organization and costumers will be improved.

Since customers are one of the most important sources of information, more attention will be paid to their needs, interests, and opinions. Having happier and generally better costumers are desirable results.

Second, the organization is a better place to work. Thus, this will be a reason for pleasure, motivation, and encouragement for more work. This also helps us to improve the morality in relationship existed among the members of an organization. Although the organization's products and services are primarily focused on entrepreneurship, but employee pays more attention to their working process. Entrepreneurship helps us to enhance the relationship with the external individuals which in turn lead organization to take more responsibility in the society (Cornwall & Perlman, 1990).

Entrepreneurial behavior

Established definitions of entrepreneurial behavior within existing firms are typically restricted to

discrete entrepreneurial events such as the creation of new organizations, new ventures new entry, or new product development. While important, narrowly defined notions of grand entrepreneurship remain inapplicable to various entrepreneurial phenomena occurring in large established firms. Entrepreneurial behavior within an existing traditional organization as a set of activities and practices by which individuals at multiple levels autonomously generate and use innovative resource combinations to identify and pursue opportunities. While innovation, autonomy and opportunities are defining elements of entrepreneurship general (Mair, 2002). Entrepreneurial behavior is transitory. Moreover, estimates of the number of people who engage in entrepreneurial behavior range from 20 percent of the population to over 50 percent .Since a large and diverse group of people engage in the transitory process of entrepreneurship, it is improbable that entrepreneurship can be explained solely by reference to a characteristic of certain people independent of the situations in which they find themselves. Therefore, when we argue that some people and not others engage in entrepreneurial behavior. We are describing the tendency of certain people to respond to the situational cues of opportunities not a stable characteristic that differentiates some people from others across all situations (Shane&Venkataraman, 2000).The relationship between entrepreneurial behavior and performance in large organizations has been assessed differently across time. During the 1980s, argued that it was difficult for people to act entrepreneurially in bureaucratic organizational structures. During this same time period, others suggested that for companies of any size, entrepreneurial behavior was possible, should be encouraged, and could be expected to enhance firm performance. A significant change in the general perception of the value of entrepreneurial behavior as a predictor of firm performance took place throughout the 1990s. This was a time during which companies were redefining their businesses, thinking about how

to most effectively use human resources, and learning how to compete in the global economy (Kuratko *et al*, 2005). In short, this was a time during which “. . . some of the world’s best-known companies had to endure painful transformation to become more entrepreneurial. These companies had to endure years of reorganization, downsizing, and restructuring. These changes altered the identity or culture of these firms, infusing a new entrepreneurial spirit throughout their operations change, innovations, and entrepreneurship became highly regarded words that describe what successful companies must do to survive” (Zahra, Kuratko, & Jennings, 1999, p. 5). Entrepreneurial behavior continues to be seen as an important path to competitive advantage and improved performance in firms of all types and sizes. Some believe that firms failing to effectively use entrepreneurial actions in the fast-paced and complex global economy reduce the probability of successful competition in their chosen markets. Entrepreneurial behavior does not occur in a vacuum; rather, it takes place within the context of the organization’s full array of actions. Establishing an internal environment in large, established organizations that serves as an antecedent to entrepreneurial behavior is challenging and requires appropriate decisions and actions. In its broadest conception, entrepreneurial behavior is a comprehensive term that captures all actions taken by a firm’s members that relate to the discovery, evaluation, and exploitation of entrepreneurial opportunities. Defined by newness, entrepreneurial actions involve the firm and its members with the use of new resources, interactions with new customers, involvements with new markets and/or with new combinations of its existing resource portfolio, customer base, and served markets. Thus, entrepreneurial actions are the conduit through which corporate entrepreneurship is practiced in established organizations .By extension, the entrepreneurial behavior of middle-level managers is fundamentally defined by these individuals’ behaviors that relate to the discovery, evaluation, and exploitation of

entrepreneurial opportunities. Still, while this conceptualization may be technically accurate, as a practical matter, it is not particularly informative. Specific actions are not implied by the words discover, evaluate, or exploit (Kuratko *et al.*, 2005).

Conceptual model

In present study, conceptual models (figure 1) introduced by Sarabi *et al.* (2012), Kavosi and Rahmatizanjantalb. (2011), Gharakhani (2012), were used. Level 2 including structural factors, underlying factors, behavior factors criteria is used from Sarabi *et al.* (2012), Kavosi and Rahmatizanjantalb (2011), Gharakhani (2012), and level 3 including sub-scale for structural factors, underlying factors, behavior factors levels. Structural factors sub criteria including entrepreneur organization structure, entrepreneur organization strategy, financial system, performance evaluation system, information system, research and

development system, reward system, human resource development were extracted from Sarabi *et al.* (2012), Kavosi and Rahmatizanjantalb (2011), Gharakhani (2012), underlying factors sub criteria including political factors/ government, communication, uncertainty /changes, sub- structure, availability to resource, technology, market , complexity from Sarabi *et al.* (2012), Kavosi and Rahmatizanjantalb (2011), behavior factors sub criteria including organizational culture, management support, risk taking, manager characteristics, employee's characteristics, employee empowerment, team spirit, entrepreneur organization leadership style, creativity and innovation, self-Efficacy, foresight, previous experience from Sarabi *et al.* (2012), Kavosi and Rahmatizanjantalb (2011), Gharakhani (2012).

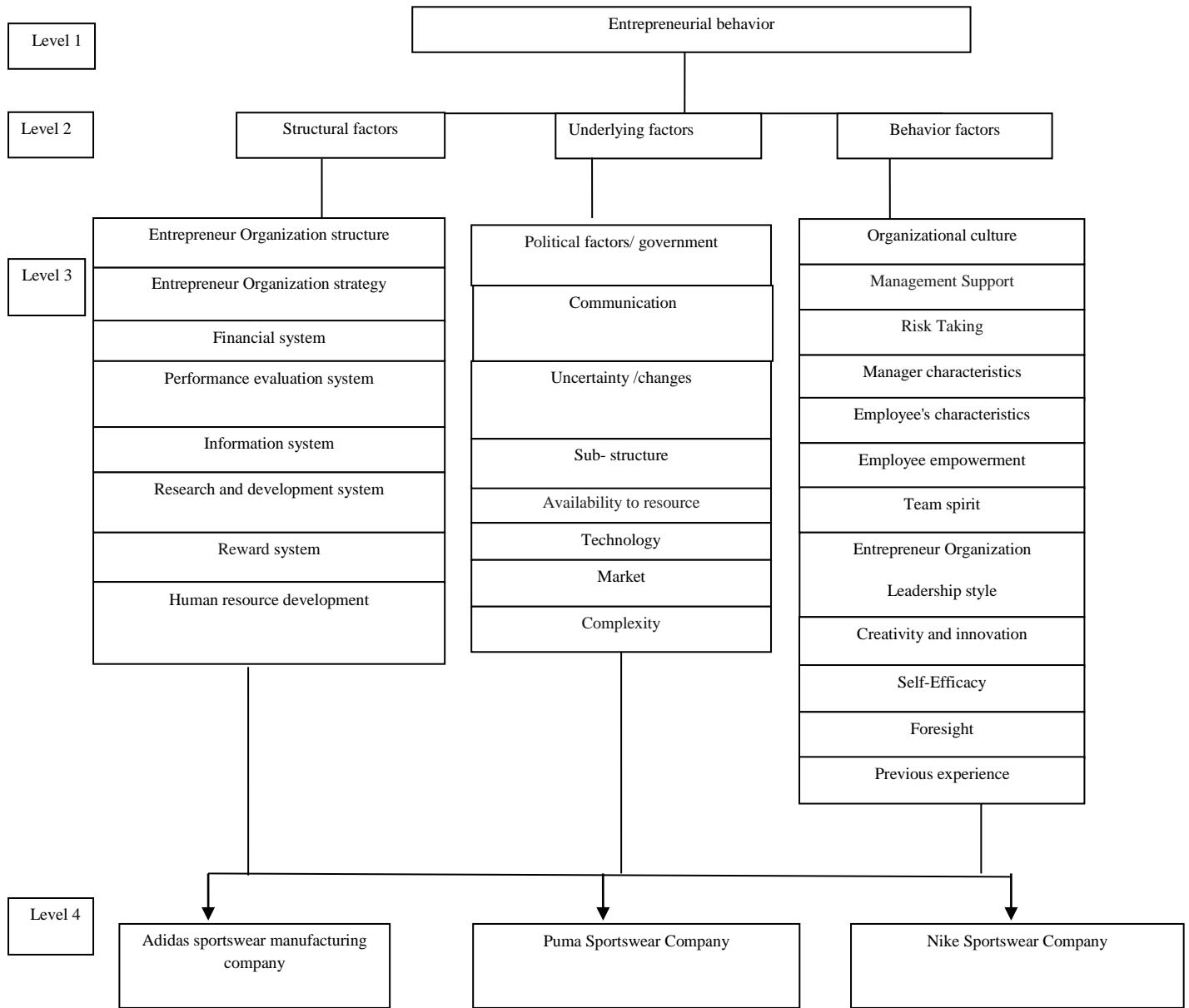


Figure 1. Hierarchical model of entrepreneurial behavior factors

Materials and Methods

In our case study, we use fuzzy AHP technique to choose the best entrepreneurial behavior factors to develop and improve its competitive advantages at Sports equipment manufacturing companies. This research is of a functional and descriptive-survey type. The fuzzy analytic hierarchy process using Chang's extent analysis technique is used as the main statistical method of this study (Chang, 1996). Firstly,

in the questionnaire, experts in Sports equipment manufacturing companies were asked to compare and state their opinions on the different components of the conceptual model. According to the subjective nature of research model and experts opinion, expert specialists of sports equipment manufacturing companies were selected as expert. Companies in sports equipment manufacturing companies have been

examined in current study included: 1- Nike sportswear company2- Puma sportswear company3- Adidas sportswear manufacturing company have been brought for this research as statistic population, the significance of each intended option is determined by experts in this stage .we sent a questionnaire to a group comprising 40 senior experts on April, 2015 and received the feedback in May, 2015. Of the 40 questions, 30 were used in this study. In this research,

bosses and managers had more than 20 years' experience and at least bachelor in above-mentioned companies .The main tools used for gathering the data in this study were company records and questionnaire. Experts were asked to express their own ideas about the comparison performed among the elements of conceptual model. In order to get experts' ideas with respect to the verbal expression in FAHP method, verbal expression listed in Table1were used.

Table 1. Verbal concepts in fuzzy scale spectrum

| Verbal scale | Triangle fuzzy numbers | Triangle fuzzy numbers reverse |
|---------------------------|------------------------|--------------------------------|
| Equal significant | (1, 1, 1) | (1, 1, 1) |
| A little more significant | (1, 3, 5) | (1.5,1.3, 1) |
| More significant | (3, 5, 7) | (1.7,1.5, 1.3) |
| Many more significant | (5, 7, 9) | (1.9, 1.7, 1.5) |
| Extremely significant | (7, 9, 11) | (1.11, 1.9, 1.7) |

Results

In order to compare entrepreneurial behavior factors (structural factors, underlying factors, behavior

factors), weight of each of these elements is shown in Table 2.

Table 2. Normalized final weights of entrepreneurial behavior factors

| | Behavior factors | Underlying factors | Structural factors |
|---|------------------|--------------------|--------------------|
| w | 0.028 | 0.481 | 0.492 |

According to the responses given by decision maker group listed in table 2, we concluded that the entrepreneurial behavior factors are ranked in such a way that structural factors is the highest and then underlying factors and behavior factors are at the next rank, respectively. There are 3 paired comparative tables for level 2 including structural factors,

underlying factors, behavior factors sub criteria which are ordered regarding to structural factors, underlying factors, behavior factors criteria.

The final results and findings obtained from each sub criteria weights related to each element in sports equipment manufacturing companies are presented in Tables 3 to 5.

Table 3. Normalized final weights related to structural factors sub criteria according to the structural factors

| | Financial system | Research and development system | Performance evaluation system | Human resource development | Reward system | Entrepreneur organization strategy | Entrepreneur organization structure | Information system |
|---|------------------|---------------------------------|-------------------------------|----------------------------|---------------|------------------------------------|-------------------------------------|--------------------|
| w | 0.125 | 0.057 | 0.124 | 0.153 | 0.149 | 0.139 | 0.154 | 0.099 |

Table 4. Normalized final weights related to underlying factors sub criteria according to the underlying factors

| | Political factors/ government | Sub-structure | Communication | Availability to resource | Technology | Uncertainty / changes | Complexity | Market |
|---|-------------------------------|---------------|---------------|--------------------------|------------|-----------------------|------------|--------|
| W | 0.241 | 0.180 | 0.131 | 0.127 | 0.108 | 0.096 | 0.088 | 0.030 |

Table 5. Normalized final weights related to behavior factors sub criteria according to the behavior factors

| | Foresight | Manager characteristics | Risk Taking | Employee empowerment | Management Support | Team spirit | Organizational culture | Self-Efficacy | Entrepreneur Organization leadership style | Creativity and innovation | Previous experience | Employee's characteristics |
|---|-----------|-------------------------|-------------|----------------------|--------------------|-------------|------------------------|---------------|--------------------------------------------|---------------------------|---------------------|----------------------------|
| W | 0.068 | 0.093 | 0.105 | 0.079 | 0.111 | 0.077 | 0.146 | 0.061 | 0.053 | 0.060 | 0.056 | 0.090 |

Comparing 8 indexes used for to structural factors sub criteria with respect to Table 3, it is known that entrepreneur organization structure is the first priority and human resource development, reward system , entrepreneur organization strategy , financial system , performance evaluation system, information system , research and development system are next ones. Comparing 8 indexes used for underlying factors sub criteria with respect to underlying factors, it is known from table 4 that the political factors/ government is first priority and sub- structure, communication, availability to resource, technology, uncertainty / changes, complexity and market are next ones. Comparing 12 indexes used for behavior factors sub

criteria regarding to behavior factors it is known from table 5 that organizational culture is first priority and management support, risk taking, manager characteristics, employee's characteristics, employee empowerment, team spirit, foresight, self-Efficacy, previous experience, creativity and innovation, entrepreneur organization leadership style are next priorities. There are 3 paired comparative tables for level 4 which in turn are based on structural factors, underlying factors, behavior factors sub-scales. Final results and finding obtained from sub-component weights for each element in sports equipment manufacturing companies are presented in Table 6 to 8.

Table 6. Final weight of 3 companies according to the structural factors sub-criteria

| | Financial system | Research and development system | Performance evaluation system | Human resource development | Reward system | Entrepreneur organization strategy | Entrepreneur organization structure | Information system |
|-----------------------------------------|------------------|---------------------------------|-------------------------------|----------------------------|---------------|------------------------------------|-------------------------------------|--------------------|
| Nike sportswear company | 0.185 | 0.492 | 0.456 | 0.752 | 0.737 | 0.440 | 0.377 | 0.293 |
| Puma sportswear company | 0.560 | 0.492 | 0.159 | 0.077 | 0.069 | 0.151 | 0.327 | 0.622 |
| Adidas sportswear manufacturing company | 0.255 | 0.017 | 0.385 | 0.171 | 0.194 | 0.409 | 0.296 | 0.086 |

Table 7. Final weight of three companies according to the underlying factors sub-criteria

| | Political factors/ government | Sub-structure | Communication | Availability to resource | Technology | Uncertainty/ changes | Complexity | Market |
|-----------------------------------------|-------------------------------|---------------|---------------|--------------------------|------------|----------------------|------------|--------|
| Nike sportswear company | 0.560 | 0.333 | 0.333 | 0.559 | 0.170 | 0.465 | 0.222 | 0.577 |
| Puma sportswear company | 0.185 | 0.333 | 0.333 | 0.104 | 0.415 | 0.197 | 0.208 | 0.043 |
| Adidas sportswear manufacturing company | 0.255 | 0.333 | 0.333 | 0.337 | 0.415 | 0.337 | 0.570 | 0.380 |

Table 8. Final weight of three companies according to the behavior factors sub-criteria

| | Team spirit | Organizational culture | Employee's characteristics | Manager characteristics | Employee empowerment | Risk Taking | Management Support | Previous experience | Self-Efficacy | Entrepreneur Organization leadership style | Creativity and innovation | Foresight |
|-----------------------------------------|-------------|------------------------|----------------------------|-------------------------|----------------------|-------------|--------------------|---------------------|---------------|--------------------------------------------|---------------------------|-----------|
| Nike sportswear company | 0.007 | 0.427 | 0.337 | 0.137 | 0.215 | 0.292 | 0.333 | 0.333 | 0.577 | 0.333 | 0.587 | 0.333 |
| Puma sportswear company | 0.514 | 0.364 | 0.197 | 0.278 | 0.215 | 0.335 | 0.333 | 0.333 | 0.043 | 0.333 | 0.136 | 0.333 |
| Adidas sportswear manufacturing company | 0.479 | 0.209 | 0.465 | 0.585 | 0.570 | 0.374 | 0.333 | 0.333 | 0.380 | 0.333 | 0.277 | 0.333 |

Comparing three elements related to the companies regarding to the financial system, it is known from table 6 that Puma Sportswear Company is the first priority, and Adidas sportswear manufacturing company and Nike Sportswear Company are as next priorities. Comparing three elements associated to the companies regarding to the research and development system, it is known from table 6 that Nike Sportswear Company and Puma Sportswear Company are first priority and Adidas sportswear manufacturing company is as next priority. Comparing three elements related to the companies regarding to the performance evaluation system, human resource development, reward system, entrepreneur organization strategy, it is known from table 6 that Nike sportswear company is first priority and Adidas sportswear manufacturing company, Puma sportswear company are as next priorities. Comparing three elements related to the companies regarding to the entrepreneur organization structure, it is known from table 6 that the Nike sportswear company is first priority and Puma Sportswear Company and Adidas sportswear manufacturing company are as next priorities. Comparing three elements related to the companies regarding to the information system, it is known from table 6 that Puma Sportswear Company is first priority and Nike Sportswear Company and Adidas sportswear manufacturing company are as next priorities. Comparing three elements related to the companies regarding to the political factors/ government, availability to resource, uncertainty/ changes, market, it is known from table 7 that Nike Sportswear Company is first priority and Adidas sportswear manufacturing company and Puma Sportswear Company are as next priorities. Comparing three elements related to the companies regarding to sub- structure, communication, it is known from table 7 that Puma sportswear company, Adidas sportswear manufacturing company and Nike sportswear company are of equal importance. Comparing three elements related to the companies regarding technology, it is known from table 7 that

Puma Sportswear Company and Adidas sportswear manufacturing company are the first priority and Nike Sportswear Company is as next priority. Comparing three elements related to the companies regarding to the complexity, it is known from table 7 that Adidas sportswear manufacturing company is first priority and Nike Sportswear Company and Puma Sportswear Company are as next priorities. Comparing three elements related to the companies regarding to the team spirit, it is known from table 8 that Puma Sportswear Company is the first priority and Adidas sportswear manufacturing company and Nike Sportswear Company are the next priorities. Comparing three elements related to the company regarding to the organizational culture, it is known from table 8 that Nike sportswear company is the first priority and Puma sportswear company and Adidas sportswear manufacturing company are the next priorities. Comparing three elements related to the companies regarding to the employee's characteristics, it is known from table 8 that Adidas sportswear manufacturing company is the first priority and Nike Sportswear Company and Puma Sportswear Company are the next priorities. Comparing three elements related to the companies regarding to the manager characteristics, risk taking, it is known from table 8 that Adidas sportswear manufacturing company is the first priority and Puma Sportswear Company and Nike Sportswear Company are the next priorities. Comparing three elements related to the companies regarding to the employee empowerment, it is known from table 8 that Adidas sportswear manufacturing company is the first priority and Puma Sportswear Company and Nike Sportswear Company are of equal importance and are the next priorities. Comparing three elements related to the companies regarding to the management support, previous experience, entrepreneur organization leadership style, foresight, it is known from table 8 that Puma Sportswear Company, Adidas sportswear manufacturing company and Nike Sportswear Company are of equal importance. Comparing three elements related to the

companies regarding to creativity and innovation, self-efficacy, it is known from table 8 that Nike Sportswear Company is the first priority and Adidas sportswear manufacturing company, Puma sportswear company are the next priorities. According to the table 9, the weights of the elements were incorporated into each other in order to obtain the companies final weights. As it is presented in below table, according

to the ideas of sports equipment manufacturing companies managers, final order of companies aiming to make a successful background for the development project of entrepreneurial behavior dimension in such a way that Nike sportswear company is at the first rank and Adidas sportswear manufacturing company and Puma sportswear company are as next priorities.

Table 9. Combining the weights of three level and calculating company's final weights aiming to improve the level of success in the development project of entrepreneurial behavior dimension

| | Adidas sportswear manufacturing company | Puma sportswear company | Nike sportswear company |
|---|-----------------------------------------|-------------------------|-------------------------|
| w | 0.369 | 0.301 | 0.430 |

Discussion

Comparing present results with Sarabi *et al.* (2012)'s study, regarding to entrepreneurial behavior, it is realized that structural factors is at the first priority in both studies. Comparing present results with Sarabi *et al.* (2012)'s study with respect to the structural factors in studies, entrepreneur organization structure is the first priority and human resource development, reward system, entrepreneur organization strategy, financial system, performance evaluation system, information system, research and development system are important, respectively. Comparing present results with Sarabi *et al.* (2012)'s study with respect to the underlying factors in both studies, political factors/government is at the first priority and sub-structure, communication, availability to resource, technology, uncertainty /changes, complexity and market are the next priorities. Comparing present results with Sarabi *et al.* (2012)'s study with respect to the behavior factors in both study, organizational culture is at the first priority and management support, risk taking, manager characteristics, employee's characteristics, employee empowerment, team spirit are the next priorities. The present study, among the structural factors, organizational structure is of the highest importance. It is suggested that sports equipment manufacturing companies should try to take an important step towards promoting entrepreneurial

behavior in their organizations by creating more flexibility in bureaucratic structures and accepting dynamic structures, supporting entrepreneurs, appreciating risk-taking and opinionated individuals, understanding the entrepreneurial ideas and thoughts of employees, supporting entrepreneurial plans and applying new theories of employees, being more flexible in controlling individuals, and participating in decision-making. Using an appropriate reward system is another important factor in creating conditions to support entrepreneurship in sports equipment manufacturing companies. In order to encourage entrepreneurship in the organization, it is suggested that the total payment be based on the level of innovation and risk-taking. The relationship between payments and performance, not physical presence, the presence of internal incentives, and flexible payments should be considered as features of the entrepreneurial payment system. Strategy is one of the important factors in the formation of entrepreneurial behavior. This means that all employees of the organization need to understand the mission and vision of the organization and strive to achieve it. Accordingly, organizational strategies should also be entrepreneurial strategies. In this study, forward-looking strategy was considered as an entrepreneurial strategy. As a result, managers of sports equipment

manufacturing companies should facilitate entrepreneurial behavior by applying a forward-looking strategy and providing new services, creating changes, and searching for new opportunities. Among the contextual factors, political factors are of the greatest importance in entrepreneurial behavior. Government activities and decisions affect the performance of organizations, especially sports equipment companies. However, since these companies cannot change them, policy recommendations in this area target the government sector. Changes in legal regulations and requirements, political and judicial processes create new opportunities and threats and affect the way services and products are provided. Political factors affecting entrepreneurial behavior include laws, regulations, and government policies that foster specific behaviors and prevent the occurrence of others. Governments can help the growth of entrepreneurship by eliminating market failures, eliminating ambiguous rules and regulations, providing the necessary financial resources for innovative actions and research, providing tax incentives and management consulting, liberalizing trade policy, and adopting a disciplined financial policy. These effects are especially noticeable and tangible in sports equipment companies. Infrastructure is the second background factor that helps promote entrepreneurial behavior. Given the special position of entrepreneurship and business, by providing the necessary infrastructure to create these businesses, rapid progress can be achieved and the digital gap between underdeveloped and developed countries can be reduced. Communication is another factor that is important after political factors affecting organizational entrepreneurship. Intra- and extra-organizational communication is an important factor in the formation of entrepreneurial activities and behavior in sports equipment manufacturing companies. Going beyond the formal hierarchy and emphasizing informal communication between managers and employees and removing communication barriers are important

factors in the formation of entrepreneurial behavior in sports equipment manufacturing companies. In other words, as environmental interactions and communications in the human, financial, and social sectors increase, entrepreneurial behavior also improves in sports equipment manufacturing companies. Among behavioral factors, organizational culture is the most important in encouraging entrepreneurial behavior. In order to develop an entrepreneurial culture in the organization, managers can consider the following: supporting risk-taking, innovation, and new ideas at all levels of the organization, valuing teamwork, establishing trust, honesty, and integrity among employees, considering human resources as the organization's most valuable resource, recognizing, respecting, and appreciating individual efforts, holding ceremonies, ceremonies, and celebrations to encourage individual entrepreneurial behavior, encouraging organizational learning at all levels, and valuing market research. Management's support for entrepreneurial activities and behaviors and encouraging employees to be entrepreneurial is another important factor that plays an important role in the formation of entrepreneurial behavior. It is suggested that managers of organizations encourage the development of new ideas and new ways of doing things in order to strengthen entrepreneurship in the organization and grant employees sufficient authority and freedom in their jobs. Also, it is better for companies to attract creative and entrepreneurial individuals to the organization by considering the characteristics of entrepreneurial individuals as one of the conditions for employment. Another factor that is important in encouraging effective entrepreneurial behavior is employee empowerment. Employee empowerment is one of the effective tools for increasing employee productivity and optimally using their individual and group capacities and abilities in line with organizational goals. If an organization wants to be a leader in its economy and business affairs and not lag behind in the competition, it must have a specialized,

creative and highly motivated human force. Employees have latent power through their knowledge, experience and motivation. In fact, empowerment is the release of this power. In other words, employee empowerment improves self-confidence and overcomes feelings of helplessness and helplessness, and increases the risk-taking of employees.

Conclusions

In present study, determine the priority of companies in order to the development of entrepreneurial behavior in Iran regarding the entrepreneurial behavior dimension (structural factors, underlying factors, and behavior factors) and structural factors, underlying factors, behavior factors sub criteria were studied. The results obtained from fuzzy AHP method in order to the development of entrepreneurial behavior indicate that Nike sportswear company is more important than Adidas sportswear manufacturing company and Puma sportswear company. The results obtained from fuzzy AHP method according to the entrepreneurial behavior factors indicate that structural factors are more important than underlying factors and behavior factors. According to the structural factors scale, it is concluded that entrepreneur organization structure is more important than other factors. The most important structural factors are: Entrepreneur organization structure, Human resource development, Reward system, Entrepreneur organization strategy, financial system, Performance evaluation system, Information system, and Research and development system. The most important contextual factors are: Political factors/ government, Sub- structure, Communication, Availability to resource, Technology, Uncertainty / changes, Complexity, Market. The most important behavioral factors are: organizational culture, management support, risk-taking, manager characteristics, employee characteristics, employee empowerment, team spirit, foresight, self-efficacy,

previous experience, creativity and innovation, and entrepreneurial organization leadership style.

References

- Aernoundt, R.(2004), Incubators: tool for entrepreneurship, journal Small Business Economics, Vol. 23, 2 (09), pp: 127-135.
- Askun .Bige, Yildirim .Nihan,(2011), ” Insights On Entrepreneurship Education In Public companies In Turkey: Creating Entrepreneurs Or Not? ”, Procedia Social and Behavioral Sciences 24 , 663–676.
- Azizinajad, H. (2022). A review of entrepreneurial psychology and its role in business. *New Developments in the Psychology of Educational Sciences and Education*, 5(49), 444-457. (Persian)
- Alves, J., & Yang, W. (2022). Cognitive mechanisms in entrepreneurship competence: its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 65.
- Buzady, Z; & Almeida. F. (2019). FLIGBY-A serious game tool to enhance motivation and competencies in entrepreneurship. *Informatics*, 6, 27.
- Burgess .Cathy,(2013), Factors influencing middle managers’ ability to contribute to corporate Entrepreneurship, *International Journal of Hospitality Management* 32, 193–201.
- Cornwall Jeffery & Perlman baron,(1990), *Organizational entrepreneurship*, Richard Irwin.
- Carlsson, B., ACS, Z.J, Audretsch, D. and Pontus Braunerhjelm. (2009) Knowledge Creation, Entrepreneurship, and Economic Growth: A Historical Review, *Industrial and Corporate Change*, 18 (6), 1193–1229.
- Chang .D.Y (1996). Application of the extent analysis method on fuzzy AHP’, *European Journal of Operational Reaserch*, 95,pp 649-655

- Deniz .Nevin, Boz .IlknurTastan, Ertosun .ÖznurGülen,(2011), The Relationship between Entrepreneur's Level of Perceived Business-Related Fear and Business Performance, *Procedia Social and Behavioral Sciences* 24 , 579–600.
- Dincer .Mustafa AbdülMetin, Yildirim .Mustafa, Dil .Esra,(2011), Is There Any Linkage Between Entrepreneur Typologies and Strategy Typologies?, *Procedia Social and Behavioral Sciences* 24 , 601–610.
- Erensal *et al.*(2006),” Determining key capabilities in technology management using fuzzy analytic hierarchy process: A case study of Turkey”, *Information Sciences* 176 , 2755–2770.
- Farzaneh,G.,Hassan,A.,Gholamreza,P.,Mirsalaldin,E., Parviz,A.,Alireza H., (2010),”Relationship Between Creativity, Grade Point Average, Achievement Motivation, Age and Entrepreneurship among University Students”, *Australian Journal of Basic and Applied Sciences*, 4(10),p.5372-5378.
- Gharakhani.Davood,(2012),Identifying and Prioritization Effective Factors on Organizational Entrepreneurship Using AHP Approach,*Journal of Basic and Applied Scientific Research*, 2(4)4320-4327.
- Gódány, Z., Machová, R., Mura, L., & Zsigmond, T. (2021). Entrepreneurship motivation in the 21st century in terms of pull and push factors. *TEM Journal*, 10(1), 334-342.
- Ghasemi .Farshid, Rastegar. Ahmad, GhorbanJahromi .Reza, RoozegarMarvdashti .Roghayeh,(2011), ” The relationship between creativity and achievement motivation with high school students”, entrepreneurship, *Procedia - Social and Behavioral Sciences* 30 , 1291 – 1296.
- Gnyawali,D.R . Fogel (1994),”Environments for Entrepreneurship Development: Key Dimensions and Research Implication”, *Entrepreneurship Theory and Practice*, 18, pp40-56.
- Gold A.H., Malhotra A. and SegarsA. ,(2001), ”Knowledge management: an organizational capabilities perspective”, *J Manage INF Syst*, 18(1): pp.185–214.
- Ireland R.D & Webb J.W.(2009), Crossing the great divide of strategic entrepreneurship: Transitioning between exploration and exploitation, *Business Horizons*, Vol. 52, pp. 469-479.
- Jedigregori, J., Mohebzadegan, Y., & Azizi, M. (2021). Identification of the effective components on entrepreneurship education of secondary school students (qualitative approach). *Pazhuheshhay Barnamerizi Darsi*, 11(2), 267-244.(Persian)
- Kim-Soon, N., Ahmad, A. R., & Ibrahim, N. N. (2018). Understanding the motivation that shapes entrepreneurship career intention. *Entrepreneurship: Development Tendencies and Empirical Approach*. P. 291-308
- Kavosi.Esmaeil ,Rahmatizanjantalb.Farshad ,(2011),Designing and delivering oflocalmodelto improve organizational entrepreneurshipat the University,Case study: Science andResearch Branch of Tehran, *Rahbord journal* , Vol.20, No. 59.p.217-241.
- Kuratko DF, Ireland RD, Covin JG, Hornsby JS. A model of middle level managers' entrepreneurial behavior. *Entrep Theory Pract*. 2005;29(6):699-716
- Kraus Sascha& KauranenIlkka.(2009), Strategic management and entrepreneurship: Friends or foes?”, *Int. Journal of Business Science and Applied Management*, Volume 4, Issue 1,pp. 37-50.
- Lee S.H &Wiliams C.(2007), Dispersed entrepreneurship within multinational corporations: A community perspective”,

- Journal of World Business, Vol. 42, pp. 505-519.
- Mair, J. (2002), "Entrepreneurial behavior in a large traditional firm: exploring key drivers", research paper no. 466, IESE, University of Navarra, Barcelona.
- Özdemirci . Ata, (2011), Corporate Entrepreneurship and Strategy Process: A Performance Based Research on Istanbul Market, *Procedia Social and Behavioral Sciences* 24 , 611–626.
- Safari .Khalil, Rastegar. Ahmad, GhorbanJahromi .Reza,(2010), The relationship between psychological empowerment and entrepreneurship among clerks of Fars Payame Noor University, *Procedia Social and Behavioral Sciences* 5 , 798–802.
- Shahhosseini,A.,Kavousy, E.,Shirsavar,H.R.,Ardahaey,F.,(2011) , Appointing the Level of Individual Entrepreneurship of Islamic Azad University Students, *Asian Social Science*, Vol. 7, No. 1; January, p.106-114.
- Shane, S. &Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217–226.
- Sarabi. Amir ali ,Abdoi .Mohammad ,Forotani .Zahra ,(2012), Identifying of affecting factors on entrepreneurial behavior in public organizations in Iran, *International academy of organizational behavior management* , Vol.1, No. 2.p.86-108.
- Szyliowicz, D. and Galvin, T. (2010), Applying broader strokes: extending institutional perspectives and agendas for international entrepreneurship research, *International Business Review*, Vol. 19 No. 4, pp. 317-32.
- Tajeddini, K.,(2010), Effect of customer orientation and entrepreneurial orientation on innovativeness: Evidence from the hotel industry in Switzerland, *Tourism Management*. 31, 2010, 221–231.
- TANȚĂU A.D.(2008), Common Dimensions For Entrepreneurship And Strategy: The Need For Strategic Entrepreneurship”, Vol. 3,<http://www.managementmarketing.ro/pdf/articole/94.pdf>.
- Tsai Wen-Hsien, Kuo. Hsiao-Chiao,(2011), ”Entrepreneurship policy evaluation and decision analysis for SMEs”, *Expert Systems with Applications* 38 , 8343–8351.
- Weismeier-Sammer .Daniela (2011), Entrepreneurial behavior in family firms: A replication study, *Journal of Family Business Strategy* 2 , 128–138
- Wiklund.J.,Shepherd,D.A.,Patzelt,H.(2009). Building an Integrative Model of Small Business Growth, *Small Business Economics* 32 (4), pp. 351-374.
- Zahra, S.A., Kuratko, D.F., & Jennings, D.F. (1999). Entrepreneurship and the acquisition of dynamic organizational capabilities. *Entrepreneurship Theory and Practice*, 23(3), 5–10.
- Zheng J (2009), Entrepreneurship and innovation: the case of Yangtze River Delta in China, *Journal of Chinese Entrepreneurship*, Vol. 1 No. 2, pp. 85-102.
- ZeqiriIzet.(2010), A theoretical overview of the interactions between entrepreneurship and strategic management”, Munich Personal RePEc Archive(MPRA paper), Online at <http://mpa.ub.uni-muenchen.de/21943/>, No. 21943, pp. 1-9.

