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DEVELOPMENT AND VALIDITY OF THE TEST OF ENTREPRENEURIAL BEHAVIOR SCALE IN SPORT'S SMES IN IRAN

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ABSTRACT

The aims of this study was to development and validity of the instrument that measures the test of entrepreneurial behavior scale in sport SMEs in Iran by using confirmatory factor analysis. Entrepreneurial behavior scale consists of the same five subscales as the initial test of the entrepreneurial behavior Scale: willingness to change, generational involvement, perceived technological opportunities, strategic planning and the entrepreneurial behavior in sport. This study was carried out in an attempt to assess content, predictive, and construct validity, as well as internal consistency of the entrepreneurial behavior Scale, using 473 sport small to mid-sized enterprises in Iran samples. Confirmatory factor analysis (CFA) was used to reduce the number of items and confirm the latent structure of the entrepreneurial behavior Scale. Results supported the multidimensional nature of the entrepreneurial behavior Scale in sport enterprises. Result show that reduced a 20-item pilot questionnaire to a 16-item instrument measuring Acceptance. A series of subsequent analyses resulted in the deletion of 4 items from the original 20-item EBS scale.

Keywords: Validity, entrepreneurial behavior scale, sport SME

INTRODUCTION

Sport is an important economic and social driver of regional development around the world. The sports industry is large and one of the most visible worldwide. Entrepreneurs can be economic or private enterprise-based or social. Both economic and social

entrepreneurs gather resources and use their human capital in order to add value and create wealth. The entrepreneurial process includes both economic and social processes that are based on knowledge and understanding of innovative behavior [1]. Entrepreneurialism is a role of founding businesses and includes a set of behaviors that are followed [2]. Entrepreneurial behavior of established businesses is viewed as a crucial prerequisite for growth and performance in dynamic environments [3, 4 & 5].

Entrepreneuring is a type of entrepreneurial behavior that often results from environmental signals, which influence an entrepreneur's actions and situation. Entrepreneurial behavior is primarily about change in industries, markets and organizations. An enterprise is "a structure or activity or set of behaviors that individuate a type or class" [6]

Sport entrepreneurship can be applied to entrepreneurial opportunities that involve sport and are based on incremental market improvement or highly innovative market advancements. Opportunity recognition is a primary ingredient of entrepreneurship as it is a goal orientated behavior that involves the creation of something of value [7].

Firm-level entrepreneurship behaviors are entrepreneurial efforts that exist within an organization (Sharma and Chrisman, 1999). They have also been referred to as corporate entrepreneurship, corporate venturing, entrepreneurships and entrepreneurial orientation [8]. Antoncic and Hisrich (2004) refer to firm-level entrepreneurial behaviors as being the behavioral intentions and behaviour of an organization. They are different to other types of behavior as they deviate from the usual way of doing business [9]. They are innovative ways that a firm decides to use in pursuit of its opportunities [10]. Often firms use different norms and strategies to act entrepreneurially within their firm [11]

In the past decade, practitioners have shown an increased interest in sports entrepreneurship as sport organizations have globalised. In the global business environment, both small and large organizations need to react quickly to changing market conditions in order to stay competitive [12]. Moreover, organizations need to behave entrepreneurially in order to identify new opportunities and make these opportunities profitable in the long term [13]

Sports organizations need to encourage innovation as a response to challenges they

face. Innovation includes outlook, behaviors, strategy and operations [14].

This paper identifies the question of what needs to be investigated in this new area of entrepreneurship behavior in sport organization. The aim of this paper is to provide an overview of the contemporary research issues for both entrepreneurship and behavior academics by providing a testing ground to explore future ideas.

This paper contributes to filling this gap by examining how certain factors impact the entrepreneurial behavior exhibited by sport firms. It aims at the examination of interrelations between the factors (1) willingness to change, (2) generational involvement, (3) perceived technological opportunities, as well as (4) strategic planning, and entrepreneurial behavior in sport businesses.

Corporate entrepreneurship: Entrepreneurial behavior of established businesses (corporate entrepreneurship) is seen as an important prerequisite for firm survival, due to its potential to create income and wealth for members [15 & 16]. In the following sections, two culture-related prerequisites for corporate entrepreneurship (willingness to change, perceived technological opportunities), a typical family-firm characteristic (generational involvement), and a potential moderating factor (strategic planning), together establishing the research model are discussed.

Willingness to change: As mentioned in the introduction to this paper, firms are often said to be reluctant to change, because they fear conflict resulting from modernization [17, 18 & 19]. Likewise, this change-averse attitude, which views innovation as a threat rather than a chance, may impact the development of the business negatively and lead to stagnation and loss of market share [20].

Generational involvement: It is assumed that the level of entrepreneurial behavior is different among the businesses of different generations. In their first generation, the businesses are based on business opportunities recognized and exploited in a more or less successful way by an innovative founder [21]. Nonetheless, throughout the years founders seem to lose their entrepreneurial spirit [22] and show risk-averse attitudes, focusing predominantly on the steadiness of the business and its long-term survivability [23].

Perceived technological opportunities: Besides willingness to change and the involvement of multiple generations, the businesses need a distinct ability to perceive

possibilities for innovation in their environment to engage in entrepreneurial activities [13]. ‘‘technological opportunities’’ refer to the degree to which the businesses perceive their industry to be rich in opportunities.

Strategic planning: strategic planning has positive effects on the three factors discussed before [15]. It may be seen as an ‘‘integrative device’’ that allows for a greater participation of members of different generations in the innovation process [24]. It enables the businesses to keep pace with change in the business and the environment [25], and, finally, strategic planning serves as an important tool for members involved in the business to enlarge their understanding of the business’ environment and therefore fosters the perception of opportunities [26 & 27].

To consider another cultural aspect concerning entrepreneurial behavior of businesses, the future orientation of the two cultures has been chosen as a standard of comparison, as it is ‘‘the fundamental decision variable for all organizations because it represents the problem of allocation of resources over time’’ [28]. Consequently, the relationship of the EBS owners indicates how certain entrepreneurial behavior are used may reflect the ability of these more seasoned business professionals to initiate and sustain new ventures. While past research has not yet examined this issue directly, in sport enterprises.

A new behavior technique is required due to increasing development within today’s society. The sports industry is a demanding and increasing market in which is becoming one of the most important and has the most potential. However research is required in different societies to identify what behavior techniques from different companies will be best suited to the to the sports industry. The Entrepreneurship behavior technique is a new theory which could potentially be applied to the sports industry therefore the reliability and validity has to be studied and tested to ensure that it is a suitable method. This study will be carried out within this paper.

MATERIALS AND METHODS

Participants were samples of473managersin small to mid-sized sports enterprises in Iran. These enterprises are companies which either provide a sports service or are manufacturers or suppliers of sports equipment and clothing.

Use of the entrepreneurial behavior dimensions within an SMES will largely reflect the decisions of the owner/operator. It is the focus of this research to understand more about the relationship of

owner/operator characteristics and how these impact the use of entrepreneurial behavior.

Out of a list of over 1500 sports enterprises, a stratified random sample was drawn of 500 small to medium sized businesses. Criteria included sport manufacturers, sport industries wholesalers/distributors, retailers, and sport service businesses. Out of 500 questionnaires that were distributes 473 were completed and collected.

The items were used to measure five entrepreneurial behavior dimensions. Respondents were asked to rate their agreement on a 7-point Likert scale with a series of statements regarding the operation of their company.

The 20 -item of the EBS was used as a self-reported measure of entrepreneurial behavior. Participants responded to each item on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). Previous research supports the structure, reliability, and validity of the SMES.

Reliability:

Internal consistency estimates were calculated to evaluate the reliability of the revised 20-item scale. Cronbach's alpha coefficients indicated in table 1:

Table 1.Cronbach's alpha coefficient entrepreneurial behavior

Validity	Cronbach's alpha	items
Willingness to change	0/80	3
Perceived technological opportunities	0/77	3
strategic planning	0/84	3
Corporate entrepreneurship	0/89	7

Entrepreneurship behavior consists of five sections which after analysis and evaluation have found that some of the items from the five dimensions are limited. One of the items from the Willingness to change section is limited, also one of the items from each factors Perceived technological opportunities, strategic planning, Generational involvement are limited. Generational involvement has a one item therefore this factor is limited. This is due to a lack of reliability in the data.

Data analysis:

Fit indexes. Various goodness-of-fit indexes were utilized to evaluate the adequacy of the factorial structure of the four competing models. The statistic (in this case, the Satorra–Bentlerscaled as robust maximum likelihood was used) evaluates the absolute fit of the hypothesized model to the data. However, this statistic is very sensitive to sample size. Therefore, additional fit indexes were employed to evaluate model fit. The Robust Comparative Fit Index (CFI) and the Non-Normed Fit Index (NNFI) were utilized to compare the hypothesized model with the

independence model. The Standardized Root Mean Square Residual (SRMR) was also employed, because it represents the average of the standardized residuals between the specified and obtained variance– covariance matrixes. The Root Mean Square Error of Approximation (RMSEA) was also utilized to assess the Closeness of fit of the hypothesized model to the population covariance matrix. When the 90% confidence interval of the RMSEA contains 0/05, it indicates the possibilities of close fit. A simulation study by Hu & Bentler suggested new cut-off criteria for the various fit indexes. According to these new criteria, a good model fit is indicated when the CFI and the NNFI are close to 0/95, the SRMR is close to 0/08, and the RMSEA is close to 0/06. To compare the four models, difference tests were carried out. However, due to the sensitivity of the statistic, two more fit indexes were employed. The first one was the Akaike Information Criterion (AIC), which assesses whether a good model fit can be achieved with fewer estimated parameters. The second fit index was the Expected Cross-Validation Index (ECVI), which represents an approximation of the fit that the hypothesized model would achieve in another sample of the same size. The AIC and ECVI do not have a specified range of acceptable values, but amongst the competing models, the one with the lowest AIC and ECVI values would be the most parsimonious and most likely to replicate to other samples.

RESULTS

Results show that we evaluated the measurement model of the SME using confirmatory factor analysis (CFA) and the maximum likelihood estimation with LISREL 8/8. Several types of indices for determining overall model fit for the SME measurement model were used including the goodness-off it statistic and several other fit indices both absolute and incremental that supplement the chi-square test. These indices are the Goodness-of-Fit (GFI), the Adjusted GFI (AGFI), Normed Fit Index (NFI), and the root mean- square error of approximation (RMSEA). The RMSEA 90% confidence intervals are also provided to assist in interpreting these point estimates. An absolute fit index (e.g., RMSEA) assesses how well a model reproduces the sample data without comparison to a reference model, whereas an incremental fit index (e.g., CFI, TLI, and IFI) compares the target model to a more restricted baseline model (Hu &Bentler, 1999). Values on the GFI, AGFI, and NFI that are 0/92, 0/90 and 0/92 are generally taken to reflect acceptable and

excellent fits to the data, respectively. For the RMSEA, values of 0/090less indicate an adequate fit.

Table 2: Factor analysis (CFA) entrepreneurial behavior in sport (EBS)

subscale	item	mean	ES
Willingness to change	Wc1	16/71	0/72
	Wc2	23/36	0/95
	Wc3	15/55	0/68
Perceived technological opportunities	Pt1	19/80	0/85
	Pt2	18/62	0/81
	Pt4	12/46	0/57
strategic planning	Sp1	22/12	0/87
	Sp2	22/77	0/89
	Sp3	15/37	0/66
Corporate entrepreneurship	CE1	15/25	0/65
	CE2	15/75	0/67
	CE3	21/30	0/83
	CE4	19/85	0/79
	CE5	19/83	0/79
	CE6	18/26	0/74
	CE7	15/59	0/66

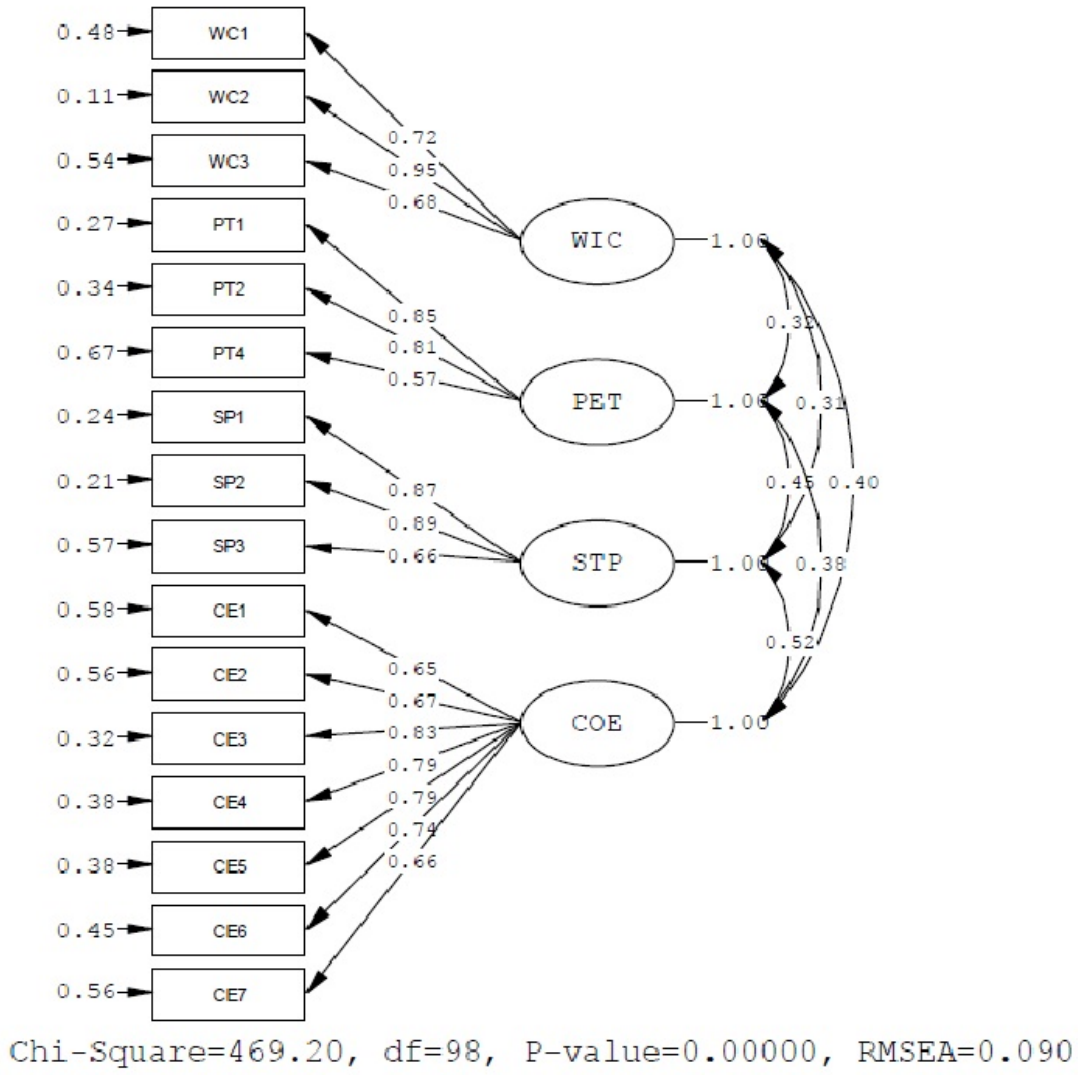

Fig. 1: Results estimate standard of the CFA Factor analysis illustrating the entrepreneurial behavior in sport enterprise

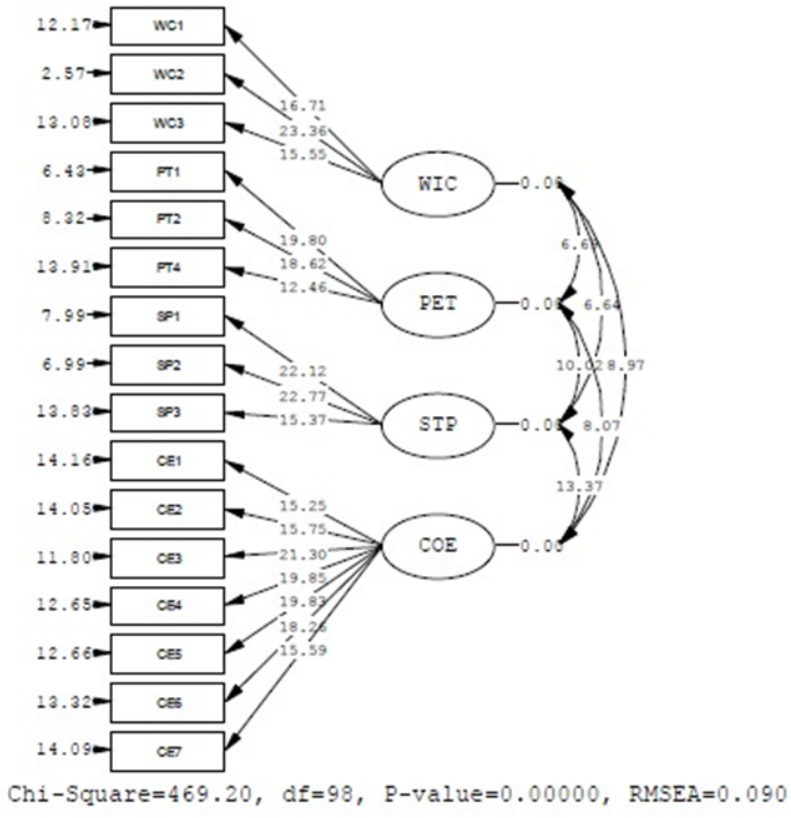

Fig. 2: Results T-value of the CFA Factor analysis illustrating the entrepreneurial behavior in sport enterprise

Table 3: Fit statistics for the model

Model	NFI	AGFI	GFI	$\chi 2$	df	RMSEA	p-value
	0/92	**0/90**	**0/92**	**469/20**	**98**	**0/090**	**0/000**

DISCUSSION

Entrepreneurial behavior represents a non-traditional approach. It is a proactive marketing process. Owners with more entrepreneurial experience use Willingness to change, are more Perceived technological opportunities, use strategic planning more frequently, and Corporate entrepreneurship utilized. EBS scores were normally distributed in most samples examined, indicating that the scale is fit.

The BES appeared to be reliable across several samples and in addition to its face validity, it showed encouraging convergent validity. An analysis of the one-factor, 20-item BES model (Weismeier, 2011) evidenced show model fit (see Table 2,3& figure 1,2).As the a priori measurement

model was of poor fit, items were considered for deletion if they displayed large standardized residuals, if modification indices suggested that the error term of an item correlated with that of another item, or if an item had a low factor loading. Accordingly, we conducted a series of one-factor, congener analyses in which items were allowed to load on only one hypothesized factor (i.e., adequate indicators of the latent variable), and error terms were not allowed to correlate until an adequate measurement model was obtained. A series of subsequent analyses resulted in the deletion of4 items from the original 20 -item scale. low factor loadings indicated that each of these four - items did not correspond with the other items loading on the Entrepreneurial behavior in sport enterprise. The resultant 16-item, four-factor model showed excellent model fit and adequate internal reliability.

Consequently, the BES in IRAN can be considered the new marketing techniques Entrepreneurial behavior in sport enterprise and the results partially supporting the reliability and validity of the scale. These results justify its use in different enterprises sports and research settings aiming the sport Entrepreneurial behavior evaluation.

REFERENCES

1. Ratten, V. (2012). Guest editor's introduction: Sports entrepreneurship: towards a conceptualization, Int. J. Entrepreneurial Venturing, Vol. 4, No. 1, 2012.
2. Gartner, W. (1988) 'Who is an entrepreneur? Is the wrong question', Entrepreneurship, Theory and Practice, Vol. 13, No. 4, pp.47–68.
3. Barringer, B. R., & Bluedorn, A. C. (1999).The relationship between corporate entrepreneurship and strategic management. Strategic Management Journal, 20, 421–444.
4. Covin, J., & Slevin, D. (1991).A conceptual model of entrepreneurship as firm behavior. Entrepreneurship Theory and Practice, 16, 7–25.
5. Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. Strategic Management Journal, 11, 5–15.
6. Chell, E. (2007) 'Social enterprise and entrepreneurship: towards a convergent theory of the entrepreneurial process', International Small Business Journal, Vol. 25, No. 1, pp.5–23.
7. Gaglio, C.M. (2004) 'The role of mental simulations and counterfactual thinking in the opportunity

identification process', Entrepreneurship Theory and Practice, Vol. 28, No. 1, pp.533–552.

8. Sharma, P. and Chrisman, J. (1999) 'Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship', Entrepreneurship, Theory and Practice, Vol. 23, No. 3,pp.11–27.

9. Antoncic, B. and Hisrich, R.D. (2004) 'Corporate entrepreneurship contingencies and organizational wealth creation', Journal of Management Development, Vol. 23, No. 6,pp.518–550.

10. Kuratko, D.F., Ireland, R.D. and Hornsby, J.S. (2001) 'Improving firm performance through entrepreneurial actions: Acordia's corporate entrepreneurship strategy', Academy of Management Executive, Vol. 15, No. 4, pp.60–71.

11. Lumpkin, G.T., Cogliser, C.C. and Schneider, D.R. (2009) 'Understanding and measuringautonomy: an entrepreneurial orientation perspective', Entrepreneurship Theory and Practice, January, pp.47–69.

12. Fayolle, A., Basso, O. and Bouchard, V. (2010) 'Three levels of culture and firms entrepreneurial orientation: A research agenda', Entrepreneurship & Regional Development, Vol. 22, Nos. 7/8, pp. 707–730.

13. Shane, S., and Venkataraman, S. (2000) 'The promise of entrepreneurship as a field of research',Academy of Management Review, Vol. 25, No. 1, pp. 217–26.

14. Chell, E., Nicolopoulou, K. and Karatas-Ozkan, M. (2010) 'Social entrepreneurship and enterprise: international and innovation perspectives', Entrepreneurship & Regional Development, Vol. 22, No. 6, pp.485–493.

15. Kellermanns, F. W., &Eddleston, K. A. (2006). Corporate entrepreneurship in familyfirms: A family perspective. Entrepreneurship Theory and Practice, 30, 809–830.

16. Zahra, S. A., Hayton, J. C., &Salvato, C. (2004). Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture. Entrepreneurship Theory and Practice, 28, 363–381.

17. Beckhard, R., & Dyer, W. G., Jr. (1983). SMR forum: Managing change in the family firm–Issues and strategies. Sloan Management Review, 24, 59–65.

18. Vago, M. (2004). Integrating change management: Challenges for family business clients and consultants. Family Business Review, 17, 71–80.

19. Ward, J. L. (1987). Keeping the Family Business Healthy. San Francisco: Jossey-Bass.

20. Miller, D., Steier, L., & Le Breton-Miller, I. (2003).Lost in time: Intergenerational succession, change and failure in family business. Journal of Business Venturing, 18, 513–531.

21. Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. Journal of Business Venturing, 18, 573–596.

22. Salvato, C. (2004). Predictors of entrepreneurship in family firms. Journal of Private Equity, 7, 68–76.

23. Morris, M. H. (1998). Entrepreneurial intensity. Westport, CT: Quorum Books.

24. Ketokivi, M., &Castaner, X. (2004).Strategic planning as an integrative device.Administrative Science Quarterly, 49, 337–365.

25. Upton, N., Teal, E. J., &Felan, J. T. (2001). Strategic and business planning practices offast growth family firms. Journal of Small Business Management, 39, 60–72.

26. Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporatecontext, and the concept of strategy. Academy of Management Review, 8,61–70.

27. Hambrick, D. C. (1981).Specialization of environmental scanning activities amongupper level executives. Journal of Management Studies, 18, 299–320.

28. Ashkanasy, N., Gupta, V., Mayfield, M. S., & Trevor-Roberts, E. (2004). Future orientation. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), Culture, leadership, and organizations: The GLOBE study of 62 societies (pp. 282–342).

29. Weismeier, Daniela. (2011). Entrepreneurial behavior in family firms: A replication study. Journal of Family Business Strategy 2 ,128–138.

Index (1)

Willingness to Change

1. Family members are generally ready to take on any new challenges that our family firm faces.
2. Family members are generally open to trying new things for our family firm.
3. Family members are generally fascinated by novel ideas.

Perceived Technological Opportunities

1. Opportunities for product innovation are abundant in our major industry.
2. Opportunities for technological innovation are abundant in our major industry.
3. Opportunities for major technological breakthroughs are abundant in our major industry.

Strategic Planning

1. We have a strategy for achieving our business' goals.
2. We have a plan for our business.
3. We know what we need to do to reach our business' goals.

Corporate Entrepreneurship

1. Our firm has introduced many new products or services over the past three years.
2. Our firm has made many dramatic changes in the mix of its products and services over the past three years.
3. Our firm has emphasized making major innovations in its products and services over the past three years.
4. Over the past three years, our firm has shown a strong proclivity for high-risk projects (with chances of very high return).
5. Our firm has emphasized taking bold, wide-ranging action in positioning itself and its products or services over the past three years.
6. Our firm has shown a strong commitment to research and development, technological leadership, and innovation.
7. Our firm has followed strategies that allow it to exploit opportunities in its external environment.