Article

# **Exploring Human Resource Factors Based Entrepreneurship**

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**Abstract:** Entrepreneurial opportunities arise when certain individuals have insight into the value of resources that others do not have. Entrepreneurial vigilance, entrepreneurial knowledge, and the ability to coordinate resources as their own. This study is intended to advance our understanding of human resource factors based on entrepreneurship. A total of 175 questionnaires were sent to HRM managers, and 150 received back is 86% response rate of 175 SMEs. Factor analysis is used to assess the underlying structure of human resources. Responses to the HRM and entrepreneurship items were analyzed using multivariate analysis of variance (MANOVA). The results of this study identify that the human resource factors that greatly influence entrepreneurship are Entrepreneurial Ability and Entrepreneurial Innovation, Entrepreneurial Intelligence, Entrepreneurial Knowledge, and Entrepreneurial Competence.

**Keywords:** Entrepreneurial Ability; Entrepreneurial Innovation; Entrepreneurial Intelligent; Entrepreneurial Konowledge; Entrepreneurial Competence

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# 1. Introduction

Most frequently the research examining human resources in the context of entrepreneurship has looked at the number of qualifications [1], the diversity of qualifications and experience [2], the productivity of personnel [3], and the education and experience of top management teams [4]. The theories about human resource, cannot be extended to small-medium-enterprise (SMEs) and tend to be incongruent with the actual human resource issues encountered by SME practitioners in the field [5]. Previous research suggests that configurations of human resource practices may lead to higher performance on the part of firms and become sources of sustained competitive advantage because these

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systems of practices are often unique and difficult to imitate [6]. There have been numerous empirically based studies that examine the relationships between entrepreneurship and organizational performance [7]. This study attempts to fill this gap by extending current entrepreneurship based human resource theories.

## 2. Literature

#### 2.1. Human Resource

According to the resource-based view, in order for a resource to qualify as a source of sustained competitive advantage, the resource must add value to the firm, must be rare and difficult to imitate, and may not have any adequate substitutes [8]. Human capital resource includes such things as the experience, judgment, and individual intelligence. Therefore, four criteria must be attributable to the resource in order for it to provide a sustained competitive advantage: 1) the resource must add positive value to the firm, 2) the resource must be unique or rare among current and potential competitors, 3) the resource must be imperfectly imitable, and 4) the resource cannot be substituted with another resource by competing firms [9]. As the pool of human capital under the firm's control in a direct employment relationship [10].

Focus on knowledge, skills, and abilities inherent in the individuals that make up the organization [11]. Skills of human being in organizations. Competencies include such as knowledge, skills, and abilities [12]. The human is considered as the first source of added value. Significant links existing between investing in the human resources management activities (employment protection, profits share, evaluation, incentives, compensation, carriers, communication) and organizational effectiveness [13]. Value creation [14]. Based on these opinions, it can be claimed that human resources are qualified individuals with appropriate intelligence and experience in sustained competitive advantages.

## 2.2. Entrepreneurship

Since entrepreneurship can be defined as "innovative behavior allied to a strategic orientation in pursuit of profitability and growth" [15]. However, important gaps remain in our understanding of entrepreneurial and innovation, which consequently limit our understanding of the economic, societal, and technological contribution. Cites in [16] on the individual "innovating" entrepreneur who bring new combinations that include new processes, new product, sources of supply, new markets and new form of organization, that entrepreneurial activity require to grow and develop any economy is traceable to individuals' entrepreneurs.

This emphasizes the role of the entrepreneurial knowledge user in the process that creates value for the entrepreneurial firm and ultimately contributes to the growth of industries, regions, and economies [17]. Other opinion states that resource-based value can theoretically inform and extend current research on entrepreneurship [18]. They suggest that through the entrepreneurial process of cognition, discovery, understanding of market opportunities, and coordinated knowledge can transform inputs into heterogeneous outputs.

## 2.3. Human Resources based Entrepreneurship

Entrepreneurship requires the ongoing acquisition and development of new resources and new ways of reconfiguring resources. Human Resource has led to new business models coming into existence and plays a pivotal role in digital transformation [19]. A lot of

universities build critical human capital, generate new knowledge and strive to promote innovation through academic entrepreneurship [20]. After reviewing the literature on the resource-based view, this paper explores the idea that HR and the managerial characteristics of entrepreneurs may function as organizational competencies and be sources of sustained competitiveness for development and integration of organizational competencies. A good deal of attention has been paid to the role of human resources, in enhancing organizational performance and creating sustained competitive advantage in the context of entrepreneurship [21], managerial and psychological characteristics of entrepreneurs [22].

The prevalent dimensions were: Entrepreneurial Knowledge is a major manifestation of human capital necessary for entrepreneurial success and sustainability [23]. The concepts, skills, and mentality which entrepreneurs use or should use [24]. Reflecting one's knowledge on the basic functional activities necessary to start a business [25]. Entrepreneurial Experience is a process of understand your customer needs, build products that customers desire and validate business viability. An essential differentiation is made between "habitual entrepreneurs" who have previous business-ownership experience and "novice entrepreneurs" who are running their business without any prior entrepreneurial experience [26]. Entrepreneurial ability is turning ideas into action, it's includes creativity, innovation and risk-taking. Entrepreneurial alertness was introduced into the entrepreneurship literature by Kirzner, who defined it first as 'the ability to notice without search opportunities that have hitherto been overlooked [27], Entrepreneurial judgement is imaginative skills, derivation of decision rules, analytical skills and searching skills [28], Entrepreneurial intelligent a combination blend of analytical, creative, and practical aspects of intelligence [29], Entrepreneurial competence is a set of skills and ability that individuals possess and/or can acquire and improve to become proactive and to show the initiative spirit [30], Entrepreneurial innovation is a set of knowledge of operations innovation, market/marketing innovation, organizational innovation, and boundary management innovation [31], Entrepreneurial orientation is a processes, practices, and decision-making activities that lead to new entry [32].

To date, little attention has been given to the high-performance work systems (HPWSs) of SMEs [33]. Since firms in Asian countries may have different HR, it is valuable to look at the relationship between HR and entrepreneurship. Second, this article examines the effects of entrepreneurship on firm performance factor. Entrepreneurship has been considered to influence the improvement of firm performance [34], strong leadership and a centralized decision-making mechanism [35]. Thus, this study is intended to advance our understanding of human resource factors based on entrepreneurship.

# 3. Methods

Survey instruments is use questionnaire directed at HRM managers was principally concerned with having them characterize the firm's HRM practices. A total of 175 questionnaires were sent to HRM managers, and 150 were received back for 86% response rate from 175 SMEs. Factor analysis was first run to assess the underlying structure of the human resources. A total of 3 factors with eigenvalues greater than 1.0 were generated, explaining 58% of the variance in the data. Labels were assigned to each factor based on item loadings. Reliabilities (Cronbach alpha) were computed for these factors, and an item

analysis performed, resulting in a coefficient of .71. Accordingly, the summated entrepreneurship scores for managers were correlated (Pearson's), and responses to the HRM and entrepreneurship items were made using multivariate analysis of variance (MANOVA).

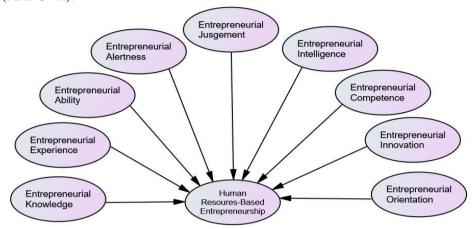


Figure 1. HRBE forming factors.

## 4. Result and Discussion

In the spite of fact that the relationship between HR practices and entrepreneurship is complex, a resource-based view of the firm points out the potential for managers to play an active role in developing such an advantage through focusing on firm resources. The role of managers, then, is to recognize, develop, and exploit the resources within the firm. In line with [36] stated that advantages must be found in the rare, imperfectly imitable, and non-substitutable resources already controlled by a firm.

The variant analysis of each human resource factor is as presented in the following table below.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy.	.628
Bartlett's Test of Sphericity	Approx. Chi-Square	245.623
Bartiett's Test of Sphericity	T- 0	
	Df	36
	Sig.	.000

Source: Processed data

The results show that KMO MSA 0.628 > 0.50 and Bartlett's Test of Sphericity (Sig) 0.000 < 0.05. It is showed that the factor analysis in this study fulfilled the requirements.

Based on the table 2 output below, that the extraction value for all variables is greater than 0.50, thus all variables can be used to explain factors.

 Table 2. Anti-image Matrices

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		Ent.	Ent.	Ent.	Ent.	Ent.	Ent.	Ent.	Ent.	Ent.
		Knowledge	Experience	Ability	Alertness	Judgement	Intelligent	Competence	Innovation	Orientation
ခ	Entre. Knowledge	.845	179	024	126	055	106	090	.062	.127
anc	Entre. Experience	179	.780	.031	035	.006	109	.015	133	166
ar.	Entre. Ability	024	.031	.624	017	212	.025	.124	253	125
, O	Entre. Alertness	126	035	017	.638	.092	.090	150	228	219
e.	Entre. Judgement	055	.006	212	.092	.725	036	189	062	111
-imag	Entre. Intelligent	106	109	.025	.090	036	.788	195	.038	136
. <u>.</u>	Entre. Competence	090	.015	.124	150	189	195	.729	.004	055
, Tig	Entre. Innovation	.062	133	253	228	062	.038	.004	.605	.146
4	Entre. Orientation	.127	166	125	219	111	136	055	.146	.674
on	Entre. Knowledge	.608a	221	034	172	070	130	115	.087	.169
atio	Entre. Experience	221	.718 <sup>a</sup>	.044	049	.008	140	.020	193	229
<u>e</u>	Entre. Ability	034	.044	.614a	027	315	.036	.184	412	193
ДOП	Entre. Alertness	172	049	027	.617a	.136	.127	220	367	334
e	Entre. Judgement	070	.008	315	.136	.668a	048	260	093	159
ıage	Entre. Intelligent	130	140	.036	.127	048	.667a	257	.055	186
-in	Entre. Competence	115	.020	.184	220	260	257	.643a	.006	079
.hti	Entre. Innovation	.087	193	412	367	093	.055	.006	.571a	.228
∢	Entre. Orientation	.169	229	193	334	159	186	079	.228	.598a

Notes: Measures of Sampling Adequacy (MSA)

Based on the table 3 below, the value of initial eigenvalues and extraction sums of squared loadings that can be formed is that there are 3 variations of factors, namely [2,633, 29.25%]; [1,550, 17.22%]; and [1,042, 11.58%], so the total component value is 58.05%. The correlation value of entrepreneurial knowledge with components 1.2 and 3 is 0.395, 0.330 and 0.510.

Table 3. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1. Knowledge	2.633	29.252	29.252	2.633	29.252	29.252	1.929	21.433	21.433
<ol><li>Experience</li></ol>	1.550	17.217	46.469	1.550	17.217	46.469	1.778	19.754	41.188
3. Ability	1.042	11.579	58.048	1.042	11.579	58.048	1.517	16.860	58.048
<ol><li>Alertness</li></ol>	.918	10.199	68.247						
<ol><li>Judgement</li></ol>	.832	9.249	77.495						
<ol><li>Intelligent</li></ol>	.666	7.398	84.894						
7. Competence	.604	6.715	91.608						
8. Innovation	.419	4.654	96.263						
9. Orientation	.336	3.737	100.000						

Extraction Method: Principal Component Analysis.

While the value of entrepreneurial correlation ability with components 2 and 3 is negative at [-0.589, and - 0.238]. Correlation value of entrepreneurial knowledge with components 1.2 and 3 is 0.395, 0.330, and 0.510. While the value of entrepreneurial correlation ability with components 2 and 3 is negative at [-0.589, and - 0.238].

Table 4 shows grouped factor 1 is entrepreneurial ability 0.832 and entrepreneurial innovation 0.770. Group 2 is Entrepreneurial Judgment 0.611, Entrepreneurial Intelligent 0.707, Entrepreneurial Competence 0.661, and Entrepreneurial Orientation 0.601. While group 3 Entrepreneurial Knowledge 0.701, Entrepreneurial Experience 0.644, and Entrepreneurial Alertness 0.596.

Table 4. Related Component Matrix<sup>a</sup>

	С	omponen	ıt
	1	2	3
Entrepreneurial Knowledge	108	.147	.701
Entrepreneurial Experience	.169	.215	.644
Entrepreneurial Ability	.832	.112	037
Entrepreneurial Alertness	.464	.087	.596
Entrepreneurial Judgement	.497	.611	152
Entrepreneurial Intelligent	219	.707	.191
Entrepreneurial Competence	057	.661	.289
Entrepreneurial Innovation	.770	138	.299
Entrepreneurial Orientation	.302	.601	.149

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

Entrepreneurial Intelligent Entrepreneurial Entrepreneurial Innovation Knowledge 0.707 0.770 0.701 Entrepreneurial Entrepreneurial Competence 0.661 Ability 0.832 Human Resource Based Entrepreneurship

The model of HRBE can be seen in the following figure:

Figure 2. HRBE forming factors

The individual competencies, specific to the pursuit of corporate entrepreneurship, are fundamental to companies' ability to nurture and sustain innovation and new venture creation [37]. There is an empirical evidence to support the influence of human resource characteristics, of which individual competencies are required on entrepreneurship [38]. The performance appraisals in these organizations included higher employee involvement and participation in the process, a greater emphasis on individual performance criteria, assessments based more on outcomes or end results, a longer-term performance focus and explicit encouragement of innovative and risk-taking behaviors. From several factors that have been tested, it turns out that the dominant factors that shape human resource based on entrepreneurship are Entrepreneurial Ability and Entrepreneurial Innovation, Entrepreneurial intelligent, Entrepreneurial Knowledge, Entrepreneurial Experience.

Table 5. Variable groups of Human Resources

Factors	Variables
1	Entrepreneurial Ability and Entrepreneurial Innovation
2	Entrepreneurial Judgement, Entrepreneurial Intelligent, Entrepreneurial Competence, and Entrepreneurial Orientation
3	Entrepreneurial Knowledge, Entrepreneurial Experience, and Entrepreneurial Alertness

This means that to become a reliable entrepreneur, a good ability in the field of business is needed, has innovation in making products, has a high level of intelligence, has a lot of knowledge about the business he is going to do, and has competence in the business field. Developing policies of necessary skills, abilities and knowledge among graduates required for initiating businesses [39].

## 5. Conclusion

These results identify the factors of human resources that are very influential on entrepreneurship in cluster 1 are Entrepreneurial Ability and Entrepreneurial Innovation, and for cluster 2 are Entrepreneurial Judgment, Entrepreneurial Intelligent, Entrepreneurial Competence, and Entrepreneurial Orientation. Therefore, an important role for the HRM function in the formulation and implementation of the company's strategy is needed in the improvement of the entrepreneurial spirit. In addition, the significant findings of each of the underlying HRM dimensions identified through factor analysis show a relationship that is consistent with this proposition [40].

The implication of this study shows that human resources management also provides those interested in entrepreneurship with number of fertile opportunities for further research. A combined package of selection, training and appraisal options might have a differential impact on entrepreneurship than the sum of the impacts of the individual practices which strengthened professional activity of students and graduates [40]. Additional research should be directed towards examining possible ways in which HRM practices interact with other organizational variables in affecting entrepreneurship. Examples of such variables include company structure, technologies employed, types of budgetary and control systems and stage of the organizational life cycle.

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