

## Appraisal of An Opportunity-Based model for Rural Entrepreneurial Process

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### ABSTRACT

Research on the rural entrepreneurial process is relatively limited. This quantitative study appraised an opportunity-based model of rural entrepreneurial process that consisted of two components including the principal stages and the important factors in each stage. Using tree analysis, the pathways passed by the rural entrepreneurs and the drivers of the process were investigated. A survey was conducted with a sample of 193 rural entrepreneurs supported by Omid Entrepreneurship Fund, Iran. Based on the results, the rural entrepreneurs passed 7 pathways to get from opportunity recognition to opportunity exploitation. Process of analyzing the regression tree indicated that the rural entrepreneurial process resulted from a complex set of various stages and drivers. The first determinant stage of the predicted value of opportunity exploitation as the dependent variable was opportunity evaluation. All rural entrepreneurs were divided into two categories of low and high opportunity evaluation. The most important drivers of this stage were prior knowledge, access to expertise, and access to financial resources. According to the results, social supports, proactiveness, and expectancy for success were the most effective drivers of the rural entrepreneurial process in which opportunity revision was the most determinant stage. Opportunity examination was another determinant stage influenced by normative environment and self-efficacy. Innovativeness and social networks were the best drivers for the rural entrepreneurs who passed the rural entrepreneurial process with high ability of opportunity recognition. According to the results, both individual and contextual factors were important, in almost all pathways. To facilitate and accelerate the rural entrepreneurial process and promote its quality, it is important to consider the rural entrepreneurs' abilities.

**Keywords:** Decision tree, Drivers of rural entrepreneurship, Process model.

### INTRODUCTION

Recently, the process viewpoint has become an important perspective on entrepreneurship (Gieure *et al.*, 2020). For a better understanding of the image of this concept, it is important to observe and analyze entrepreneurship as a process rather than an entity (Anderson, 2000; Mets, 2021). To expand and implement the theories of entrepreneurship in practice, it is necessary to understand the pathways, stages, bottlenecks, timings, and drivers of the entrepreneurial process (Gove, 1986; Gallina, 2014). The entrepreneurial process

is expected to be unique in different circumstances (Anderson, 1995). The researchers' attention has centered on the macro-level of entrepreneurial process (Mets, 2021), but it is understudied at the micro-level (Nassif *et al.*, 2010) and, therefore, this issue in rural entrepreneurship is poorly understood.

Rural entrepreneurship, as a distinctive area of study in the entrepreneurship literature (Fortunato, 2014), should be seen as a process (Anderson, 1995). According to the central argument of the current study, this issue can be considered as the rural entrepreneurial process. The concept of

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entrepreneurial process is characterized as ‘the creation and extraction of value from an environment that involves the shift in value from an existing use value to a higher market value (Anderson, 2000). However, there is not enough theoretical basis and empirical evidence for understanding the details and components of the rural entrepreneurial process (Pato and Teixeira, 2016; Müller and Korsgaard, 2018). Research on the rural entrepreneurial process is relatively limited and more knowledge is needed due to the following reasons.

First, theoretical and empirical analysis of the rural entrepreneurial process contribute to the concept of rural entrepreneurship. The literature lacks a clear and transparent definition of rural entrepreneurship (Pato and Teixeira, 2018), and a general agreement on this concept and its components (Wortman, 1990). In some studies, rural entrepreneurship is defined as the development of small firms in rural areas (Lafuente *et al.*, 2007), representing the meaning of rural business. In the others, rural entrepreneurship has the same concept as entrepreneurship and limitation of this concept to the rural boundaries can be conceptualized as an independent concept (Fortunato, 2014; Pato and Teixeira, 2018). It is necessary to distinguish the concept of rural entrepreneurship from the other forms of businesses related to rural areas such as “entrepreneurship in rural areas” or “rural business” (Masoomi and Rezaei-Moghaddam, 2022). In order to understand rural entrepreneurship, it is necessary to consider this concept as a process (Anderson, 1995). Therefore, investigation of the rural entrepreneurial process is an appropriate way to understand the pure concept of rural entrepreneurship and its components.

Second, theoretical and empirical analysis of the rural entrepreneurial process contribute to the rural entrepreneurship in theory and practice. Rural entrepreneurship has become increasingly popular due to the growing importance of entrepreneurship (Yu

and Artz, 2019) and rural issues (Kalantaridis *et al.*, 2019). In other words, entrepreneurship is known as an important tool facilitating rural development (Ataei *et al.*, 2020). It can be seen in the increasing number of studies on rural entrepreneurship (Pato and Teixeira, 2016) and the growing interest of policy makers in supporting this concept in rural areas (Yu and Artz, 2019; Haji *et al.*, 2020). Theorizing the rural entrepreneurial process contributes to identifying the mechanisms that form this process and analysis that, in practice, helps to validate these mechanisms. The rural entrepreneurship literature is suffering from the lack of theoretical and empirical studies on the subject of rural entrepreneurial process.

Summing up, investigation of the rural entrepreneurial process theoretically and empirically can be a starting point and theoretical support for the rural entrepreneurship literature and a road map for rural entrepreneurs and policy makers in order to develop and support rural entrepreneurship. An opportunity-based model of rural entrepreneurial process has been introduced in a recent study by Masoomi *et al.* (2021). The present study aimed to contribute to a more comprehensive understanding of the rural entrepreneurial process by appraisal of this model.

## MATERIALS AND METHODS

### An Opportunity-Based Model for Rural Entrepreneurial Process

Shane and Venkataraman (2000) believed that a field of social science must have its own specific conceptual framework explaining and predicting a set of empirical phenomena that is not explained or predicted by the existing conceptual frameworks in other fields. They explained a framework for the entrepreneurship. Today, rural entrepreneurship as a field of social science should be studied as a distinctive area of

study (Fortunato, 2014) to have its own specific conceptual framework. In other words, rural entrepreneurship has lacked a comprehensive, or even an initial, conceptual framework (Pato and Teixeira, 2018). The process viewpoint could be a useful tool for investigation of the concept of rural entrepreneurship.

There are different perspectives on the entrepreneurial process. Some focus on an entrepreneur as a person who establishes a new business (Gartner, 1988; Henry and McElwee, 2014), but the recent perspectives are concentrated on the entrepreneurial opportunities (Eckhardt and Shane, 2003). The opportunity-based perspective is more comprehensive due to the focus on both the process of entrepreneurship and the entrepreneurs (Shane and Venkataraman, 2000).

Summing up, on one hand, the phenomenon of rural entrepreneurship is required to have its own conceptual framework and, on the other hand, process viewpoint is a key perspective for investigation of a phenomenon and opportunity-based view is a useful

perspective. In this regard, Masoomi *et al.* (2021) introduced an opportunity-based model for rural entrepreneurial process (Figure 1).

As demonstrated in Figure 1, this model has been made by combining two main components including the principal stages and the key drivers at each stage. Based on this model, the rural entrepreneurial process starts with opportunity recognition and ends with opportunity exploitation. The bolder arrows in the model show the possible pathways of the rural entrepreneurial process. The other arrows represent the influence of factors on each stage of this process. The influencing mechanisms of the factors pertains to the paths that rural entrepreneur passes. All factors are explained in Table 1.

There are several pathways from opportunity recognition as the first stage to opportunity exploitation as the last stage of the process. It is clear that all rural entrepreneurs do not pass all possible paths. Therefore, discovering the more common paths is an important specific purpose that

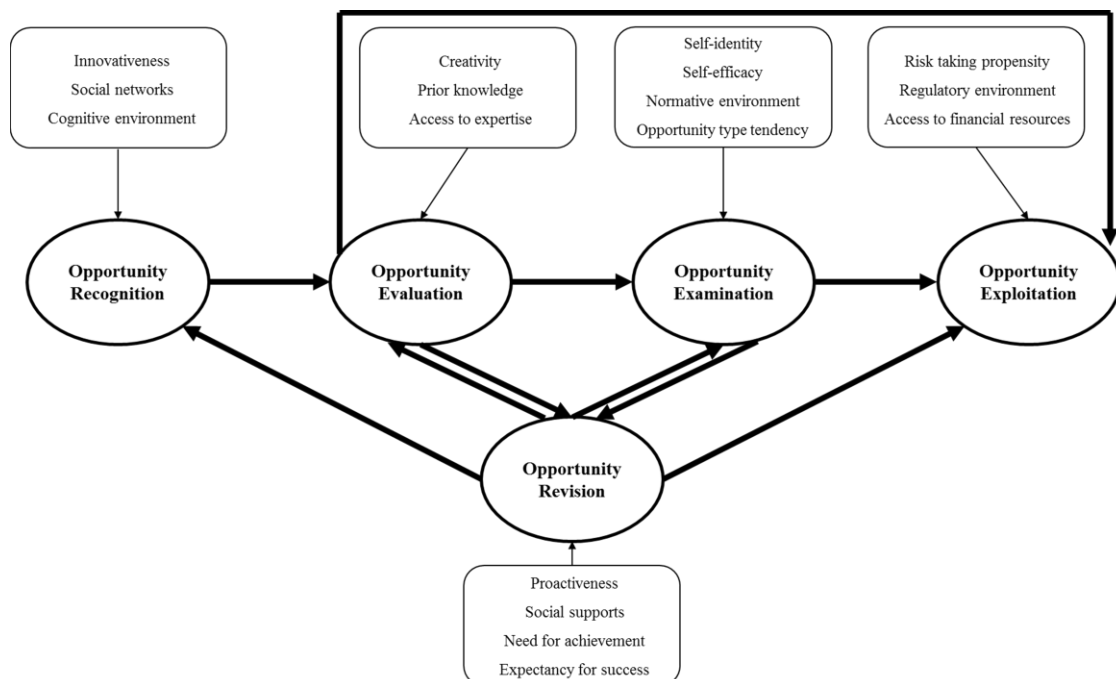


Figure 1. Opportunity-based model for rural entrepreneurial process (Masoomi *et al.*, 2021).

Table 1. Details of the study variables.

Variable	Explanation	Source	Number of items	Cronbach's alpha
Rural entrepreneurial opportunity recognition	The ability of the individuals to recognize a situation in which creating value for rural areas would be profitable.	Wang <i>et al.</i> (2013); Masoomi <i>et al.</i> (2021)	5	0.78
Rural entrepreneurial opportunity evaluation	The ability of the individuals to comprehensively assess a rural entrepreneurial opportunity in terms of validity and profitability in theory.	Tang <i>et al.</i> (2012); Masoomi <i>et al.</i> (2021)	4	0.83
Rural entrepreneurial opportunity examination	The ability of the individuals to examine a rural entrepreneurial opportunity in a small scale in practice.	Masoomi <i>et al.</i> (2021)	4	0.71
Rural entrepreneurial opportunity exploitation	The ability of the individuals to turn a rural entrepreneurial opportunity into a business.	Kuckertz <i>et al.</i> (2017); Masoomi <i>et al.</i> (2021)	4	0.87
Rural entrepreneurial opportunity revision	The ability of an individual to change, update, and improve a rural entrepreneurial opportunity.	Masoomi <i>et al.</i> (2021)	4	0.86
Creativity	The ability of recognizing the relationships between problems and solutions through reshaping resources in the new ways.	Ardehivili and Cardozo (2000)	5	0.72
Self-efficacy	The perception of an individual's ability to accomplish a task and an individual's confidence in his/her skills.	Urban (2006)	6	0.91
Prior knowledge	The information about a specific subject matter such as customers' needs.	Shepherd and DeTienne (2005)	5	0.89
Social networks	The interpersonal ties for acquiring resources and obtaining required information.	Wang <i>et al.</i> (2013); Bolton and Lane (2012)	5	0.85
Innovativeness	The degree to which an individual is relatively earlier in adopting new ideas than other members of his social system.		4	0.79
Cognitive environment	The community's cognition, information, knowledge and skills related to the entrepreneurship concepts.	Scott (2008); Masoomi and Zamani (2020)	4	0.75
Normative environment	The community's beliefs, norms and values related to the entrepreneurship concepts.	Scott (2008); Masoomi and Zamani (2020)	4	0.81
Regulatory environment	The set of rules, laws and policies designed for supporting entrepreneurial endeavors.	Scott (2008); Masoomi and Zamani (2020)	4	0.74
Risk taking propensity	The individual's willingness to take risk associated with creation of a business and exploitation of an opportunity.	Zhang <i>et al.</i> (2019)	5	0.82
Access to expertise	The possibility that individuals can access the required expertise.	Cornwell and Cornwell (2008)	4	0.92
Access to financial resources	The possibility that individuals can access the financial services.	Heuven and Groen (2014)	4	0.90
Opportunity type tendency <sup>a</sup>	The individual's interest in the type of rural entrepreneurial opportunity.	Masoomi and Rezaei-Moghaddam (2022)	-	-
Self-identity	The salient and enduring aspects of one's self-perception.	Rise <i>et al.</i> (2010)	4	0.78
Proactiveness	The individual's tendency to initiate and maintain actions for making significance changes.	Sánchez (2013)	4	0.76
Social supports	The supports from social context surrounding rural entrepreneurs encouraging them in the rural entrepreneurial process.	Hajli (2014)	5	0.85
Expectancy for success	The anticipated success in a task performance.	Bong <i>et al.</i> (2012)	4	0.83
Need for achievement	The individual's tendency for significant accomplishment.	Zeffane (2013)	5	0.79

<sup>a</sup> This is a nominal variable with four levels including "new product or service", "new market or marketing", "new resource or exploitation of the resource", "new method or innovation"

should be considered in appraisal of the model. An entrepreneurial process can be enabled by different factors (Anderson, 2000; Müller and Korsgaard, 2018). The opportunity-based model of rural entrepreneurial process was obtained from a qualitative study by Masoomi *et al.* (2021), focusing on some specific cases. Hence, it is important to investigate the drivers of this model using quantitative methods in a larger sample. The novelty of this study is associated with the quantitative consideration of an opportunity-based model of rural entrepreneurial process as a different view on rural entrepreneurship.

To address the above-mentioned issues, the general purpose of this study was to appraise the opportunity-based model of rural entrepreneurial process by investigation of the following specific purposes:

- The pathways passed by the rural entrepreneurs.
- The determinant stages and effective drivers of the process.

### Methodology

In this quantitative study, a survey was conducted to appraise the opportunity-based model of rural entrepreneurial process. The target population of this study was the rural entrepreneurs, the owners of the businesses representing the opportunity-based concept of rural entrepreneurship, in Fars Province, Iran. It is important for the studies focusing on rural entrepreneurship to present a clear definition of this concept (Pato and Teixeira, 2018). This study followed the opportunity-based perspective in which rural entrepreneurship means the pursuit of a rural entrepreneurial opportunity as a situation for making profit through the creation of value for a rural setting. Two main criteria are assumed for the businesses to be representing the opportunity-based concept of rural entrepreneurship: (1) Being a new rural entrepreneurial opportunity (new product or service, new market or

marketing, new resource or exploitation of the resource, and new method or innovation) and (2) Making profit through value creation for a rural setting (Masoomi and Rezaei-Moghaddam, 2022).

The participants were derived from the database of Omid Entrepreneurship Fund during 2019, a governmental organization for supporting entrepreneurship (Hajilo *et al.*, 2017). From a database of 496 businesses related to rural areas, 193 businesses had the two criteria and could be categorized as rural entrepreneurship. The owners of all 193 businesses (rural entrepreneurs) were selected as the sample of this study.

A questionnaire was developed to collect required data. The face validity of the questionnaire was confirmed by a panel of experts (in agricultural extension and rural development, focusing on rural entrepreneurship) and the reliability was tested by Cronbach's alpha obtained from a pilot study, involving 30 rural entrepreneurs obtained from Barekat Foundation (as another governmental organization supporting rural entrepreneurship, considering the opportunity-based criteria related to their business). In order to improve the questionnaire, the items were corrected based on the pilot study. Table 1 shows the description of the quantitative variables used in this study and their measurements. The tree model was constructed using SPSS software.

Regarding the first specific purpose of the study, a decision tree was used in order to identify the possible pathways passed by the rural entrepreneurs to get from opportunity recognition to opportunity exploitation. In this regard, a pattern of the pathways of the process was represented to respondents and they were asked to number the stages they passed (*"Please number the stages of the process in order, according to the pathway you passed to get from opportunity recognition to opportunity exploitation in the last opportunity you recognized"*).

Investigation of the drivers influencing this process was the second specific purpose



of the study. Although the opportunity-based model represents the decision-making process, the power of this model needs to be assessed. The regression tree analysis was used for this purpose due to the following reasons:

- 1) The common statistical methods like regression fail to analyze the models with non-normal interactions (Xu *et al.*, 2018). As the opportunity-based model of rural entrepreneurial process is made up of two different components, the interactions of variables in this model are complicated. As shown in Figure 1, bolder arrows represent paths and the others show the influence of factors. Therefore, there are two different types of relations in the model including paths and effects. Tree analysis is a statistical technique ideally suited for such models (De'ath and Fabricius, 2000; Xu *et al.*, 2018).
- 2) In the models with different types of interactions, the variables may be repeated and in regression tree, it is possible for one variable to be used multiple times in a model (Britt *et al.*, 2011).
- 3) As the dependent variable (rural

entrepreneurial opportunity exploitation) is interval, regression tree was used to analyze the last specific purpose of this study. In the current study, regression tree was chosen as a mechanism for analyzing the effects of variables in relation to the process in which there are multiple paths. RESULTS AND

### DISCUSSION

The results will be represented and discussed based on the specific purpose of the study as follows:

#### Investigation of the Pathways Passed by the Rural Entrepreneurs

Understanding how the rural entrepreneurs have made decisions about the pathways provides a clearer image of the rural entrepreneurial process. In this regard, a decision tree was made based on the pathways the rural entrepreneurs passed. As shown in Figure 2, this tree consisted of three elements: (1) Root node: the starting point of the decision-making process (represented by rectangle). In this tree, there are two root nodes such as opportunity

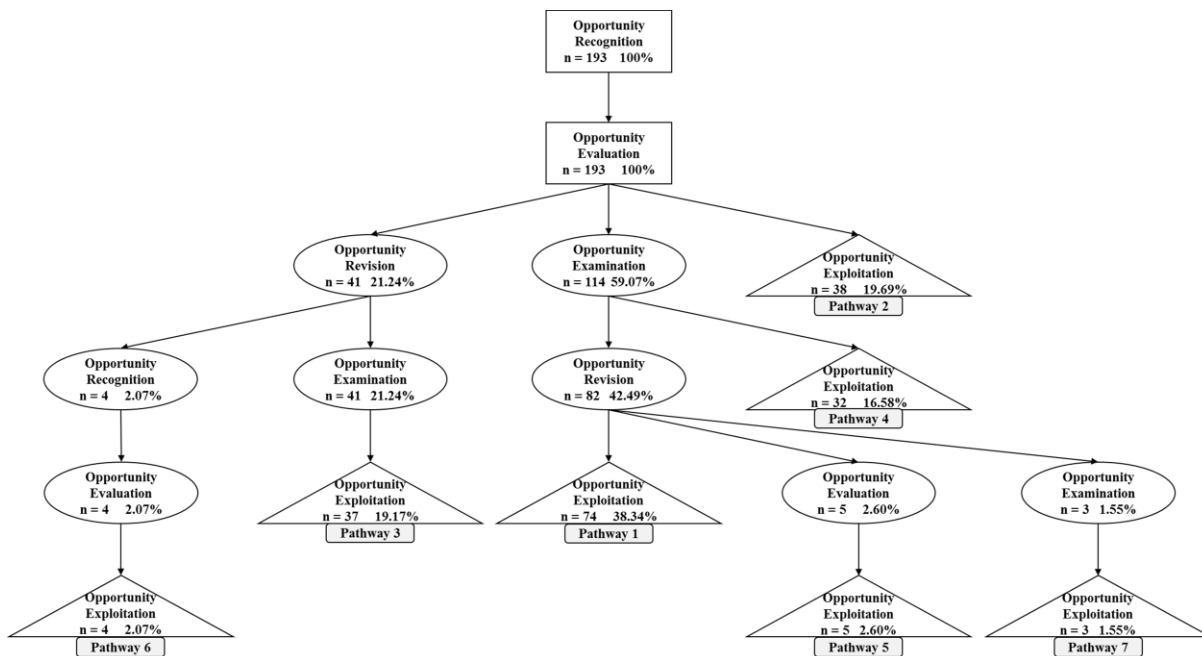


Figure 2. The tree of pathways passed by the rural entrepreneurs.

recognition and opportunity evaluation as the first and second stages of the rural entrepreneurial process. In other words, all rural entrepreneurs started with rural entrepreneurial opportunity recognition and then all of them chose opportunity evaluation as the next stage of the process. (2) Internal node: branches stem from the roots, representing different options (represented by circle). These nodes appear if rural entrepreneurs make a particular decision. For example, after opportunity evaluation, they may decide to enter the stage of opportunity revision or opportunity examination. Therefore, opportunity revision and examination are two particular decisions that rural entrepreneurs may make after opportunity evaluation. Therefore, these two stages are internal roots. (3) Leaf node: this node is the terminal node without any outgoing edge (represented by triangle). In this tree, opportunity exploitation is the end of all branches and the only possible outcome for each branch.

As all rural entrepreneurs were successful in exploiting the rural entrepreneurial opportunities, it is not surprising that the only leaf node is opportunity exploitation (Figure 2). Opportunity recognition and evaluation were also the similar initial stages for them. However, the pathways passed by the rural entrepreneurs are different. Most of the rural entrepreneurs (59.07%) chose opportunity examination after opportunity evaluation. It is important to note that 38 individuals did not experience the stage of opportunity examination during the whole process, indicating the importance of this stage in the rural entrepreneurial process. The tree also showed opportunity revision as a commonly used stage by the rural entrepreneurs (123 individuals). The rural entrepreneurs' interest in examination and revision of the opportunities represents that the rural entrepreneurs prefer to make sure about the correctness of the opportunities in different aspects before exploiting them. It may refer to the type of rural entrepreneurial opportunity. In other words, rural entrepreneurial opportunities can be more

testable compared to the other forms of entrepreneurial opportunities. Based on the tree (Figure 2), there are 7 pathways to get from opportunity recognition to opportunity exploitation, indicating diversity of paths in the rural entrepreneurial process. The most commonly passed pathway was opportunity recognition, evaluation, examination, revision, and exploitation. This pathway was passed by 74 individuals (38.34%). The second most followed pathway was opportunity recognition, evaluation, and exploitation. This was the shortest route from opportunity recognition to opportunity exploitation from the aspect of number of stages. This finding shows that although this pathway is the shortest, it does not mean that this is popular among the rural entrepreneurs. In other words, this tree indicated that the rural entrepreneurs preferred to examine (59.07%) their recognized opportunities, or revise (21.24%) them instead of exploiting them (19.49%) directly.

### **Investigation of the Determinant Stages and Effective Drivers of the Process**

Regression tree analysis was used in order to investigate the drivers of the rural entrepreneurial process. To construct the tree model, 21 independent variables were entered into the analysis. Among all of the selected variables, 14 variables contributed to the model. Based on the results, the specified variables explained 73.26% of the variability of opportunity exploitation as the dependent variable, indicating a fairly good model. Figure 3 indicates the interplay of drivers of the rural entrepreneurial process. The values of all variables in the tree were considered from 1 to 5 because all of them were computed from Likert-scale items as interval variables.

As illustrated in Figure 3, opportunity exploitation was firstly dependent on opportunity evaluation. The members of node 6 were skilled in opportunity evaluation and, for them, the only driver of

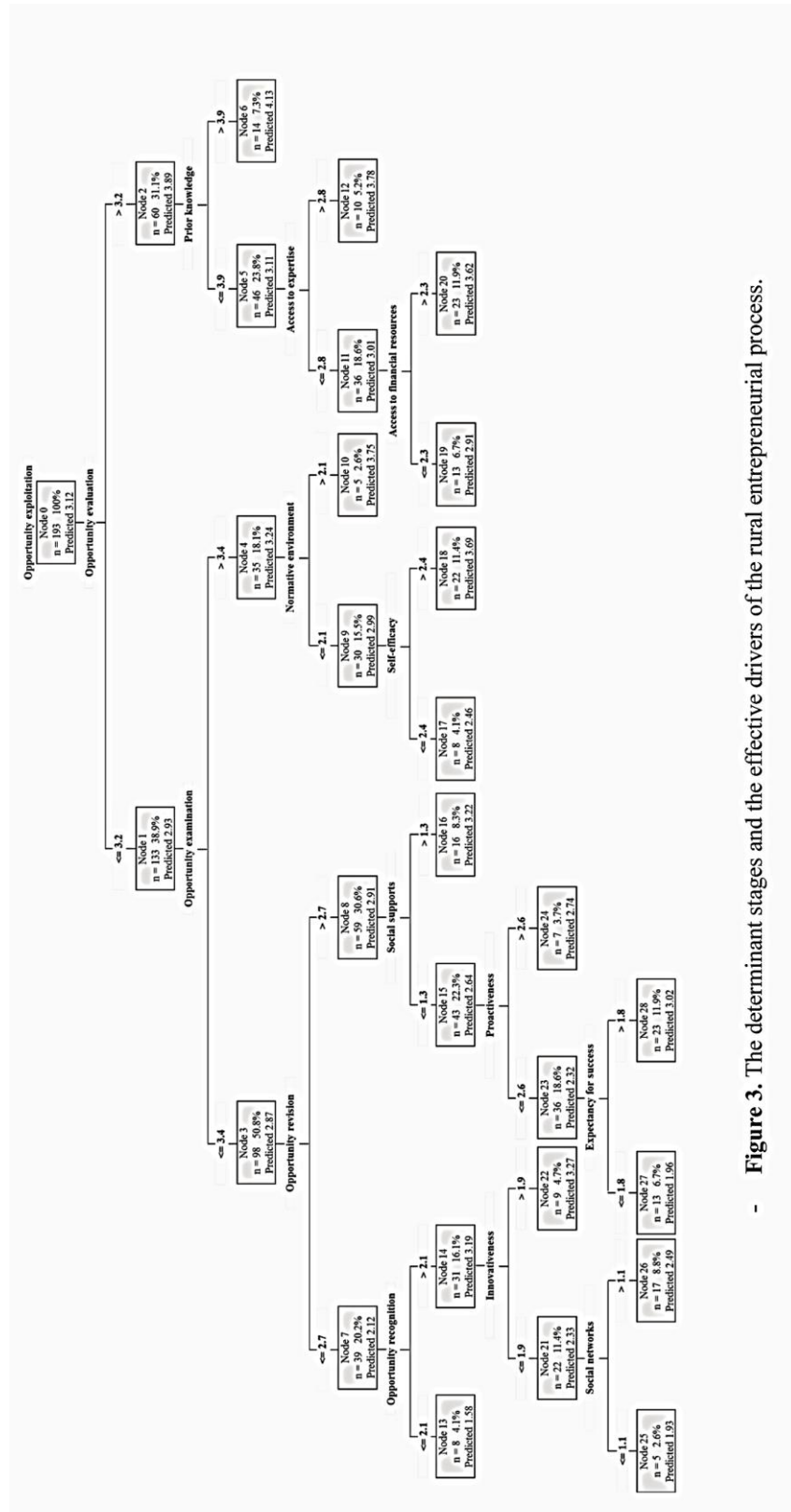


Figure 3. The determinant stages and the effective drivers of the rural entrepreneurial process.



opportunity exploitation was prior knowledge. In other words, those rural entrepreneurs with higher prior knowledge, who were experts in opportunity evaluation, were more likely to exploit rural entrepreneurial opportunities, better than the others. It is interesting to note that these rural entrepreneurs often passed the pathway 2 in which opportunity evaluation was a key stage.

Based on the results, the high access to expertise (higher than 2.8) reduces the negative impact of low prior knowledge (lower than 3.9) on the predicted value of opportunity exploitation (Figure 3). This can be seen in node 12 whose members passed the pathways 2 and 7. It is not surprising that the lower prior knowledge can be addressed by the higher access to expertise. This is because the rural entrepreneurs can compensate the lack of their own prior knowledge by receiving it from the other sources of expertise.

As demonstrated in Figure 3, access to financial resources can be considered as a vital variable in the rural entrepreneurial process. The members that were classified in node 20 were the rural entrepreneurs who had adequate access to financial resources (higher than 2.3). They often passed pathways 2 and 5. Opportunity exploitation was predicted 3.62 by the members of this node, while they did not have adequate access to expertise and their prior knowledge was low. This means that access to financial resources can be an important driver for individuals who are skilled in opportunity evaluation. In other words, knowledge and information, and access to financial resources have equal importance in opportunity exploitation.

After opportunity evaluation, the rural entrepreneurial process was dependent on opportunity examination. In other words, if opportunity evaluation was lower than 3.2, the other drivers of the process would be categorized based on opportunity examination. The members of node 4 had the high ability of opportunity examination (higher than 3.4) and it is interesting to note

that these individuals often passed pathways 3 and 4 in which opportunity examination was an important stage. As demonstrated in node 10, the high score of normative environment (higher than 2.1) increases the predicted value (from 3.24 to 3.75). On the other hand, if the normative environment was lower than 2.1, then, self-efficacy would be determinant. Predicted value was increased for the members of node 18 with higher score of self-efficacy (higher than 2.4).

For those rural entrepreneurs with low ability of opportunity examination (lower than 3.4), opportunity revision was determinant. The predicted value was 2.12 in node 7, in which the members had low ability of opportunity revision (lower than 2.7), consisting of the individuals who passed pathway 6. However, if opportunity revision was higher than 2.7, then, opportunity exploitation would reach 2.91 (node 8). Most of the rural entrepreneurs who passed the pathways 1 and 3 were the members of node 8. This indicates the importance of opportunity revision in the rural entrepreneurial process. In other words, the more skilled rural entrepreneurs in opportunity revision can be more successful in opportunity exploitation, even with lower ability of opportunity examination.

The high social supports (higher than 1.3) increase the positive effect of high opportunity revision (higher than 2.7) on the predicted value for the members who were categorized in node 16. According to the results, the low social supports (lower than 1.3) reduce the predicted value of opportunity exploitation from 2.91 to 2.64 (node 15). However, this was improved to 2.74 by the higher proactiveness (higher than 2.6), demonstrated in node 24. The low score of proactiveness (lower than 2.6) can be compensated by the high level of expectancy for success (higher than 1.8), as indicated in node 28. However, it is important to note that the low level of expectancy for success increases the negative effect of low proactiveness on the predicted value (node 27).



The rule extracted from the tree model is this: if opportunity evaluation was lower than 3.2, opportunity examination was lower than 3.4, opportunity revision was lower than 2.7, opportunity recognition was lower than 2.1, then, opportunity exploitation would be 1.58 (node 13), the lowest predicted value recorded. The most important drivers of the rural entrepreneurial processes for the individuals with the high level of opportunity recognition were innovativeness and social networks. The high level of innovativeness (higher than 1.9), increases the predicted value to 3.27 (node 22). If innovativeness was lower than 1.9, then, the high social networks would improve the predicted value from 2.33 to 2.49 (node 26). Based on the results, opportunity revision was the most determinant stage of the rural entrepreneurial process. Because this stage had an important role in the formation of pathways 1 and 3. For those rural entrepreneurs who passed pathway 1, social supports, proactiveness and expectancy for success were the most important drivers of the rural entrepreneurial process. These variables were the important factors at the stage of opportunity revision. Therefore, it is not surprising that this stage was the most determinant for the individuals who passed pathway 1. The rural entrepreneurs often enter the stage of opportunity revision, when the process did not go based on their predetermined plan. Therefore, it can be concluded that this stage is full of challenges and requires more energy compared to the other stages. In this regard, proactiveness and expectancy for success can be the significant drivers at this stage. The importance of social supports is also reasonable due to the challenging features of the stage of opportunity revision.

Testability is an important feature of rural entrepreneurial process (Masoomi and Rezaei-Moghaddam, 2022) and it is not surprising if opportunity examination would be the second determinant stage of the rural entrepreneurial process for the individuals that passed the pathways 3 and 4. Self-

efficacy and normative environment were two drivers related to this stage. Opportunity examination is the first practical stage, after opportunity recognition, evaluation, and revision (in pathway 3) as the tree subjective stages. Therefore, self-efficacy could be considered as a driver of this stage. The rural entrepreneur needs to be confident to start examination of the rural entrepreneurial opportunity in practice. It is also important to note that the rural entrepreneurs usually exploit the opportunities in the rural areas in which people influence each other. Thus, it is so important that such activities like the exploitation of a rural entrepreneurial opportunity be acceptable for rural people, in terms of values and beliefs.

Evaluation as the third determinant element is the key stage in the pathways 2, 6 and 7. Opportunity evaluation can be considered as a knowledge or information-based stage. This is because the most important drivers of this stage are prior knowledge and access to expertise. It is also important to consider the significant role of access to financial resources. The rural entrepreneurs who passed pathway 2 got from opportunity recognition to exploitation without passing opportunity revision and examination. Thus, it is necessary for these individuals to pursue the rural entrepreneurial opportunities through having access to the rich sources of knowledge and information and also strong access to financial supports.

It is interesting to note that opportunity recognition was the key stage for the individuals who experienced this stage twice. These rural entrepreneurs changed or abandoned their previous opportunity after revising these opportunities. It can be said that they recognized a new opportunity. In other words, these individuals were expert in recognition of the rural entrepreneurial opportunities. Innovativeness and social networks were the most important drivers of the rural entrepreneurial process for these groups of rural entrepreneurs, in congruence with the studies in which these two variables were known as the drivers of opportunity

recognition (Wang *et al.*, 2013; Lorenz *et al.*, 2018). Table 2 shows the details of the relations between the pathways and drivers of the tree model of rural entrepreneurial process.

### CONCLUSIONS

It is important to note that both individual and contextual factors were important, in almost all pathways. This complex and non-linear nature of the various drivers helps to identify the rural entrepreneurial process more comprehensively, as a step forward in the rural entrepreneurship literature. This nature can also be considered useful from the aspect of policy implications. If the interventions in a specific driver were impossible for the policymakers, they would be able to facilitate the rural entrepreneurial process through focusing on another driver. For example, if providing access to financial resources was difficult in a specific situation, providing access to expertise would be the most effective alternative. In some cases, improvement of an individual driver can compensate the low level of a contextual driver. As the low level of normative environment can be compensated by the high level of self-efficacy. This can be the other way around in some other cases. For example, expectancy for success as an individual factor increased the predicted value of opportunity exploitation to 3.02 when the level of social supports was lower than 1.3. Therefore, the rural entrepreneurial process must be seen as a dynamic process which can be improved by the flexible interventions.

There are still considerable gaps in the understanding of rural entrepreneurial process that were not addressed in this study due to the limitations. There are obstacles constraining an entrepreneurial process (Müller and Korsgaard, 2018). These obstacles lead to creation of some bottlenecks in the process. In other words, there are some bottlenecks preventing the smooth flow of the process (Rajakumar et

**Table 2.** Details of the relations between the pathways and drivers of the tree model of rural entrepreneurial process.

Pathway	Paths in order	n	Dominant node(s)	Key stage(s)	The most important driver(s)
1	Recognition - Evaluation - Examination - Revision - Exploitation	74	8	Revision	Social supports; Proactiveness; Expectancy for success
2	Recognition - Evaluation - Exploitation	38	6 - 12 - 20	Evaluation	Prior knowledge; Access to expertise; Access to financial resources
3	Recognition - Evaluation - Revision - Examination - Exploitation	37	4 - 8	Revision; Examination	Normative environment; Self-efficacy; Social supports; Proactiveness; Expectancy for success
4	Recognition - Evaluation - Examination - Exploitation	32	4	Examination	Normative environment; Self-efficacy
5	Recognition - Evaluation - Examination - Revision - Evaluation - Exploitation	5	20	Evaluation	Access to financial resources
6	Recognition - Evaluation - Revision - Recognition - Evaluation - Exploitation	4	7	Recognition	Innovativeness; Social networks
7	Recognition - Evaluation - Examination - Revision - Examination - Exploitation	3	12	Evaluation	Access to expertise



al., 2005). Detecting the possible bottlenecks in the rural entrepreneurial process in the future studies, makes this process more comprehensive through determining the stages which are easier or more difficult to pass.

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## ارزیابی مدلی فرصت-محور از فرآیند کارآفرینانه روستایی

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### چکیده

تحقیقات در زمینه فرآیند کارآفرینانه روستایی نسبتاً محدود است. این مطالعه کمی، مدلی فرصت-محور از فرآیند کارآفرینانه روستایی متشکل از دو جزء "مراحل اساسی" و "عوامل مهم در هر مرحله" را مورد ارزیابی قرار داد. با استفاده از تحلیل درخت، مسیرهای طی شده به وسیله کارآفرینان روستایی و محرک‌های فرآیند مورد بررسی قرار گرفت. پیمایشی با ۱۹۳ کارآفرین روستایی حمایت‌شده به وسیله صندوق کارآفرینی امید (کشور ایران) انجام شد. بر اساس نتایج، کارآفرینان روستایی برای رسیدن از تشخیص فرصت به بهره‌برداری از فرصت، هفت مسیر را طی کردند. فرآیند تحلیل درخت رگرسیون نشان داد که فرآیند کارآفرینانه روستایی نتیجه یک مجموعه پیچیده از مراحل و محرک‌های متنوع است. اولین مرحله تعیین‌کننده برای بهره‌برداری از فرصت، به عنوان متغیر وابسته، ارزشیابی فرصت بود. مهم‌ترین محرک‌های این مرحله، دانش قبلی، دسترسی به تخصص و دسترسی به منابع مالی بودند. بر اساس نتایج، حمایت‌های اجتماعی، فعال بودن و انتظار موفقیت مهم‌ترین محرک‌های مؤثر بر فرآیند کارآفرینانه‌ای بودند که در آن بازنگری فرصت مهم‌ترین مرحله تعیین‌کننده بود. آزمون فرصت، مرحله تعیین‌کننده دیگری بود که تحت تأثیر

محیط هنجاری و خود-کارآمدی قرار داشت. نوآور بودن و شبکه-های اجتماعی، بهترین محرک-ها برای آن دسته از کارآفرینان روستایی بودند که فرآیند کارآفرینانه روستایی را با توانایی بالا در تشخیص فرصت طی کرده بودند. بر اساس نتایج، هر دو عوامل محیطی و فردی تقریباً در تمام مسیرها حائز اهمیت بودند. برای تسهیل و تسریع فرآیند کارآفرینانه روستایی و ارتقاء کیفیت آن، در نظر گرفتن توانایی-های کارآفرینان روستایی مهم است.