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A Mixed-Method Approach to Design an Entrepreneurial Behavior Development Model in Agricultural Cooperatives of Kermanshah Province, Iran

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Abstract

The present study aimed to design a model for developing entrepreneurial behavior in agricultural cooperatives in Kermanshah province, employing an exploratory mixed-method approach. In the qualitative phase of the study, the participant team included all key individuals well-informed about entrepreneurship within the cooperatives of Kermanshah province. Thirty participants were selected using a snowball purposive sampling method. The statistical population for the quantitative phase included 530 managers and members of active agricultural cooperatives in Kermanshah province. Among them, 223 were selected using the stratified sampling method and Krejcie and Morgan's table. Data collected during the qualitative phase were analyzed using Nvivo8 software, resulting in the development of a grounded theory in the form of a conceptual model. During model analysis, research hypotheses were initially compiled and then assessed using the path analysis method in SPSS 23 and SmartPLS3 software. The findings from the qualitative phase, based on the grounded theory model, were categorized into six groups: Causative conditions (e.g., economic profits, personal incentives, etc.), Contextual conditions (e.g., cultural factors, diverse working areas, etc.), Intervening conditions (e.g., sanctions, market fluctuations, etc.), Phenomena (e.g., entrepreneurial behavior such as innovation, initiative in job tasks, etc.), Strategies (e.g., educational-promotional activities, keeping cooperatives up to date, etc.), Consequences (e.g., self-sufficiency in production, preventing cooperatives from depression, etc.). In the quantitative phase, the model emerging from the qualitative part was tested and ultimately approved. Based on the results, it is recommended that to foster entrepreneurial behavior in agricultural cooperatives, the research model be presented to cooperative members through training classes.

Keywords:
Agricultural cooperatives; cooperation; entrepreneurial behavior; mixed-method Approach

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INTRODUCTION

Today, the role of agricultural cooperatives in the development of sustainable rural communities has become increasingly recognized (Kalogiannidis, 2020; Lui et al., 2019; Giagnocavo et al., 2017). Cooperatives, aligned with government policies, play a pivotal role in improving living conditions, enhancing income levels, and elevating the social status of rural residents. They also contribute to addressing constraints and challenges, ultimately promoting the well-being of farming families (Gava et al., 2021; Herbal et al., 2015). In light of these insights, experts in rural development agree that while sustainable rural development depends on various factors and conditions, the development of agricultural cooperatives stands out as a crucial element in rural areas. Global experiences further confirm the significant role of agricultural cooperative entities and organizations, especially in developing countries, in alleviating poverty, generating employment opportunities, and fostering rural development (Moon & Lee, 2020; Ma et al., 2018; Pinto, 2009).

Iran serves as an example of a developing country where combatting poverty and job creation are of paramount importance. In this context, the presence of agricultural cooperatives can be beneficial. However, various evidence and statistics suggest that Iranian agricultural cooperatives have not reached their potential in economic and social spheres (Khosravi et al., 2016). For instance, according to the Ministry of Cooperatives, as of March 20, 2020, a total of 24,021 agricultural and forestry cooperatives were registered in the country, with 14,912 of them being active. In Kermanshah province, there were 2,404 agricultural cooperatives during the same period, with 968 of them actively functioning (Statistical Yearbook of the Ministry of Cooperatives, Labor, and Social Welfare, 2021). The presence of numerous inactive cooperatives indicates their struggle to remain profitable and stable in the competitive market (Khosravi et al., 2016). Research and inspections have also revealed that many cooperatives couldn't compete with larger private firms and subsequently became inactive and dormant (Shojaei et al., 2011). In essence, agricultural and rural cooperative organizations can contribute to sustainable job creation and development only when they embrace entrepreneurial missions, goals, and characteristics. Numerous studies have shown the positive and significant impact of entrepreneurial development on the sustainability, profitability, growth, and efficiency of various firms and institutions (Donbesuur et al., 2020; Zahra et al., 2004; Zahra et al., 2005; Kellermanns et al., 2008).

Entrepreneurship can be defined as the recognition and exploitation of opportunities, coupled with innovation and risk-taking, that ultimately lead to value creation (Ratten and Jones, 2020). It involves the process of identifying opportunities based on market needs and addressing these needs while considering potential risks. An entrepreneur needs the vision to spot opportunities and the ability to invest in them (Hatton, 2015). Entrepreneurship is a dynamic process that harnesses individuals' drive and motivation to generate and implement new ideas and practical solutions (Kuratko and Hodgetts, 2007). Therefore, entrepreneurial development allows companies not only to leverage their competitive advantages but also to identify new opportunities and cultivate new competencies (Kuratko et al., 2005). In this context, organizations should create conditions that foster the emergence and development of entrepreneurial behavior (Nenwh, 2019). Entrepreneurial behavior encompasses all the actions and practices individuals undertake to identify, assess, and exploit innovative opportunities in pursuit of entrepreneurial activities (Autio et al., 2014). Focusing on the development of entrepreneurial behavior within agricultural cooperatives is of paramount importance because entrepreneurship stems from the manifestation of entrepreneurial behavior in

individuals (Noori et al., 2021; Shapero, 1984). Considering this perspective, the development of innovative services, products, and businesses in agriculture, as well as the continuous evolution of innovation in this sector, requires the cultivation and promotion of entrepreneurial behavior within agricultural cooperatives, according to Knudson et al. (2004). Therefore, given the deep connection between entrepreneurial development and entrepreneurial behavior in agricultural cooperatives, and recognizing the pivotal role of these cooperatives in sustainable rural and agricultural development, it becomes crucial to emphasize the need for the development of entrepreneurial behavior as one of the main pillars of entrepreneurial development within agricultural cooperatives. In light of these considerations, this study aims to design a model for the development of entrepreneurial behavior in agricultural cooperatives in Kermanshah province.

Relevant studies have been conducted on this relatively underexplored topic. Lawrence and Ganguli (2016) conducted a study that delved into the entrepreneurial behavior of stockmen in India. Their results indicated a positive and significant correlation between entrepreneurial behavior and various factors, including educational background, land ownership, economic status, social participation, economic motives, and communication skills. In another study by Mattihalli (2015), occupational experiences, social participation, and involvement in promotional programs were identified as factors influencing farmers' entrepreneurial behavior. Furthermore, Dam et al. (2010) demonstrated that variables such as entrepreneurial knowledge, job adjustment, creative thinking, networking skills, team-working skills, and the presence of an entrepreneurial atmosphere had a positive and significant impact on teachers' entrepreneurial behavior. Lawrence and Ganguli (2016) also concluded in their study that factors such as the pursuit of economic profits, personal incentives, access to human and financial resources, and managerial support played pivotal roles in influencing the success of entrepreneurial behavior. Similarly, the significance of economic profits in shaping entrepreneurial behavior was underscored by Kotlar and Sieger (2018), Michaelis et al. (2019), and Kang et al. (2016).

There is substantial evidence indicating that agricultural cooperatives in Kermanshah province have not performed well in terms of economic development, gaining a competitive advantage, and increasing employment. This situation has led to the decline of many cooperatives (Meymanatabadi et al., 2020; Jamini and Jamshidi, 2021). Numerous studies have highlighted one of the key issues faced by agricultural cooperatives in Kermanshah province, which is the lack of attention to entrepreneurial development as a means to enhance their status as economic enterprises (Noori, 2021; Nazari darkhori, 2021; Khosravi et al., 2016). Consequently, there is a pressing need to focus on the development of entrepreneurial behaviors to enable agricultural cooperatives in Kermanshah province to gain a competitive advantage and foster their development (Imani et al., 2017).

In this context, enhancing entrepreneurial behavior harnesses the energy and motivation of individuals to generate and implement new ideas and practical solutions (Kuratko & Hodgetts, 2007). This can play a pivotal role in the development and strengthening of cooperatives (Rezaei, 2014). Consequently, it is imperative to conduct a study focused on the development of entrepreneurial behaviors within agricultural cooperatives in Kermanshah province. By fostering entrepreneurial behaviors in agricultural cooperatives, we can anticipate the development and expansion of innovative products and services (Noori et al., 2021; Knudson et al., 2004). This, in turn, creates the foundation for the growth and rejuvenation of agricultural cooperatives in Kermanshah province (Noori et al., 2021; Ahmadpour et al., 2019).

Therefore, the primary objective of this study is to design a model for the development of entrepreneurial behavior in agricul-

tural cooperatives within Kermanshah province, utilizing a mixed-method approach. The research goals encompass the following:

- Examining the most significant factors influencing the development of entrepreneurial behaviors in agricultural cooperatives in Kermanshah province.
- Investigating the foremost measures implemented to promote entrepreneurial behaviors within agricultural cooperatives in Kermanshah province.
- Assessing the principal consequences resulting from the measures taken to enhance entrepreneurial behaviors in agricultural cooperatives in Kermanshah province.
- Formulating a model for the advancement of entrepreneurial behaviors in agricultural cooperatives, grounded within the framework of grounded theory.
- Validating the developed model for fostering entrepreneurial behaviors in agricultural cooperatives of Kermanshah province through a quantitative research phase.

METHODOLOGY

This study followed an exploratory-sequential approach, combining both qualitative and quantitative methods to achieve its objectives. In terms of its purpose, it applied a mixed-method paradigm. The qualitative phase employed Straussian Grounded Theory (SGT), while the quantitative phase utilized structural equation modeling for model testing. In the qualitative phase, the researcher adopted purposive snowball sampling, relying on the expertise of managerial and entrepreneurial professionals in agricultural cooperatives. Using semi-structured interviews, a total of 30 experts were identified and selected to participate in the study. In addition to structured interviews, various data collection methods such as observation, focus groups, and field note-taking were employed. The data collection process continued until theoretical saturation was reached, meaning no new data or concepts emerged. Data analysis followed the phasic method and analytic techniques outlined by Strauss and Corbin in grounded theory, which includes open, axial, and selective coding (Naderi et al., 2022). To ensure the reliability and validity of the research findings in the qualitative phase, triangulation and member check techniques were employed. In the quantitative part of the study, the statistical population consisted of 530 managers and members from active agricultural cooperatives in Kermanshah province. The sample size of 223 was determined using Krejecie and Morgan's table (Table 1).

Table 1

Total Statistics of Active Agricultural Cooperatives in Kermanshah Province, Separated by Types of Activities and Number of Members

Activity type	Active cooperatives	Sum of members	Sample size %	Sample size %
Stockmen	10	100	18.8	42
Poultrymen	5	50	9.4	21
Wheat farmers	2	20	3.76	9
Gardeners	2	20	3.76	9
Rangeland owners	3	30	5.66	12
Fisheries and aquatics	3	30	5.66	12
Beekeepers	10	100	18.8	42
Combine owners	1	10	1.88	4
Natural resources	13	130	24.52	54
Mushroom growers	2	20	3.76	9
Others	2	20	3.76	9
Sum	53	530	100	223

Source: General Directorate of Cooperatives, Labor, and Social Welfare of Kermanshah Province, (2019)

In this phase, the sampling process was carried out using the proportional stratified sampling method. Subsequently, the researcher distributed a questionnaire that they had developed among the selected samples. This questionnaire comprised two main sections: The first part focused on collecting demographic information about the respondents. The second part incorporated the model that had emerged during the qualitative phase (grounded theory model), consisting of six key constructs as outlined in Table 3. The items (concepts) and structures (dimensions) are detailed in the table. Responses were measured using a 5-point Likert scale, ranging from "very low" to "very high."A panel of thirty experts examined and confirmed the face and content validity of the questionnaire in this section. Subsequently, the Content Validity Ratios (CVRs) for all indices were estimated to be 0.7 or higher, affirming their validity. To assess the model's fitness, various indices including factor loading (>0.4), Average Variance Extracted (AVE) (>0.5), Composite Reliability (CR), Cronbach's Alpha (CA) (>0.7), determination coefficient (R2), and goodness of fit (GOF) were employed. The results are presented in Table 2. The data in Table 2 indicate that the values of factor loading (>0.4), AVE (>0.5), and CR and CA (>0.7) are satisfactory for all constructs. Moreover, the GOF was calculated to be 0.637, indicating that the structural model exhibits a suitable fit. Therefore, it can be concluded that the selected indices within the research design's factorial framework demonstrate the necessary fitness.

RESULTS

In this study, the gender distribution of the participants indicated that 79.4 percent were male, while 20.6 percent were female. The average age of the respondents was approximately 42 years. Furthermore, a significant proportion of the respondents (62.8%) held diplomas or lower academic qualifications, while 37.2 percent had attained a B.A. degree or higher. The entrepreneurial behavior development model, developed using grounded theory in the agricultural cooperatives of Kermanshah province, encompasses several key components: causative conditions, contextual conditions, intervening conditions, executive strategies, and the outcomes of entrepreneurial behavior development within agricultural cooperatives. Initially, a total of 112 concepts were identified. In the final stage of analysis, these concepts were categorized into 32 primary categories, each representing a distinct aspect or challenge. These categories were further grouped under the broader classification of main problems. The results of the open coding process are presented in Appendix 1.

In the next step, the codes extracted in open coding were refined and separated for the formation of code families (axial or concentrated coding (Appendix 1). The Nvivo software was used for this purpose.

In the concluding phase of qualitative analysis, the concepts and categories were formalized, and their interconnections were delineated. In line with the identified categories and the application of grounded theory principles, Figure 1 visually presents the basis of the qualitative model developed in this study.

After constructing the final model, the researcher created a questionnaire based on the developed model and proceeded to finalize the conceptual model, determining their coefficients through structural equation modeling. In order to assess the research hypotheses, the researcher utilized structural equation modeling analysis with the Smart-PLS 3 software.

In terms of the required precision for measuring the research constructs, this phase of the study examined the causal relationships among the research constructs. Figure 2 visually presents the outcomes, including the standard coefficients and the significance of the structural model fit.

Causative conditions have direct effects on the constructs of contextual conditions (β= 0.779, p<0.01), primary phenomenon (β=

Table 2
Fit Indices of the Structural Model of Study

Dimensions	Factor loading	CR	CA	AVE
Acquiring economic profits	0.762	0.864	0.816	0.519
Personal incentives	0.785			
Enjoying human and financial credits	0.622			
Internal disputes	0.582			
Insufficient knowledge of members	0.683			
Managerial supports	0.850			
Cultural factors	0.421	0.888	0.844	0.580
Presence of diverse working areas	0.833			
Insufficient financial supports	0.849			
Developing new markets	0.794			
Institutions' rate of participation in and cooperation with cooperatives	0.796			
Administrative bureaucracy	0.786			
Sanctions	0.884	0.886	0.808	0.722
Market fluctuations	0.861			
Climatic changes	0.802			
Innovation	0.845	0.918	0.881	0.738
Importunity in works	0.810			
Opportunism	0.875			
Risk appetite	0.902			
Educational-promotional activities	0.882	0.983	0.943	0.718
Modernizing cooperatives	0.892			
Reducing administrative bureaucracy	0.744			
Supporting entrepreneurship	0.805			
Developing marketing	0.897			
Transparency in cooperatives	0.833			
Eliminating intermediates	0.843			
Supportive-financial policies	0.874			
Self-sufficiency in production	0.805	0.911	0.877	0.672
Preventing cooperatives from depression	0.744			
Developing producing capacities	0.840			
Increasing job creation	0.862			
Improving livings of people	0.841			

0.164, $p<0.05$), and intervening conditions (β= 0.552, p<0.0001). On the other hand, the causative conditions variable has an indirect positive and significant impact on the primary phenomenon (β=0.495) through the mediation of two variables, including contextual conditions and intervening conditions. Causative conditions, by themselves, can explain 60.5 and 30.2 percent of variations in the contextual and intervening conditions, respectively.

Regarding the impact of other variables on the primary phenomenon, it can be affirmed that the causative (β=0.164, $p<0.05$), contextual (β=0.442, $p<0.01$), and intervening conditions (β=0.274, $p<0.01$) exhibit direct and statistically significant effects on the primary phenomenon variable. Additionally, the causative conditions variable (β= 0.495) exerts an indirect, positive, and statistically significant influence on the primary phenomenon variable. In total, these variables collectively predict 64 percent of the variance in the primary phenomenon. When considering both the direct and indirect effects of the variables within the conceptual

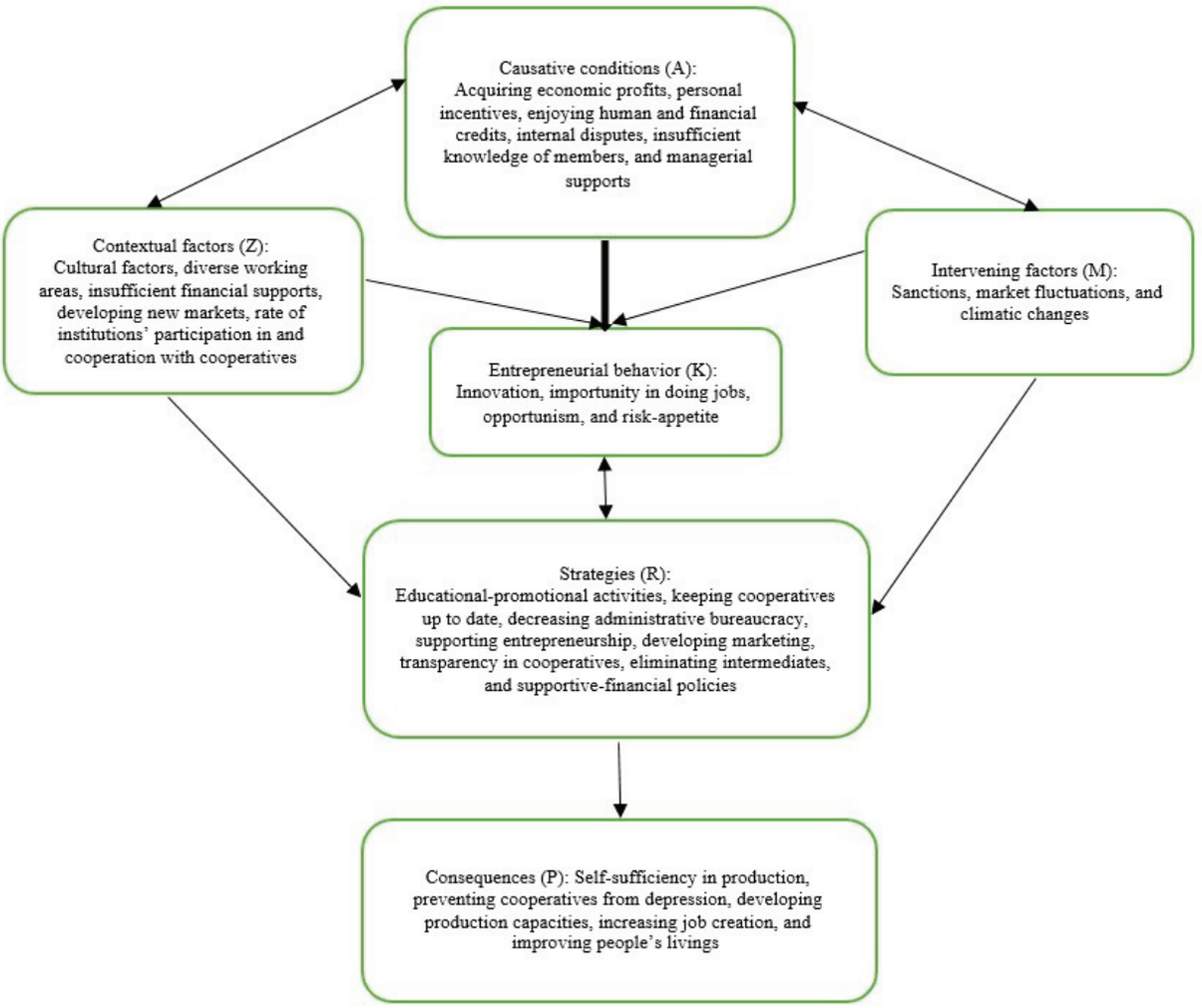

Figure 1. Entrepreneurial Behavior Development Model in Agricultural Cooperatives of Kermanshah Province, Based on Grounded Theory

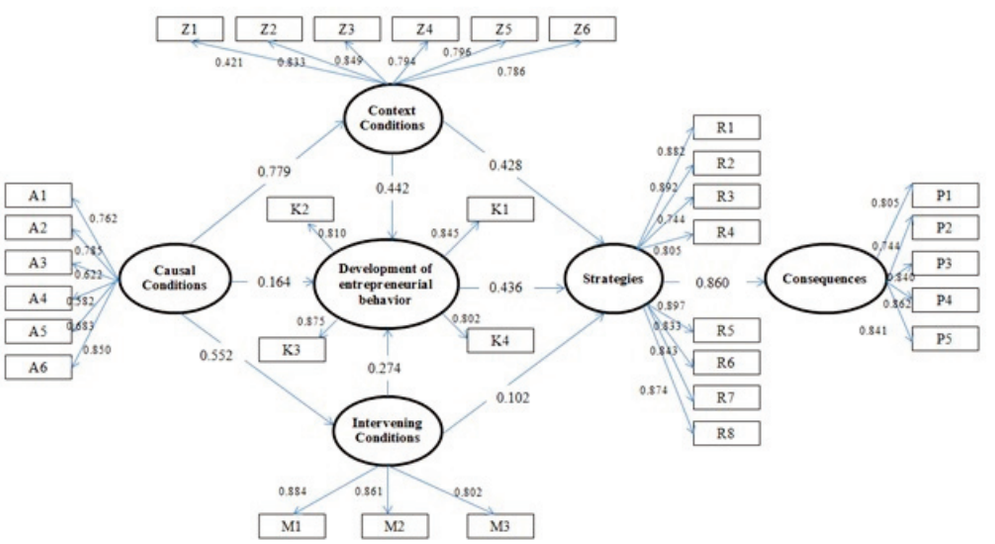

Figure 2. Structural Model Fit with Standard Coefficients

Table 4

Path Analysis of Effect of Research Constructs for Model Testing

Effect of variable	On variable	B	t*	Result	R^2
Causative conditions	Contextual conditions	0.779	24.18	Accepted	0.605
	Entrepreneurial behavior development	0.164	2.424	Accepted	0.640
	Intervening conditions	0.552	12.97	Accepted	0.302
Entrepreneurial behavior development	Strategies	0.436	7.57	Accepted	0.801
Contextual conditions		0.428	7.79	Accepted	
Intervening conditions		0.102	20.5	Accepted	
Strategies	Consequences	0.860	41.26	Accepted	0.739

* >1.96 t-values are significant at a confidence level of 95 percent.

framework of the study on the primary phenomenon variable, it can be asserted that a significant portion of the variability in this variable is accounted for by the causative conditions variable.

Regarding the direct and indirect effects of the variables of the study's conceptual framework on the strategies variable, we can posit that variables of the primary phenomenon (β= 0.436, p<0.01), contextual conditions (β= 0.428, p<0.01), and intervening conditions (β= 0.102, p<0.05) have direct positive and significant effects on the strategies variable. On the other hand, the variables of causative (β=0.667), contextual (β= 0.193), and intervening conditions (β= 0.119) have indirect positive and significant effects on the strategies variable. In sum, the variables of causative conditions, contextual conditions, the main phenomenon, and intervening conditions (directly and indirectly) can explain 80.1 percent of variations in the strategies construct. With respect to the direct and indirect effects of the variables of the conceptual framework of the study, we can put that the significant portion of the variation in this variable is explained by the causative conditions variable.

The strategies variable (β=0.860, p<0.01) exerts a direct, positive, and highly significant influence on the consequences variable. Additionally, the variables of causative conditions (β= 0.582), contextual conditions (β=0.534), the primary phenomenon (β= 0.375), and intervening conditions (β= 0.190) have indirect, positive, and statistically significant effects on the consequences variable. Collectively, these variables can account for 73.9 percent of the variability in consequences. When considering both the direct and indirect effects of the variables within the conceptual framework of the study on the consequences variable, it can be asserted that a significant portion of the variation in consequences is explained by the strategies variable.

DISCUSSION AND CONCLUSION

Given the challenging economic conditions in Iran, entrepreneurship and cooperatives are essential financial considerations. Managers of various companies and cooperatives must strive to cultivate entrepreneurial behavior to drive the growth of their organizations. The absence of a comprehensive and effective model for developing entrepreneurial behavior in agricultural cooperatives can result in inefficiency and inactivity within these cooperatives. To address this issue, the present study aimed to introduce an entrepreneurial behavior development model for agricultural cooperatives. What sets the model presented in this research apart from existing frameworks is that many available

models have primarily examined specific domains and their relationships. However, the current study, in addition to addressing strategies and consequences, places emphasis on various factors that influence the development of entrepreneurial behavior in agricultural cooperatives, including causative, contextual, and intervening factors.

The final model of the research illustrates that the causative conditions influencing the development of entrepreneurial behavior in agricultural cooperatives encompass factors such as acquiring economic profits, personal incentives, access to human and financial resources, internal disputes, insufficient member knowledge, and managerial support. These factors play a significant role in shaping entrepreneurial behavior within cooperatives and can be categorized into two groups: those hindering entrepreneurial behavior development and those promoting it.

Among the factors hindering entrepreneurial behavior development, internal disputes and insufficient member knowledge stand out. These findings align with the results of Lawrence and Ganguli (2016) and Dam et al. (2010). In their research, Lawrence and Ganguli (2016) highlight staff ignorance as a barrier to entrepreneurial behavior development, emphasizing that improved knowledge levels through training can lead to increased entrepreneurial behaviors. Similarly, Dam et al. (2010) assert that entrepreneurial knowledge is significantly linked to entrepreneurial behaviors, meaning that weaker entrepreneurial knowledge among personnel correlates with reduced entrepreneurial behaviors. Overall, these findings emphasize the importance of addressing internal disputes and enhancing member knowledge to foster entrepreneurial behavior within agricultural cooperatives.

Indeed, factors inhibiting the development of entrepreneurial behavior, such as internal disputes, have been a recurring theme in various studies. Lawrence and Ganguli (2016), Mattihalli (2015), and Dam et al. (2010) have all explored the impact of internal disputes on entrepreneurial behaviors in different ways. Their research collectively suggests that controlling and reducing internal disputes can enhance participation levels and, consequently, create a more favorable environment for the development of entrepreneurial behavior. On the other hand, factors promoting the development of entrepreneurial behavior include economic profits, personal incentives, access to human and financial resources, and managerial support. This finding is consistent with the results of Lawrence and Ganguli (2016). In their research, Lawrence and Ganguli (2016) emphasize that businesses need both economic and non-financial support, such as managerial support and staff motivation through rewards, to foster entrepreneurial behaviors. Expanding on this finding, it's crucial for managers to motivate employees to engage in entrepreneurial behaviors, considering that people's motivations vary based on Maslow's hierarchy of needs. Therefore, a range of motivational factors, encompassing both financial and non-financial aspects, should be provided by the business. Similarly, Kang et al. (2016), Michaelis et al. (2019), and Kotlar and Sieger (2018) highlight the significant effect of economic profits on entrepreneurship development.

Kang et al. (2016) establish a positive and significant relationship between economic benefits and the occurrence of entrepreneurial behaviors among personnel. Michaelis et al. (2019) argue that cost savings contribute to reducing expenses and increasing economic benefits, thereby supporting and fostering entrepreneurial behaviors. Kotlar and Sieger (2018) assert that economic costs are directly and inversely linked to entrepreneurial behaviors in businesses. In essence, lower costs and higher business profits lead to greater support for the development of entrepreneurial behaviors. To summarize, all three studies emphasize that financial and non-financial incentives play a vital role in the emergence and development of entrepreneurial behaviors. Therefore, businesses

should promote employee motivation by offering both financial and non-financial incentives to nurture entrepreneurial behaviors.

The intervening conditions, which encompass sanctions, market fluctuations, and climatic changes, indirectly impact the income and profits of agricultural cooperatives. Agriculture is inherently sensitive to climate change, and crises such as insufficient rainfall or drought can have a significant influence on input prices and the income of agricultural cooperatives. This sensitivity to environmental changes is echoed in Dam et al. (2010) findings, which indicate that job adjustment is a crucial factor affecting the occurrence of entrepreneurial behaviors. In essence, the more effectively agricultural cooperatives can adapt to environmental changes, the higher their income and the greater the development of their entrepreneurial behaviors. Sanctions and market fluctuations further affect the costs and revenues of agricultural cooperatives. When these environmental factors exert a strong influence on the financial resources of agricultural cooperatives, it reduces their ability to support risk-taking and entrepreneurial actions. Consequently, the development of entrepreneurial behaviors may be hindered in practice. Therefore, the ability of agricultural cooperatives to navigate and adapt to these intervening conditions is essential for fostering entrepreneurial behaviors and achieving sustainable development.

Contextual conditions, including cultural factors, the diversity of working areas, insufficient financial support, the development of new markets, the rate of participation and cooperation of institutions with cooperatives, and administrative bureaucracy, significantly influence the strategies and development of entrepreneurial behavior. Lawrence and Ganguli (2016) found that institutions' participation in and cooperation with cooperatives played a crucial role in the success of entrepreneurial behaviors. However, cultural factors can act as suppressors, diminishing enthusiasm for cooperative activities in rural areas. Issues such as disagreements regarding the involvement of rural women, who make up a significant portion of the rural community, can hinder the development of their talents. Lengthy administrative processes, project evaluation delays, and restrictive regulations can lead to discouragement and reduced motivation. Therefore, it is crucial to promote the participation and cooperation of all cooperative members to develop entrepreneurial behaviors, as the cooperative philosophy is founded on the engagement of all members.

Diverse working areas can boost the income of cooperatives, aligning with the findings of Lawrence and Ganguli (2016) and Mattihalli (2015), who emphasized that improving the economic situation and increasing income are effective in developing entrepreneurial behaviors. Furthermore, insufficient financial support can also hinder the development of entrepreneurial behaviors. Lawrence and Ganguli (2016) concluded in their study that financial support is one of the factors influencing the success of entrepreneurial behavior. Given the association of entrepreneurial actions with risk-taking, providing financial support to personnel is essential for developing entrepreneurial behaviors in agricultural cooperatives. Developing new markets is another significant factor in fostering entrepreneurial behaviors. Expanding into new markets leads to increased sales and profits, creating a favorable environment for the development of entrepreneurial behaviors. To enter new markets and compete effectively, companies need a competitive advantage, which necessitates the development of entrepreneurial behaviors. The findings also indicate that the rate of institutions' participation in and cooperation with cooperatives, as well as administrative bureaucracy, impacts the development of entrepreneurial behaviors. The provision of facilities and support by relevant organizations for entrepreneurial practices can lead to increased development of entrepreneurial behaviors in agricultural cooperatives. Therefore, facilitating processes, removing obsta-

cles, and reducing administrative bureaucracy are effective measures for fostering entrepreneurial behaviors.

The presented strategies encompass various elements such as educational-promotional activities, keeping cooperatives updated, reducing administrative bureaucracy, supporting entrepreneurship, developing marketing, promoting transparency within cooperatives, eliminating intermediaries, and implementing supportive financial policies. These strategies lead to positive consequences in terms of entrepreneurial behavior development in agricultural cooperatives, including self-sufficiency in production, preventing cooperatives from declining, expanding production capacities, increasing job opportunities, and improving people's livelihoods.

Efforts to provide training, increase member awareness, and keep members up to date align with the findings of Lawrence and Ganguli (2016) and Dam et al. (2010). To foster entrepreneurial behaviors, it is crucial to offer training programs to cooperative members. Factors such as reducing administrative bureaucracy, supporting entrepreneurship, eliminating intermediaries, and implementing supportive financial policies are consistent with the idea of supporting and facilitating cooperatives, which is in line with the results of Lawrence and Ganguli (2016). Developing entrepreneurial behaviors in cooperatives necessitates both financial and non-financial support at both micro and macro levels. Promoting transparency within cooperatives can enhance trust in these organizations, ultimately leading to increased social participation. Mattihalli (2015) also highlighted the importance of strengthening social participation and involvement in promotional programs for the development of entrepreneurial behaviors among farmers. Increasing member participation in promotional programs can enhance their awareness and keep them updated, which, in turn, can stimulate the generation of creative ideas and contribute to the development of entrepreneurial behaviors in businesses.

In conclusion, it is essential to consider all the components that contribute to the development and manifestation of entrepreneurial behaviors within agricultural cooperatives. These components not only facilitate increased entrepreneurial practices within the cooperatives but also improve their overall conditions, stimulate economic growth, and contribute to the development of both villages and the entire country. To that end, the following suggestions are offered to planners and policymakers:

- Given that increased income and improved economic situations foster entrepreneurial behaviors, it is recommended to provide interest-free facilities with long-term payoffs and suitable economic support mechanisms such as secure purchasing options.
- Recognizing that raising education and awareness among cooperative members and keeping them updated are key drivers of entrepreneurial behaviors, it is advisable to offer educational courses aimed at enhancing the knowledge and skills of cooperative members. These training programs should be tailored to address the specific daily needs of cooperative members to maximize their effectiveness in promoting entrepreneurial behaviors.
- Since the reduction of administrative bureaucracy and increased support are associated with the development of entrepreneurial behaviors, efforts should be made to streamline the trading environment of cooperatives and eliminate unnecessary administrative hurdles.
- Given that market fluctuations, sanctions, and climate change can impact entrepreneurial behaviors, it is suggested to establish free marketing consulting teams to assist agricultural cooperatives in mitigating the effects of these factors as much as possible.

For future research, conducting needs assessments and designing educational content to foster entrepreneurial behaviors within agricultural cooperatives would be valuable. Additionally, it's worth noting that one of the

main limitations of this study is the dispersion of the statistical population in the quantitative phase within Kermanshah province, which made the research both costly and time-consuming.

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CONFLICT OF INTEREST

The authors state that there is no conflict of interest.

AUTHORS' CONTRIBUTIONS

Each of the authors contributed to the development of the paper.

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