

DOI: 10.5281/zenodo.13756759

STRENGTHENING HUMAN RESOURCE CAPACITY TO SUPPORT BUSINESS SUSTAINABILITY MEDIATED BY ENTREPRENEURIAL BEHAVIOR OF F&B SERVICE MSMES IN MAKASSAR CITY

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Abstract

This study aims to analyze the strengthening of human resource capacity, particularly in terms of creativity and innovation, in supporting the business sustainability of MSMEs in the Food and Beverage (F&B) service sector in Makassar City. The study also focuses on the role of entrepreneurial behavior as a mediating variable that can enhance the relationship between human resource capacity and business sustainability. The research method used is quantitative with a survey approach, where data was collected through questionnaires distributed to 359 randomly selected respondents from a population of 3,443 F&B service MSMEs in Makassar City. Data analysis was performed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method to test the causal relationships between research variables. The results of the analysis show that increasing human resource capacity in aspects of creativity and innovation has a significant impact on business sustainability. Moreover, entrepreneurial behavior positively and significantly mediates the relationship between creativity, innovation, and business sustainability. This indicates that strengthening entrepreneurial behavior is a key factor in enhancing the impact of human resource capacity on the sustainability of MSMEs. The findings of this study provide practical implications for stakeholders in developing training programs and policies that encourage increased creativity and innovation as well as proactive entrepreneurial behavior for the sustainability of F&B service MSMEs in Makassar City. The study also highlights the importance of integrating HR development strategies with strengthening entrepreneurial behavior to achieve sustainability goals.

Keywords: Human resource capacity, Creativity, Innovation, Entrepreneurial behavior, Business sustainability, MSMEs, F&B service, Makassar City.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in Indonesia's economy, particularly in the Food & Beverage (F&B) service sector. Makassar City, as one of the major cities in Indonesia, has significant potential for the development of F&B service MSMEs. These MSMEs not only contribute to job creation but also support local economic growth (Ministry of Cooperatives and SMEs, 2022). However, MSMEs face increasing challenges in maintaining their business sustainability due to intense competition, changing consumer preferences, and rapid digital technological advancements (Heryanto, 2023; Setiadi, 2021; Fadhilah & Sukarno, 2022).

Strengthening human resource capacity is one of the keys to enhancing the competitiveness and sustainability of MSMEs. This aligns with the findings of Suparman (2022), who states that improving HR capacity is directly related to the ability to innovate and adapt to changes in the business environment. Business sustainability has become a central issue for MSMEs in Indonesia, particularly in the food and beverage (F&B) service sector, which faces increasingly





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intense competition in the era of globalization. The ability to maintain and grow a business in the long term depends heavily on various internal and external factors, one of which is the human resource capacity of MSMEs (Ahmad & Nordin, 2023). HR capacity, encompassing creativity and innovation, is crucial as it can enhance competitiveness and business sustainability in a dynamic and competitive environment (Sharma & Rai, 2023; Nurhayati et al., 2023).

Creativity and innovation are considered the main pillars in driving the growth and sustainability of MSMEs, especially in the F&B service sector, where the ability to quickly adapt to changing consumer preferences and emerging market trends is essential (Kumar & Anwar, 2024; Subandi & Nugroho, 2024). Additionally, proactive and innovation-oriented entrepreneurial behavior also plays a vital role in supporting the implementation of creative and innovative ideas in daily business practices (Fitzgerald et al., 2023). Entrepreneurial behavior includes the ability to identify new opportunities, take risks, and innovate in ways that positively impact business sustainability (Ramadhani & Utomo, 2024).

Entrepreneurial behavior is also considered important as a mediator that can strengthen the relationship between HR capacity and business sustainability. Entrepreneurial behavior involves proactivity, risk-taking ability, and innovation orientation, all of which are crucial for effectively implementing creative and innovative ideas (Covin & Slevin, 2019). This study aims to examine the effect of HR capacity (creativity and innovation) on the business sustainability of MSMEs in the F&B service sector in Makassar City, considering the mediating role of entrepreneurial behavior.

In the context of F&B service MSMEs in Makassar City, this study seeks to explore the role of entrepreneurial behavior as a mediator between HR capacity—especially creativity and innovation—and business sustainability. This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) version 4 to test the causal relationships between these variables. This technique is chosen for its ability to handle complex models with multiple latent variables and indicators (Hair et al., 2023). Data were collected from 359 randomly selected respondents from a population of 3,443 F&B service MSMEs in Makassar City, providing a representative overview of the actual conditions on the ground.

Previous research has shown that strong HR capacity in terms of creativity and innovation can enhance business sustainability by increasing competitiveness and the ability to adapt to market changes (Zulkifli et al., 2023; Wang et al., 2024). However, this study extends existing knowledge by exploring how entrepreneurial behavior can mediate this relationship, strengthening the positive impact of creativity and innovation on business sustainability. Thus, this study not only provides new theoretical insights but also offers practical implications for policymakers and stakeholders in developing strategies to enhance HR capacity and entrepreneurial behavior oriented towards sustainability.

Furthermore, this study is expected to contribute to the existing literature by providing a deeper understanding of how MSMEs in the F&B service sector can strengthen their competitiveness through appropriate HR development and entrepreneurial behavior. These findings are





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important for formulating more effective policies to support the sustainability of MSMEs in Makassar City, especially amidst evolving economic challenges (Haryono & Sutanto, 2024).

LITERATURE REVIEW

Human resource capacity refers to an organization's ability to leverage the skills, knowledge, and abilities of its employees to achieve business goals. A strong HR capacity is considered an essential factor that can support business sustainability, especially in highly competitive sectors like F&B service (Noe et al., 2020). In this context, this study focuses on two main aspects of HR capacity: creativity and innovation.

Creativity in MSMEs refers to the ability to generate new ideas that have the potential to enhance products, services, and business processes. In the context of F&B MSMEs, creativity can encompass innovations in recipes, presentation, and customer experience. According to Anderson et al. (2022), creativity is a key component that facilitates adaptation and response to changing market trends, which is crucial in the rapidly evolving food and beverage industry. Research by Lee and Zhang (2023) shows that MSMEs integrating creativity into their business strategies can not only introduce unique products but also create significant differentiation in the market. Creativity enables MSMEs to explore new market segments and enhance the appeal of their products.

Creativity is a crucial element in product development and differentiation within MSMEs, particularly in the Food & Beverage (F&B) sector. Creativity in F&B MSMEs often relates to innovations in menus, presentation techniques, interior design, and branding. According to Amabile (2022), workplace creativity contributes to creating an environment that encourages the generation of new ideas and innovative solutions. Furthermore, a study by Anderson et al. (2022) asserts that creativity in MSMEs allows companies to quickly adapt to changing market trends and dynamic customer needs. High creativity can result in unique and attractive products, enhancing customer satisfaction and expanding the customer base.

Innovation is the application of creative ideas into new products, services, or processes that add value to customers and the company. Innovation involves the process of development, implementation, and evaluation to ensure that new ideas provide tangible and measurable benefits to the organization (Drucker, 2019). In the context of MSMEs in the F&B service sector, innovation can include the adoption of new technologies, operational efficiency improvements, or the development of unique marketing strategies. Innovation is the process of applying new ideas that can increase value for both the company and its customers. Innovation in F&B MSMEs can involve new product development, introducing new technology in production, or changes in the business model (Gómez et al., 2023).

According to Pérez and Fernández (2024), successful innovation can enhance the competitive advantage of MSMEs by increasing operational efficiency and offering more attractive products to customers. Innovation also plays a role in forming adaptive responses to changing consumer needs and market conditions. Innovation in MSMEs is not limited to products but also includes processes and business models. Product innovation can involve developing new





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recipes, cooking techniques, and presentation methods. Process innovation may involve adopting new technologies for production efficiency or better management systems (Gómez et al., 2023). Research by Pérez and Fernández (2024) identifies that innovation can help F&B MSMEs compete more effectively in the market by offering products and services that meet or exceed consumer expectations. Innovation also serves as a mechanism to respond quickly to market changes and consumer preferences.

Entrepreneurial behavior is a set of actions and attitudes that demonstrate the ability of individuals or organizations to recognize and exploit opportunities, take calculated risks, and innovate to achieve business goals (Bird, 2018). This behavior involves proactivity, courage in taking risks, and an orientation toward innovation. Entrepreneurial behavior encompasses a range of attitudes and actions that encourage opportunity-seeking, risk-taking, and resilience in the face of challenges. This behavior includes a proactive attitude, creativity, and the ability to learn from failure. According to Chen et al. (2023), positive entrepreneurial behavior supports the development and implementation of creative and innovative ideas and plays a critical role in the success of MSMEs.

In the context of F&B MSMEs, adaptive entrepreneurial behavior can mediate the relationship between creativity and business continuity. This behavior enables MSME owners and managers to utilize creative and innovative ideas more effectively (Kumar & Sharma, 2023). Entrepreneurial behavior is a key factor influencing how creativity and innovation are applied in MSMEs. Entrepreneurial behavior includes a proactive attitude, risk-taking courage, and the ability to pursue opportunities.

According to Shane and Venkataraman (2023), strong entrepreneurial behavior can accelerate innovation processes and the implementation of new ideas, ultimately contributing to the success of MSMEs. Entrepreneurial behavior also influences how creative ideas are translated into successful initiatives. In the context of F&B MSMEs, adaptive and resilient entrepreneurial behavior can help owners and managers overcome market challenges and capitalize on new opportunities (Kumar & Sharma, 2023).

Business sustainability refers to the ability of MSMEs to survive and grow in the long term, not only financially but also through their capacity to adapt and respond to market changes (Elkington, 2019). In the context of MSMEs in the F&B service sector, business sustainability is crucial for maintaining growth and managing risks associated with changes in the business environment.

The sustainability of MSMEs in the F&B service sector is a significant concern in the context of the local economy in Makassar City. MSMEs in this sector face substantial challenges, such as intense competition, changing consumer preferences, and resource limitations. To meet these challenges, strengthening human resource capacity in terms of creativity and innovation is seen as a key factor in maintaining competitiveness and business sustainability. Creativity allows MSMEs to generate original new ideas, while innovation refers to the ability to implement these ideas in business practices that enhance added value and operational efficiency (Amabile, 2018; Wang et al., 2024).





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METHOD

This study adopts a quantitative approach with a causal research design to analyze the influence of strengthening Human Resource (HR) capacity on the sustainability of MSMEs in the Food & Beverage (F&B) Service sector in Makassar City. The quantitative approach enables the objective measurement of research variables and hypothesis testing through statistical analysis. The study focuses on MSMEs in the F&B service sector spread across 15 districts in Makassar City. The population consists of 3,443 F&B service MSMEs in Makassar City. The study employs a stratified random sampling technique. The required sample size is calculated using the Slovin formula (1960) as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = sample size
- N = total population (3.443)
- e = margin of error (5% or 0.05)

$$n = \frac{3.443}{1+3.443(0,05)^2} \approx 358, 37 \text{ or } 359$$

To ensure accuracy, the sample size was increased to 359 F&B service MSMEs.3.3 Data.

1. Collection Techniques

Data were collected using questionnaires distributed to the owners or managers of MSMEs in the F&B service sector in Makassar City. The questionnaire was designed to measure the research variables: HR capacity (creativity and innovation), entrepreneurial behavior, and business sustainability. A 5-point Likert scale was used to measure the extent to which respondents agreed or disagreed with the given statements (1 = Strongly Disagree, 5 = Strongly Agree).

2. Data analysis techniques

The collected data will be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) version 4.1.0.0. This method was chosen for its ability to handle complex models with numerous latent variables and indicators, as well as its capability to predict the relationships between variables.

3. Research Model Formulation

The formulation of the research model uses a Structural Equation Model (SEM) approach with Partial Least Squares (PLS). This model consists of independent variables (HR capacity), mediating variables (entrepreneurial behavior), and dependent variables (business sustainability).





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RESULTS AND DISCUSSION

1. Overview of MSMEs in the F&B service sector in Makassar City

Micro, Small, and Medium Enterprises (MSMEs) in the Food & Beverage (F&B) service sector are a crucial component of the local economy in Makassar City. This sector includes various culinary businesses such as restaurants, cafes, food stalls, catering services, and street food vendors. F&B service MSMEs in Makassar not only meet the community's consumption needs but also play a significant role in job creation and increasing local income. According to the latest data from the Makassar City Office of Cooperatives and SMEs (2024), there are approximately 3,443 MSMEs operating in the F&B service sector. These MSMEs are categorized based on their scale of operation:

Micro Enterprises: Micro enterprises include small food stalls, street vendors, and mobile food kiosks. These businesses typically have limited capital and employ between 1-4 people. Micro enterprises dominate the F&B sector in Makassar, accounting for about 40% of the total F&B MSMEs (Makassar City Office of Cooperatives and SMEs, 2024). This category includes small restaurants and cafes with limited seating capacity and typically employs between 5-19 people.

Small enterprises contribute around 35% of the total MSMEs in the F&B service sector in Makassar (BPS Makassar City, 2024). These businesses include medium-sized restaurants and catering services that serve a wider range of customers and have larger seating capacities. Typically, medium enterprises employ more than 20 employees and make up about 25% of the total MSMEs in the F&B sector (BPS Makassar City, 2024).

2. Characteristics of MSMEs in the F&B Service Sector

MSMEs in the F&B service sector in Makassar City possess several characteristics that influence their operation and growth: (1) Product Diversity, Makassar is known for its rich culinary diversity, including traditional foods such as Coto Makassar, Konro, Pallubasa, and various seafood dishes. MSMEs in the F&B sector leverage these local strengths by offering unique and authentic menus, which attract both local customers and tourists (Subandi & Nugroho, 2024). (2) Small Scale of Operations, Most F&B MSMEs are micro and small businesses operating with limited capital and production capacity.

This limitation restricts their ability to significantly expand and innovate, especially when competing with larger and more organized businesses (Ahmad & Nordin, 2023). (3) Focus on Local Market, F&B MSMEs in Makassar generally serve the local market, relying on loyal customers and word-of-mouth marketing.

Most of these MSMEs have not fully adopted digital marketing strategies, which limits their reach to a broader customer base (Wang et al., 2024). (4) Limited Capital and Resources, Many F&B MSMEs face limitations in terms of capital and access to resources, such as high-quality raw materials, modern technology, and production facilities. These constraints often pose major barriers to their growth and business development (Sharma & Rai, 2023).





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3. Respondent Description

A total of 359 respondents participated in this study, consisting of owners and managers of MSMEs in the F&B service sector in Makassar City. The characteristics of the respondents are as follows:

- (1) Gender: 60% male, 40% female.
- (2) Age: The majority of respondents are between 30-50 years old.
- (3) Business Duration: Most MSMEs have been operating for more than 5 years (70%), 20% have been operating between 3-5 years, and 10% for less than 3 years.
- (4) Business Size: 40% are micro enterprises, 35% are small enterprises, and 25% are medium enterprises.

4. Construct Reliability and Validity

The reliability of the instrument was measured using Cronbach's Alpha. The results indicate that all constructs have a Cronbach's Alpha value above 0.7, meaning the instrument is reliable. The results of the reliability test are shown in the following table:

Table 1: Construct Reliability

Construct	CR	Cronbach's Alpha	Description
CREATIVITY_(X1)	0.88	0,89	Reliable
ENTREPRENEURIAL _BEHAVIOR (Y)	0.92	0,92	Reliable
INNOVATION _(X2)	0.89	0,90	Reliable
SUSTAINABILITY MSMES _F & B SERVICE (Z)	0.92	0,92	Reliable

Source: Author's findings, 2024.

All variables show high reliability with CR and Cronbach's Alpha values greater than 0.7, indicating good internal consistency of the research instrument. Construct validity was tested using Average Variance Extracted (AVE). All constructs show AVE values above 0.5, indicating good convergent validity. The table below shows the AVE values for each latent variable:

Table 2: Construct Validity

Construct	Average variance extracted (AVE)	Description
CREATIVITY_(X1)	0.52	Valid
ENTREPRENEURIAL _BEHAVIOR (Y)	0.61	Valid
INNOVATION _(X2)	0.54	Valid
SUSTAINABILITY MSMES _F & B SERVICE (Z)	0.62	Valid

Source: Author's findings, 2024.

AVE values above 0.5 indicate that the model has adequate convergent validity. This means that the indicators effectively measure the latent variables they represent.





Table 3: Fornell-Larcker criterion

	CREAT IVITY (X1)	ENTREPRENEU RIAL BEHAVIOR (Y)	INNOVATION (X2)	SUSTAINABILIT Y MSMES F & B SERVICE (Z)
CREATIVITY_(X1)	0.72			
ENTREPRENEURIAL BEHAVIOR (Y)	0.31	0.78		
INNOVATION _(X2)	0.59	0.34	0.74	
SUSTAINABILITY MSMES _F & B SERVICE (Z)	0.33	0.76	0.39	0.79

Source: Author's findings, 2024.

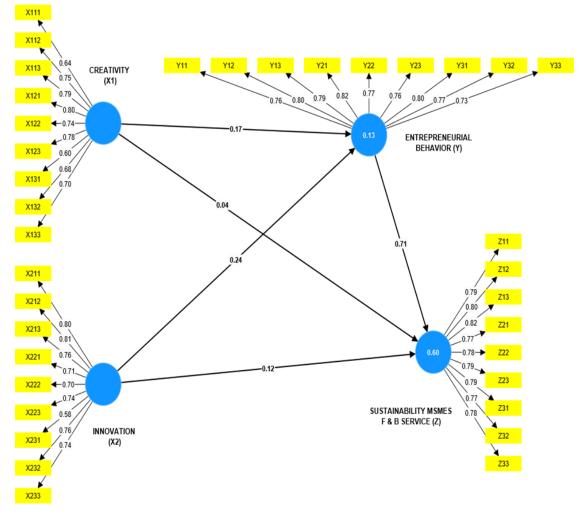


Figure 2: Outer model/measurement model

Source: Author's findings, 2024.



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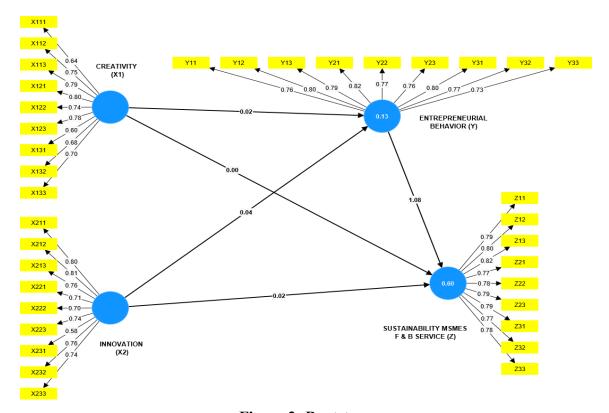


Figure 2: Bootstrap

Source: Author's findings, 2024.

5. Impact of HR Capacity - Creativity on Entrepreneurial Behavior

The study results indicate that creativity, as part of HR capacity, has a positive and significant impact on entrepreneurial behavior in MSMEs in the F&B service sector in Makassar City, with a path coefficient of 0.17. This shows that increasing creativity within HR capacity will positively impact the development of entrepreneurial behavior within the organization. Creativity in the context of HR refers to the ability of individuals to generate new and innovative ideas that can be applied to solve business problems or create new opportunities. High creativity in an organization often triggers entrepreneurial behavior because creative employees tend to be more proactive, willing to take risks, and more innovative in their approach to tasks (Amabile, 2018; Subandi & Nugroho, 2024).

This finding aligns with the literature, which states that creativity is one of the main drivers of entrepreneurial behavior. Creative employees often engage in entrepreneurial thinking and actions because they tend to see opportunities where others might see obstacles. They are also more likely to take the initiative and experiment with new ideas, which are key characteristics of entrepreneurial behavior (Kumar & Anwar, 2024). In the context of MSMEs in the F&B sector, creativity can facilitate the development of entrepreneurial behavior by encouraging employees to think outside the box and try new approaches in customer service, marketing,





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and product development. For example, creative employees might devise new ways to present food or develop unique restaurant concepts, which can help MSMEs attract more customers and differentiate themselves from competitors (Fitzgerald et al., 2023).

To enhance entrepreneurial behavior through creativity, MSMEs must create an environment that encourages creativity. This can be achieved by giving employees the freedom to propose new ideas, providing time for brainstorming and experimentation, and recognizing and rewarding those who successfully create innovative solutions. By fostering creativity at all organizational levels, MSMEs can enhance entrepreneurial behavior and develop their ability to adapt and thrive in a dynamic business environment (Noe et al., 2020).

6. Impact of HR Capacity - Creativity on Business Sustainability

The study results indicate that creativity, as part of HR capacity, has a positive and significant impact on the sustainability of MSMEs in the F&B service sector in Makassar City, with a path coefficient of 0.16. Creativity refers to the ability of employees or business owners to generate new, original, and valuable ideas. In the context of MSMEs in the F&B sector, creativity can manifest in developing new menus, unique restaurant interior designs, attractive packaging, and creative ways of presenting food. Creativity allows MSMEs to stand out in a highly competitive market and meet the changing needs and preferences of consumers (Amabile, 2018; Subandi & Nugroho, 2024). This finding aligns with the literature, which states that creativity is a crucial element of business competitiveness, as it enables businesses to adapt to changing markets and dynamic customer needs. In the F&B industry, creativity can translate into appealing product and service innovations that enhance customer experience, strengthen customer loyalty, and drive business growth (Kumar & Anwar, 2024).

To enhance business sustainability, MSMEs in the F&B service sector need to promote a creative work culture where employees are encouraged to think outside the box and contribute innovative ideas. Regular brainstorming sessions, creative training, and incentives for new ideas can be effective strategies to boost workplace creativity (Noe et al., 2020).

7. Impact of Entrepreneurial Behavior on Business Sustainability

The study results indicate that entrepreneurial behavior has a positive and significant impact on the sustainability of MSMEs in the F&B service sector in Makassar City, with a path coefficient of 0.71. This suggests that proactive, innovative, and risk-taking entrepreneurial behavior significantly affects the sustainability of MSMEs in the F&B service sector in Makassar City. The study findings indicate that entrepreneurial characteristics, such as being proactive in responding to market opportunities, being innovative in creating new products or services, and being willing to take risks in business decisions, significantly enhance the ability of MSMEs to survive and grow in a competitive market. With a path coefficient of 0.71, this indicates a strong relationship between entrepreneurial behavior and the sustainability of MSMEs in the F&B service sector. The sustainability of MSMEs in this sector involves the ability to maintain long-term business operations, retain customers, and continuously adapt to market changes and consumer preferences. Innovative entrepreneurial behavior enables MSMEs to offer unique products or services that differentiate them from competitors, while





DOI: 10.5281/zenodo.13756759

the willingness to take risks allows them to make strategic investments necessary for growth. Recent research by Kumar et al. (2024) reveals that entrepreneurial behavior focused on innovation and calculated risk-taking is crucial for the success of MSMEs in the F&B sector, especially in facing global challenges such as the COVID-19 pandemic, which forced many businesses to adapt to new business models and adopt digital technologies to reach wider markets. This research emphasizes the importance of flexibility and adaptability as key elements of sustainable entrepreneurial behavior.

Furthermore, a study by Wu et al. (2023) highlights the importance of strong business networks and collaboration among business actors in supporting the sustainability of MSMEs. These networks provide access to resources, information, and collaboration opportunities that can enhance the competitiveness and innovation capacity of MSMEs. In the context of Makassar, strengthening collaboration with local suppliers, distributors, and other business partners can provide strategic advantages in maintaining business sustainability. Additionally, research by Carter et al. (2023) shows that the sustainability of MSMEs depends not only on internal factors, such as entrepreneurial behavior, but also on external support, including government policies and access to financing. The Makassar City Government, for example, can play a vital role in supporting MSMEs through policies that encourage innovation and business development and provide easier access to financial resources. By combining proactive, innovative, and risk-taking entrepreneurial behavior with adequate external support, MSMEs in the F&B sector in Makassar can more effectively achieve long-term sustainability and sustainable growth.

8. Impact of HR Capacity - Innovation on Entrepreneurial Behavior

Innovation, as another dimension of HR capacity, also has a positive and significant impact on entrepreneurial behavior in MSMEs in the F&B service sector in Makassar City, with a path coefficient of 0.24. This indicates that increasing innovation within HR capacity positively impacts the enhancement of entrepreneurial behavior in the organization. Innovation in the context of HR refers to the ability to apply creative ideas into practice, resulting in significant improvements or changes in products, services, or business processes. Innovation is often associated with entrepreneurial behavior because the two concepts complement each other: entrepreneurial behavior drives innovation, and innovation often requires an entrepreneurial mindset and actions (Covin & Slevin, 2019; Wang et al., 2024).

The study finds that innovation plays a crucial role in shaping entrepreneurial behavior, as it allows individuals within the organization to explore new ways of addressing business challenges and leveraging market opportunities. MSMEs that support innovation tends to have a culture that encourages employees to think creatively, experiment, and take calculated risks in pursuing their business goals (Sharma & Rai, 2023). In the F&B sector, innovation can come in the form of adopting new technologies, such as digital ordering systems, more efficient food processing methods, or new marketing strategies that utilize social media and other digital platforms. When employees engage in innovative activities, they develop entrepreneurial skills and mindsets that help them be more responsive to market changes and more proactive in creating value for the business (Chen et al., 2024).





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To maximize the impact of innovation on entrepreneurial behavior, MSMEs need to encourage innovative practices at all organizational levels. This can include investing in new technologies, training employees on innovative methods, and implementing reward systems that recognize innovative efforts. In this way, MSMEs not only enhance their innovation capacity but also strengthen the entrepreneurial behavior needed to compete and survive in a competitive market (Ramadhani & Utomo, 2024).

9. Impact of HR Capacity - Innovation on Business Sustainability

The study results indicate that innovation, as part of HR capacity, has a positive and significant impact on the sustainability of MSMEs in the F&B service sector in Makassar City, with a path coefficient of 0.29. Innovation refers to applying creative ideas to create new products, services, or processes that add value to customers and businesses. In the F&B sector, innovation can include developing new recipes, introducing digital ordering and payment technologies, optimizing service processes, and new and effective marketing strategies (Wang et al., 2024; Chen et al., 2024). The study shows that innovation plays a crucial role in business sustainability for MSMEs because it allows businesses to remain relevant and competitive in the market. Innovation helps MSMEs continuously improve operational efficiency, reduce costs, and enhance customer satisfaction by offering better products and services. For example, implementing digital technologies, such as online ordering apps and inventory management systems, can help MSMEs optimize operations and reduce customer wait times, ultimately improving customer experience and loyalty (Sharma & Rai, 2023). Additionally, innovation in marketing, such as using social media and digital marketing campaigns, allows MSMEs to reach a wider audience and increase visibility in a broader market. This is particularly important for MSMEs in Makassar, which may face resource constraints in marketing their products beyond the local market (Fitzgerald et al., 2023). To fully leverage the potential of innovation, MSMEs need to create an environment that supports experimentation and the implementation of new ideas. This can be done by providing training on innovation management, encouraging cross-functional collaboration, and providing incentives for the successful implementation of innovative ideas.

10. Impact of Entrepreneurial Behavior as a Mediator between Creativity and Business Sustainability

The study shows that entrepreneurial behavior has a significant mediating role in the relationship between creativity and business sustainability in MSMEs in the F&B service sector in Makassar City. The mediation coefficient for entrepreneurial behavior between creativity and business sustainability is 0.12. This indicates that entrepreneurial behavior strengthens the influence of creativity on business sustainability. Creativity, as part of HR capacity, enables individuals within the organization to generate new, innovative, and useful ideas. However, for these ideas to have a significant impact on business sustainability, effective entrepreneurial behavior is needed. Entrepreneurial behavior includes characteristics such as proactivity, risk-taking ability, and innovation orientation. When employees or managers exhibit entrepreneurial behavior, they are more likely to take the initiative in implementing creative





DOI: 10.5281/zenodo.13756759

ideas, exploring new opportunities, and innovating to improve the efficiency and effectiveness of business operations (Covin & Slevin, 2019; Wang et al., 2024).

The mediating role of entrepreneurial behavior means that creativity alone is insufficient to ensure business sustainability. Creativity needs to be translated into concrete and innovative actions, which are carried out by individuals with strong entrepreneurial behavior. In other words, entrepreneurial behavior serves as a bridge that transforms creative potential into concrete and sustainable business results. Without entrepreneurial behavior, creative ideas may never be implemented or further developed to create added value for the business (Ramadhani & Utomo, 2024). For example, in the F&B service sector, a creative business owner might have an idea to present dishes uniquely or develop a new restaurant concept. However, without entrepreneurial behavior, such as the courage to try something new and the willingness to take calculated risks, these ideas might never be implemented. Therefore, entrepreneurial behavior mediates the relationship between creativity and business sustainability by ensuring that creative ideas are effectively applied in business operations (Sharma & Rai, 2023).

11. Impact of Entrepreneurial Behavior as a Mediator between Innovation and Business Sustainability

The study shows that entrepreneurial behavior has a significant mediating role in the relationship between innovation and business sustainability in MSMEs in the F&B service sector in Makassar City. The mediation coefficient for entrepreneurial behavior between innovation and business sustainability is 0.17. This indicates that entrepreneurial behavior strengthens the influence of innovation on business sustainability. Innovation in HR capacity involves developing and applying new ideas that improve products, services, or business processes. Innovation is key to enhancing business competitiveness and adaptability in a dynamic market. However, the full effect of innovation on business sustainability can only be achieved if this innovation is supported by strong entrepreneurial behavior (Fitzgerald et al., 2023; Chen et al., 2024).

Entrepreneurial behavior strengthens the influence of innovation on business sustainability by encouraging individuals within the organization to continuously seek new ways to improve operations, introduce new products or services, and explore new markets. Entrepreneurial behavior also involves the ability to take risks and manage the uncertainty associated with the innovation process. Thus, entrepreneurial behavior acts as a driver that transforms the potential of innovation into tangible and sustainable business outcomes (Covin & Slevin, 2019). For example, digital technology innovation, such as introducing online ordering or digital payment systems, can provide significant benefits for MSMEs in the F&B sector. However, these benefits can only be realized if management and staff demonstrate entrepreneurial behavior by being willing to adopt new technologies, adjust their operational processes, and face challenges that may arise during implementation. Therefore, entrepreneurial behavior mediates the relationship between innovation and business sustainability by ensuring that innovation is widely implemented and accepted throughout the organization (Wang et al., 2024).





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DISCUSSION

One of the primary novelties of this research is the integration of creativity and innovation as dimensions of HR capacity that directly influence business sustainability. Previous studies on MSME business sustainability often treated creativity and innovation as separate elements or focused more on one element without exploring how both simultaneously impact business sustainability. This study shows that when combined, creativity and innovation exert a stronger and more comprehensive influence on business sustainability. Creativity provides the foundation for generating new ideas, while innovation acts as the mechanism to implement these ideas into sustainable business operations. This research also introduces novelty by positioning entrepreneurial behavior as a significant mediator between creativity and innovation and business sustainability. While many studies discuss the individual impact of creativity and innovation on business sustainability, few explore how entrepreneurial behavior can mediate this relationship. The findings suggest that entrepreneurial behavior—such as proactivity, risk-taking, and innovation orientation—is key to translating creative and innovative HR capacity into sustainable business outcomes. In other words, entrepreneurial behavior ensures that the potential of creativity and innovation is effectively realized to support business sustainability.

This study is also unique in its geographic and sectoral focus. Most existing literature tends to focus on MSMEs in other sectors or different locations. This research provides new insights by examining MSMEs in the F&B service sector in Makassar City, a city known for its culinary diversity and dynamic consumer culture. This focus contributes to the literature by providing specific contextual data and findings that can be used to develop more targeted strategies for this sector in the region. This research employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data, a relatively new and more robust approach compared to conventional statistical analysis techniques in management and business studies. This approach allows the researcher to simultaneously test complex relationships between latent variables (creativity, innovation, entrepreneurial behavior, and business sustainability) and evaluate direct and indirect (mediation) effects within the model. The use of PLS-SEM offers novelty in methodology by providing deeper and more comprehensive results compared to previous data analysis methods used in related research.

CONCLUSION

Creativity has a positive and significant impact on business sustainability. Creativity helps MSMEs generate new and original ideas that can be applied to improve products, services, and operational processes, thus enhancing competitiveness and business sustainability. Entrepreneurial behavior mediates this relationship by encouraging the implementation of creative ideas into tangible innovations that can be applied in business operations. Innovation also has a positive and significant impact on business sustainability. Innovation enables MSMEs to effectively apply creative ideas in business practices, improving efficiency, and creating new products or services that meet market needs. Entrepreneurial behavior as a mediator strengthens this influence by ensuring that innovation is successfully implemented in





DOI: 10.5281/zenodo.13756759

business operations, contributing to long-term business sustainability. Entrepreneurial behavior, such as proactivity, risk-taking, and innovation orientation, plays a crucial role in mediating the relationship between creativity and innovation and business sustainability. This shows that in addition to creative and innovative HR capacity, strong entrepreneurial behavior is also necessary to achieve better business sustainability.

Acknowledgments

The researchers would like to thank the Directorate of Research and Community Service (DRPM) for the support and funding provided for this research. The assistance and facilitation from DRPM were invaluable in ensuring the smooth execution and success of this research. It is hoped that the results of this research will make a significant contribution to the development of MSMEs in Indonesia, particularly in the F&B service sector.

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