Jurnal Akuntansi dan Manajemen
Journal homepage: https://ejournal.stei.ac.id/index.php/JAM
DOI: https://doi.org/10.36406/jam.v21i1.1490

Research Paper

Organizational health performance of micro and small enterprises run by women: A short longitudinal study

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Article Information:

Received 03/01/2024
Revised 04/15/2024
Accepted 04/18/2024
Online First 04/30/2024

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Abstract

This study aimed to develop a new scale for measuring and evaluating organizational health performance (OHP) tailored explicitly for Indonesia's MSE sector managed by women. The research involved a comprehensive literature review, focus group discussions, and assessments of content validity to establish an initial model comprising five key factors: institutional resources, leader involvement, work environment quality, organizational values, and operational stability. This model included 36 initial items that underwent further testing. The next phase utilized exploratory factor analysis (EFA) to identify the scale's underlying structure, followed by confirmatory factor analysis (CFA) to evaluate the scale's validity and reliability using data collected from 267 MSEs in Indonesia. The EFA and CFA validated the initial instrument for measuring organizational health in micro and small enterprises. The final scale consists of 34 items categorized into five factors: institutional resources, leader involvement, work environment quality, organizational values, and operational stability. The scale developed in this research acts as a diagnostic tool, enabling organizations to identify areas for improvement and highlight the aspects of their organizational health performance that require attention, particularly within MSEs.

Keywords: Organizational health performance, micro and small enterprises, women entrepreneurship, case study, exploratory factor analysis, confirmatory factor analysis

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DOI: https://doi.org/10.36406/jam.v21i1.1490

Abstrak

Penelitian ini bertujuan untuk mengembangkan skala baru guna mengukur dan mengevaluasi kinerja kesehatan organisasi (OHP) yang dirancang khusus bagi sektor usaha mikro dan kecil (UMK) di Indonesia yang dikelola oleh perempuan. Penelitian ini melibatkan tinjauan pustaka yang komprehensif, diskusi kelompok terarah, dan penilaian validitas isi untuk menyusun model awal yang mencakup lima faktor utama: sumber daya kelembagaan, keterlibatan pemimpin, kualitas lingkungan kerja, nilai-nilai organisasi, dan stabilitas operasional. Model ini memuat 36 butir pernyataan awal yang kemudian menjalani pengujian lebih lanjut. Tahap berikutnya menggunakan analisis faktor eksploratori (EFA) untuk mengidentifikasi struktur dasar skala tersebut, diikuti dengan analisis faktor konfirmatori (CFA) untuk mengevaluasi validitas dan reliabilitas skala menggunakan data yang dikumpulkan dari 267 UMK di Indonesia. Hasil EFA dan CFA memvalidasi instrumen awal untuk mengukur kesehatan organisasi pada usaha mikro dan kecil. Skala akhir terdiri dari 34 butir pernyataan yang dikategorikan ke dalam lima faktor: sumber daya kelembagaan, keterlibatan pemimpin, kualitas lingkungan kerja, nilai-nilai organisasi, dan stabilitas operasional. Skala yang dikembangkan dalam penelitian ini berfungsi sebagai alat diagnostik yang memungkinkan organisasi untuk mengidentifikasi area yang perlu diperbaiki serta menyoroti aspek-aspek kinerja kesehatan organisasi yang memerlukan perhatian, khususnya pada sektor UMK.

Kata Kunci: Organizational health performance, micro and small enterprises, women entrepreneurship, case study, exploratory factor analysis, confirmatory factor analysis

1. Introduction

In today's dynamic and competitive business environment, organizational health (OH) has emerged as a critical area of study, garnering significant attention from researchers and practitioners. OH is a vital attribute that plays a significant role in the establishment and maintenance of effective organizations, enabling them to adapt, survive, and thrive in today's business landscape (Hoy & Fedman, 1989; Miles, 1969; Parsons, 1967; Singh & Jha, 2018). The concept of OH was initially used to explain the continuity of organizational life, similar to human health. However, it was later redefined by several scholars (Hoy & Fedman, 1989; Jaffe, 1995; Parsons, 1967). These scholars characterize OH as the ability of an organization to successfully adapt to its environment, foster solidarity among its members, and achieve its objectives. Several scholars (Hoy & Fedman, 1989; Jaffe, 1995; Parsons, 1967), later redefined OH as the ability of an organization to adapt to external environmental changes, enhance the quality of interactions among its members, and successfully achieve its goals. Despite receiving considerable attention from researchers in the past decade, it remains relatively limited in generalization, so expanding this concept is still needed (Singh & Jha, 2018).

Over time, various authors have defined OH using different indices to measure an organization's health. For example, early discussions of this concept focused on problem-solving, readiness to change, and adaptability as essential for long-term organizational survival (Bennis, 1962; Fordyce & Weil, 1971; Hoy & Fedman, 1989; M. B. Miles, 1969; Parsons, 1967). Several subsequent researchers have focused on different aspects of healthy workplaces. These include job satisfaction, absenteeism, and turnover (Quick, 1999), humanistic values (Rosen, 1991), growth and a supportive work environment (Jaffe, 1995), management practices, organizational culture and values (Sauter et al., 1996), as well as effectiveness, integration, and employee well-being (Cox & Howarth, 1990; Cox & Leiter, 1992). After 2000, researchers increasingly adopted a positive psychology approach (Seligman & Csikszentmihalyi, 2014), which integrated earlier concepts of organizational health, including the ability to develop (Hoy & Miskel, 2005) and

sustainability (Hofmann & Tetrick, 2003). This evolution in understanding organizational health leads to various dimensions and perspectives, ranging from work environment management to psychological aspects of employees, leadership, culture, and organizational effectiveness.

Organizational health is a multifaceted concept essential for effective functioning and vitality (Xenidis & Theocharous, 2014). Although its significance is widely acknowledged, there are considerable gaps in understanding, measuring, and implementing OH within the context of micro and small enterprises (MSEs). Firstly, MSEs often need more resources to invest in comprehensive OH initiatives, which can hinder their ability to enhance employee engagement and well-being (Koinig & Diehl, 2022). Effective leadership and management practices are also critical for promoting OH; however, MSEs may need more expertise and resources to implement these practices (Gbemisola & Rungi, 2022; Larsson et al., 2009). Second, smaller enterprises, particularly micro-scale businesses, tend to be less proactive in promoting mental health, highlighting the need for measures to improve the current situation. These enterprises face challenges in creating and maintaining a safe and healthy work environment due to specific structural and organizational characteristics, difficulties in identifying and applying preventive measures, and inadequate skills among employers and employees (Mosconi, 2016).

The primary objective of this study is to develop a new organizational health (OH) scale tailored explicitly to the micro and small enterprise (MSE) sectors. This study contributes significantly to the organizational health literature in two ways. First, the present study addresses the need for more empirical evidence on organizational health measurement, specifically within the MSE sectors (Hadian et al., 2023; Orvik & Axelsson, 2012; A. Singh & Jha, 2018). Existing research has predominantly focused on health, education, and extensive business sectors (Bronkhorst & Vermeeren, 2016; Brown et al., 2003; Gagnon et al., 2017; Kim et al., 2018; Shoaf et al., 2004; A. Singh & Jha, 2018), rendering these findings less relevant for MSEs. These enterprises typically employ short-term strategies and operate with limited financial resources, workforce, and technological capabilities (Efendi et al., 2020). They also face unique challenges such as resource constraints, market instability, and regulatory hurdles (Wenke et al., 2021; Woschke et al., 2017; Zulu-Chisanga et al., 2021). Consequently, existing tools for measuring organizational health may not be fully applicable or practical for smaller organizations (Hadian et al., 2023; Williams et al., 2022). Therefore, this study emphasizes the need to simplify and adjust organizational health measures to ensure they are relevant to the current economic situation and business dynamics. As a result, this research provides a new, valid, and reliable scale designed explicitly for the MSE sector.

Second, this study uniquely focuses on female MSE business owners in Indonesia. Women's entrepreneurship is critical for achieving the UN 2030 Sustainable Development Goals (SDGs), particularly in addressing poverty and inequality (El-Kafafi, 2022; Samantroy & Tomar, 2018). Research from various countries indicates that women entrepreneurs play a vital role in economic growth, economic development, poverty eradication, and improved employment rates (El-Kafafi, 2022; Razzak & Jassem, 2024; Roveri et al., 2023). By focusing on female business owners, the study aims to fill a significant gap in the literature and provide insights that can improve organizational health, specifically for female entrepreneurs in Indonesia. Furthermore, the findings provide practical advantages by improving our understanding of assessing and enhancing organizational health in MSEs and offer valuable insights for practitioners' and policymakers' broader goals of gender equality and economic empowerment in sustainable development.

2. Theoretical background and hypothesis

Over the past four decades, the concept of organizational health has shifted from an emphasis on internal components necessary for adaptation and survival in changing environments (Bennis, 1962; Fordyce & Weil, 1971; Hoy & Fedman, 1989; M. B. Miles, 1969; Parsons, 1967) to a focus on sustainability achieved through the alignment of physical, mental, and social functions with organizational goals (Brown et al., 2003; Hofmann & Tetrick, 2003). According to Cox and Howarth (1990), organizational health assesses an organization's effectiveness in various environments and capacity to adapt to change. They maintain that a "healthy" organization must align its culture, structure, policies, and procedures with its objectives. This alignment is essential as it cultivates a cohesive environment where employees comprehend and embrace the organization's goals, resulting in increased motivation and productivity. When subjective elements, such as the organization's values and culture, harmonize with objective components like formal policies and structural frameworks, it establishes a unified direction for the organization (Cox & Leiter, 1992).

Similarly, Rosen (1991) characterized a healthy organization as prioritizing and upholding humanistic values, such as commitment to self-awareness, decency, respect for diversity, partnership, health and well-being, flexibility, and enthusiasm for its products. Another author (Williams, 1994) presented a comprehensive and holistic framework for organizational health, considering various factors such as environmental conditions, physical health, mental well-being, and social health. This multifaceted approach promotes a thorough understanding of employee wellness by recognizing that each dimension is critical to organizational effectiveness. Moreover, Jaffe (1995) broadened the definition of organizational health to encompass effectiveness for multiple stakeholders, stressing the importance of efficient growth, enhancing stockholder value, creating a supportive work environment for employees, providing quality products and services to suppliers and customers, and being mindful of community and environmental sustainability. Quick (1999) pointed out the traits of a healthy workplace, including high employee satisfaction, minimal grievances, low absenteeism and turnover, few accidents, and no workplace violence. Achieving a balance among the needs of all stakeholders is essential for organizational success.

More recently, Bauer and Jenny (2007) introduced the concept of organizational health development (OHD), which integrates the continuous reproduction and intentional enhancement of health within organizations as social systems, emphasizing the interplay between individual and organizational capacities. The OHD model illustrates the organizational system through its capacities—structure, strategy, and culture—interacting with individual capacities such as competence, motivation, and identity. This interaction encompasses factual processes, including business and management operations and social processes involving managers, employees, and customers. These processes not only influence but also shape both individual and organizational capacities. Additionally, the model acknowledges the significance of customs, societal factors, financial stakeholders, and members' personal lives as relevant health environments that the organization must balance alongside the interests of its members.

The model for measuring organizational health has recently progressed by combining foundational theories with modern perspectives on sustainability and positive psychology. Researchers such as Ho (2000) have simplified the evaluation of organizational health into three main components: the management environment, the social environment, and the perception of performance. Furthermore, Gagnon and his team from McKinsey outlined nine essential dimensions for assessing organizational health: direction, leadership, innovation and learning, coordination and control, capability, motivation, work environment, accountability, and external attention (Gagnon et al., 2017). In a similar vein, Singh and Jha (2017) revalidated

previous measurement scales. They identified nine organizational health factors: managerial efficacy, practicality and problem-solving, organizational adequacy versus slack, amiable power relations, HRD orientation, practices, team orientation, organizational values, innovativeness, and morale.

3. Methodology

The present study aims to develop an instrument for measuring MSE's organizational health following Hinkin's scale development procedures (Hinkin, 1995). The data collection involved conducting focus group discussions and in-depth interviews, followed by a survey of 267 micro and small enterprises in Indonesia. The research followed ethical guidelines from national and international standards (e.g., the Declaration of Helsinki) and relevant data protection laws. Two studies were conducted for scale development. The first, a focus group discussion and content validity study, was a collaborative effort involving academics and practitioners in micro and small enterprises. This phase aimed at defining, grouping, and selecting appropriate items. The next research was carried out to ensure accuracy and consistency. It employed exploratory factor analysis (EFA) to reduce items, identify the components or factors formed, and confirm the EFA findings using confirmatory factor analysis (CFA).

3.1 Focus groups and content validity

In this study, we assessed the Organizational Health construct using a modified version of the Organizational Health Measure from previous studies (Hoy & Fedman, 1989; M. B. Miles, 1969; A. Singh & Jha, 2018). For instance, the original questionnaire by Singh and Jha (2018) revealed 39 items categorized into nine dimensions. Miles (1969) identified ten important properties of OH, and Hoy and Fedman (1989) identified seven dimensions in the education sector.

Focus group discussions were held to identify key factors for measuring the health of organizations in the micro and small business sectors. This activity involved 14 academics with doctoral degrees in strategic management, marketing, accounting, and finance, six MSE owners, and two representatives from local government agencies responsible for developing micro and small businesses. The discussions took place over two stages, held on different days. On the first stage (day 1), participants were invited to share their thoughts on (i) the definition of organizational health, (ii) the advantages and disadvantages of organizational health, and (iii) how business owners and employees can contribute to improving organizational health. On the second day of the FGD, we discussed and agreed upon the dimensions of organizational health.

After thorough discussions, we proposed the initial model of five dimensions: institutional, leadership, physical work environment, organizational value, and operational stability. These dimensions were intended to simplify the previous scale (Hoy & Fedman, 1989; M. B. Miles, 1969; A. Singh & Jha, 2018). In this stage, we have developed new dimensions (institutional and operational resources) to modify the existing scale, making it more applicable to micro and small sector structures and cultural perspectives.

Next, we invited 20 expert panels comprising ten practitioners and academics in micro and small enterprises to review the instrument. They evaluated its clarity, representativeness, and comprehensiveness (Miles et al., 2016). The items were rated on a two-point scale: (1) not appropriate and (2) appropriate. We used Content Validity Ratios (CVR) for individual items and a Content Validity Index (CVI) for the entire (Ayre & Scally, 2014; Wilson et al., 2012). After analyzing the CVR, six items were removed due to expert disagreement. The total number of items was 34, comprising nine to measure institutional resources, seven for leader involvement, 5 for work environment quality, and 8 and 5 for organizational values and operational stability. For more details, please refer to Appendix 1.

3.2 Sample procedure

This study focuses on micro and small enterprises (MSEs) managed by women in Indonesia for several compelling reasons. Firstly, women entrepreneurs often need more financial assistance, poor business locations, and strong marketing strategies, which can impede their business growth and sustainability (Mohd Noor & Omar, 2024). Addressing these specific needs is crucial for enhancing their entrepreneurial success. Secondly, the global commitment to the Sustainable Development Goals (SDGs) emphasizes the importance of women's economic empowerment. This commitment is reflected in various international policies and initiatives that promote women's entrepreneurship (Dau et al., 2018; Dello Strologo et al., 2023). Supporting women entrepreneurs aligns with broader efforts to achieve gender equality and foster economic development. Lastly, it is noteworthy that more than 60 percent of Indonesia's micro and minor sectors are managed by women (Ministry of Finance of the Republic of Indonesia, 2022). This substantial representation underscores women's critical role in the MSE landscape, making it essential to focus on their unique challenges and contributions. By concentrating on this demographic, the study aims to provide valuable insights and solutions to enhance the organizational health and overall success of women-led MSEs in Indonesia, thereby contributing to local economic development and achieving SDG's global gender equality goals.

The criteria for identifying MSEs are based on the World Bank criteria and the Law of the Republic of Indonesia Number 20 of 2008. The criteria include the following: (1) number of employees (10 for micro-enterprises, 50 for small enterprises); (2) Assets and revenue levels for each category. Micro-enterprises have assets of a maximum of IDR 50 million and revenue of up to IDR 300 million; small businesses have assets between IDR 50 million - 500 million and revenue between IDR 300 million - 2.5 billion. This study focus on three sectors (wholesale and retail trade, food and beverage, and other services) as they represent the largest sectors. It is worth noting that 60 percent of these three sectors are comprised of informal sectors, which are individual or family businesses (Fachrunnisa et al., 2020).

Table 1. Characteristics of micro and small enterprises in this study

	Counts	**% of Total**
Age of business owner		
< 30 yrs	28	10.5 %
30 - 40 yrs	102	38.2 %
> 40 yrs	137	51.3 %
Type of business		
Food and Beverage	178	66.7 %
Wholesale and retail	70	26.2%
Fashion and other service	19	7.1 %
Company age		
< 1 yr	16	6.0 %
1 - 3 yrs	54	20.2 %
> 3 yrs	197	73.8 %

A convenience technique was used to determine the sample, where the field team conducted a preliminary survey to obtain permission from business owners domiciled in Jakarta and two surrounding cities. We provided a cover letter detailing the study's objectives, data handling procedures, assurances of anonymity, and instructions for completing the questionnaire.

Participants provided their informed consent by agreeing to complete the questionnaire. Data was collected at two time points. First, the business owner filled out a paper-pencil questionnaire; next, we randomly selected 1 to 2 employees and asked for contact information to complete the online questionnaire at different times. This separation of time and different sources is intended to minimize common method bias (Podsakoff et al., 2012). Of this total, 312 MSE owners responded about institutional resources, work environment quality, and operational stability, and 269 employees responded to leader involvement, organizational values, and another measure (work-life balance and work incivility) to test convergent and discriminant validity. After eliminating the cases with the unmatched owner-employee sets, 267 unique one-to-one matched sets of the owners–employees' ratings were used for hypothesis testing of our research model.

In this study, the majority of female business owner respondents are over 40 (51.3%), followed by those aged 30 to 40 (38.2%), and only 10.5% are under 30. The food and beverage type of business is the most represented sample, comprising 66.7% of the respondents, and wholesale and retail (26.2%) and fashion and other services have the least representation at 7.1%. Additionally, most companies are over three years old (73.8%), with only 6.0% less than one year old, indicating that the sample is skewed toward more established organizations (See Table 1).

Other Measures

This study also uses an external scale for convergent and discriminant validity. Organizational health encompasses individual, group, and organizational factors, with work-life balance frequently associated with promoting healthy workplace practices (Bauer & Jenny, 2012; Grawitch et al., 2006) and workplace incivility as the opposite. To assess work-life balance, the study adapted a scale from Brough et al. (2014), which consists of four items. Employees were instructed to respond to each question by selecting one of three options: (3) "yes," (1) "no," and (2) "cannot decide." A coefficient alpha of .761 indicated the scale's reliability, suggesting acceptable internal consistency. Additionally, respondents were asked to rate their experiences of workplace incivility (Cortina et al., 2001) using a three-point scale, where responses ranged from (1) "never" to (3) "very often." The coefficient alpha for the scales was .775.

3.3 Data analysis strategy

As Hinkin (1995) recommended, an exploratory factor analysis (EFA) was performed to assess the scale's dimensionality. The decisions concerning dimensionality were based on a combination of statistical (empirical) and interpretive (rational) criteria. Following the exploratory factor analysis (EFA), a confirmatory factor analysis (CFA) was conducted using JAMOVI software on the second half of the randomly split sample. The purpose of the CFA was to test the hypothesis that subscales based on intentionality would be supported and to determine whether the results would align with those obtained from the EFA. Finally, composite scores of organizational health (OH) were created and correlated with work-life balance (WLB) measures and workplace incivility to assess concurrent validity.

4. Results and discussion

4.1 Exploratory factor analysis (EFA)

The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity were employed to evaluate sampling adequacy, particularly in assessing the ratio of cases to variables for the analysis. KMO values greater than 0.6 and a significant result from Bartlett's Test of Sphericity indicated adequate sampling (Hair et al., 2019). In this study, the KMO value was found to be 0.871, which suggests a strong sampling adequacy.

Table 2. Exploratory factor analysis of OH

Indicator	Factor					% of variance
	INS	**OV**	**LDI**	**WEQ**	**OPS**	
OH1	.654					14.25
OH2	.672					
OH3	.723					
OH4	.693					
OH5	.572					
OH6	.528					
OH7	.592					
OH8	.625					
OH9	.549					
OH10			.610			10.87
OH11			.747			
OH12			.705			
OH13			.738			
OH14			.705			
OH15			.681			
OH16			.433			
OH17				.466		8.44
OH18				.721		
OH19				.748		
OH20				.790		
OH21				.669		
OH22		.560				12.76
OH23		.689				
OH24		.709				
OH25		.792				
OH26		.807				
OH27		.589				
OH28		.820				
OH29		.663				
OH30					.539	6.66
OH31					.587	
OH32					.549	
OH33					.565	
OH34					.581	
KMO Measure of Sampling Adequacy						.871
χ^2						852
df						401
RMSEA						.065

Notes: The abbreviations are as follows: INS = Institutional resources, OV = Organizational value, WEQ = **Workplace environment quality,** LDI = Leader involvement, OPS = Operational stability

The approximate chi-square value from Bartlett's Test was 852, with 401 degrees of freedom, and the p-value was less than 0.05, confirming the significance of the test. The total variance examined indicates that the items in the organizational health (OH) questionnaire accounted for a total variance of 53%. To determine the number of factors, an eigenvalue greater than 1.0 was used as a criterion, and the Varimax rotation method was meticulously applied to extract five components. During this stage of factor analysis, all items with factor loadings of 0.4 or higher were included, ensuring that the factors identified were both statistically significant and meaningful for the development of the scale (See Table 2).

4.2 Confirmatory Factor Analysis (CFA)

The initial evaluation of goodness of fit indicated that the model did not meet the required standards, necessitating further modifications based on modification indices. Upon careful review, six items were identified as having factor loadings below the acceptable threshold of 0.50. These items included two related to institutional resources (OH5 and OH6), two concerning leader involvement (OH10 and OH16), and two related to organizational values (OH22 and OH29). Their presence was found to significantly impact the analysis, leading to their removal from the model. After modification, a chi-square goodness-of-fit value less than 0.05 suggests that the model does not fit the data well. However, other fit indices provide additional insights into model adequacy. Specifically, a Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Normed Fit Index (NFI), and Tucker-Lewis Fit Index (TLI) values above 0.9 indicate a good model fit. Additionally, a Root Mean Square Error of Approximation (RMSEA) value less than 0.08 and a Standardized Root Mean Square Residual (SRMR) value below 0.060 would be a significantly reasonable model fit (Hair et al., 2019).

After removing unsuitable items, the revised model showed good internal consistency reliability across all factors, with Cronbach's alpha values ranging from .841 to .885. Also, except for the institutional resources factor, the requirements for convergent validity were met, as indicated by Average Variance Extracted (AVE) values greater than .50 for the other factors. Additionally, all standardized factor loadings (SLF) were larger than .50, suggesting that each item significantly contributes to its respective factor (see Table 3).

Table 3. Confirmatory factor analysis results

Latent	n of items	SLF	α	AVE
Institutional resources	7	.535 - .780	0.849	0.422
Leader involvement	5	.719 - .776	0.861	0.562
Work environment quality	5	.570 - .805	0.841	0.533
Organizational values	6	.511 - .885	0.885	0.579
Operational stability	5	.694 - .807	0.868	0.559

Concurrent Validity

The organizational health performance (OHP) composite score showed moderate correlations with work-life balance (WLB) and low correlations with workplace incivility. Specifically, the correlation between OHP and WLB was positive, with a correlation coefficient of r=0.528 and a p-value less than 0.01, indicating a statistically significant relationship. On the other hand, the correlation between OHP and workplace incivility was negative, with a correlation coefficient of r=−0.205 (p-value < 0.01), suggesting that higher levels of organizational health are associated with lower levels of workplace incivility. These results support the concurrent validity of the

organizational health construct developed in this study, as they align with theoretical expectations regarding the relationships between organizational health, work-life balance, and workplace incivility (see Appendix 2).

4.3 Discussion

In the initial phase, we conducted focus groups and a content validity assessment to adapt a general OH measure based on previous studies (i.e., Hoy & Fedman, 1989; M. B. Miles, 1969; Singh & Jha, 2018). During this stage, we evaluated and distinguished the specific aspects of organizational health pertinent to MSEs by incorporating various perspectives, including human resource management, strategic management, psychology, marketing, and finance. Subsequently, to further validate the OH measure, we included a sample of 267 MSEs from diverse business types across three cities in Indonesia to test its validity and reliability.

Exploratory factor analysis indicated that the 34 items were consistent with our a priori scale construction from the previous stage. Factor 1, identified as institutional resources, is a significant component that accounts for 14.25 percent of the variance and consists of nine items. This factor includes several aspects such as having a Business Identification Number (NIB), patents or halal certification for food products, market reach, government funding assistance, participation in government activities, collaboration and cooperation with other businesses, merchant partnerships, utilization of digital marketing, and access to capital resources; this attribute appears to be neglected in current OH measurements (i.e., Hoy & Fedman, 1989; Miles, 1969; Singh & Jha, 2018). The concept of institutional resources in this study is similar to intellectual capital (human, structural, and relational capital) with the addition of capital resources and the use of digital marketing as a key factor in organizational competitiveness (Cisneros et al., 2020; R. K. Singh et al., 2022; Troise et al., 2022).

Factor 2 is identified as organizational values, representing the fundamental principles guiding internal operations and business practices, accounting for 12.86 percent of the explained variance. Organizational values have consistently been a key component in previous organizational health measurement models (Sauter et al., 1996; Singh & Jha, 2018). In the current study, organizational values encompass aspects such as the freedom to discuss work-related challenges, a familial atmosphere, help each other, mutual trust among employees, teamwork, and respect for colleagues. In addition, in this study, the moral element, which in the previous model was a separate factor (Hoy & Fedman, 1989; M. B. Miles, 1969; A. Singh & Jha, 2018), is included in the organizational values factor.

Factor 3, leader involvement, emphasizes the active role of leaders in modeling behavior, fostering innovation, and contributing to the growth and development of employees through direct involvement and mentorship. This factor consists of seven items: for example, the leader knows all his employees well. The variance explained by leader involvement was 10.87 percent. This study is in line with Huang and Ramey (2008) and Hoy and Fedman (1989), who include elements of leadership to measure organizational health, as well as other forms of leadership behavior such as managerial efficacy, amiable power relations (Miles, 1969; Singh & Jha, 2018), and management practices (Sauter et al., 1996). Specifically, leader involvement in this study is more similar to the core characteristics of leader humility (Argandona, 2015; Owens & Hekman, 2012), where leaders are willing to listen to subordinates' ideas, provide direct coaching, and provide recognition for their contributions.

Factor 4 relates to the quality of the workplace environment, focusing on the physical aspects of the work environment; this includes working hours, job-related accidents, workload, and physical factors like noise levels, cleanliness, and lighting. Factor 4 explains 8.44 percent of the variation in the organizational health concept. Understanding the significance of physical

environmental factors is essential in comprehending organizational health, especially in promoting a healthy work environment (Bauer & Jenny, 2012; Hofmann & Tetrick, 2003). These factors are also similar to the job demands of the JD-R model (Bakker, A. B., & Demerouti, 2016; Bakker & Demerouti, 2007).

Factor 5, operational stability, emphasizes the essential financial and physical resources needed for a business to operate smoothly and sustainably. This factor includes critical financial aspects such as working capital, the ability to meet debt obligations, the capacity to pay employee salaries, and physical resources like a continuous supply of raw materials and support from equipment or machinery. This factor represents 6.66 percent of the variance in the organizational health construct. Operational stability is a new factor not previously identified in organizational health measurement models. Since organizational health is closely linked to an organization's ability to function effectively, adapt to its environment (Parsons, 1967), survive (M. B. Miles, 1969), and develop (Hoy & Fedman, 1989), operational stability can be a key indicator of an organization's capacity to sustain operations and foster growth.

The present study eliminated six items during the CFA stage. Compared to previous research on the education sector and large corporations (i.e., Hoy & Fedman, 1989; M. B. Miles, 1969; Singh & Jha, 2018), this study examined micro and small enterprises, making several items irrelevant. For instance, items such as "participation in government activities" and "business collaboration and cooperation" received minimal responses from most participants in the micro sectors, especially those operating locally without official government permits. Furthermore, items like "knows all his employees well" and "creates a sense of togetherness and family" within the leader involvement factor were considered irrelevant for micro companies with only 3-5 employees. The phrase "creates a sense of togetherness and family" also seemed redundant compared to "family atmosphere" in the organizational values factor. Despite discrepancies between the EFA and CFA results, the five subscales demonstrated good reliability and initial validity. Additionally, the present scales provided strong evidence of both convergent and discriminant validity, as shown by the expected correlation patterns with measures of employee work-life balance and workplace incivility.

4.4 Implications

This study introduces a new scale to measure the health of small and micro enterprises (MSE) by combining existing concepts and adjusting them to fit the unique context of these organizations. The characteristics of MSEs, which generally have short-term strategies and operate with limited financial resources, workforce, and technological capabilities, do not require complex dimensions, so existing organizational health measurement models must be adjusted. This study assumes that a healthy organization operates effectively and can adapt and thrive in a changing environment. Theoretically, this broader approach expands beyond effectiveness and performance, highlighting the importance of organizational health as a comprehensive concept covering various aspects of the organization's sustainability. In particular, we will add two important components to the organization: institutional resources and operational stability, which were previously unnoticed (Hoy & Fedman, 1989; M. B. Miles, 1969; Sauter et al., 1996; A. Singh & Jha, 2018).

The expansion emphasizes that organizational health is not only about effectiveness and performance but also about sustainability and adaptability. This shift in theory encourages researchers to take a more comprehensive view of what makes an organization healthy. Additionally, introducing new components, such as institutional resources and operational stability, opens up opportunities for future research to explore how these factors influence organizational health in small and medium-sized enterprises (SMEs). Hence, future studies could lead to the development of new hypotheses and research questions that delve deeper into the

interaction between organizational health and various internal and external factors, thereby significantly impacting the field of organizational behavior and management.

In addition to theoretical implications, a new scale developed in this study is specifically designed for MSEs, allowing practitioners to assess organizational health in a way relevant to their unique context. This tool can help MSEs identify strengths and weaknesses in their operations, enabling targeted interventions to improve overall health. First, focus on institutional resources. MSEs can prioritize developing and managing these resources to improve their operational effectiveness. This may involve seeking partnerships, leveraging community resources, optimizing digital marketing, and existing assets to support organizational growth. Second, operational stability as a key component of organizational health encourages MSEs to focus on creating stable processes and systems, including the sustainability of raw materials and working capital (including ensuring employee salary payments).

Finally, the present study provides a robust framework that addresses the unique challenges MSE faces in general and women entrepreneurs in Indonesia. In addition, this study enhances the understanding of the government and stakeholders regarding the existing MSE conditions in Indonesia so that it can be used as a guide to developing sustainable economic growth in Indonesia. The research aligns with the global commitment to the SDGs, particularly those related to gender equality and economic empowerment. More importantly, the study's findings can inform policymakers and stakeholders about the current conditions of women-managed MSEs. This knowledge can guide the development of policies and strategic initiatives to create a more favorable environment for women entrepreneurs, thus promoting gender equality and economic empowerment in Indonesia.

4.5 Limitations and future research directions

This study has a few limitations. First, the Average Variance Extracted (AVE) for the institutional resources factor is below the recommended threshold of [specific threshold value], indicating that it needs further attention. However, we consider this result an initial indication for future development. Second, the majority of the study's sample comes from the micro level, which may only partially represent the broader spectrum of small business groups. This limitation implies that the findings may only apply to certain small businesses. Hence, future studies should concentrate on enhancing the measurement of the institutional resources factor by incorporating more items that cover a wider range of dimensions related to institutional resources.

Additionally, to improve the inclusiveness of the sample, future research should include a more diverse range of organizations and small businesses across different sectors without distinguishing between women and men as managers/owners. Utilizing stratified sampling techniques could ensure that different types of small businesses are adequately represented, thus allowing for more broadly applicable findings. Furthermore, conducting comparative studies involving micro-level and small business groups can offer valuable insights into the differences and similarities in organizational health across different organizational sizes. This approach is crucial in understanding how various factors influence organizational health in different contexts, ultimately contributing to a more comprehensive understanding of organizational health dynamics.

5. Conclusion

This study aimed to develop a new scale for measuring organizational health, specifically within the micro and small business sectors. The research began with focus group discussions to establish content validity, followed by EFA and CFA involving 267 micro and small enterprises in

Indonesia. The results indicate that the organizational health performance subscales can be categorized into five primary factors: institutional resources, leader involvement, work environment quality, organizational values, and operational stability. The uniquely focuses on this study's micro and small business sectors, providing a practical and tailored approach to assessing organizational health in this context. Consequently, the findings of this study represent a significant advancement for policymakers in Indonesia and other Asian countries with similar economic characteristics, aiding them in assessing organizational health and formulating appropriate strategies to enhance the internal conditions of MSE sector organizations in the future.

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