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Impact of Business Development Services on Women Entrepreneur Performance with Managerial Support

Yusri Karmila¹, Nuraini²

¹ Department of Accounting study program, Faculty of Economics and Business, Universitas Wira Bhakti, Kota Makassar, Indonesia

² Department of Management study program, Faculty of Economics and Business, Universitas Wira Bhakti, Kota Makassar, Indonesia

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Correspondence to:
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 Yusri Karmila

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ABSTRACT

Purpose: Using data from a multi-stakeholder project in Cameroon, this paper investigates the direct and interactive effects of training and skills development, market access facilitation and business advisory services on the performance of women entrepreneur.

Method: They employed a quantitative cross-sectional design and collected data via a structured questionnaire, adjusted from validated measures from earlier studies. Data were analysed using IBM SPSS 26 and analysed by multiple regression for direct effects and the PROCESS macro for moderation effects.

Findings: Each of the three BDS components has significant positive impact-performance effects on entrepreneurs, with training and skills development rated as the most impactful of the three BDS components. Managerial support very significantly moderates all relationships suggesting that strong team leadership engagement enhances the value derived from BDS interventions.

Novelty: Using the Resource-Based View and Capability Theory, this study provides unique empirical insight into the interplay of managerial support in maximizing the impact of BDS on women-led MSMEs. Answering a fundamental question that has been missing in previous studies, it examines the relationship between external service delivery and internal leadership capacity.

Implications: Results highlight the need for combining leadership development with BDS in order to increase impacts. Fifth, policymakers and practitioners should focus on a multi-faceted approach to align incentives through external levers with capability-building efforts to promote sustainable growth in MSMEs.



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1. Introduction

Women entrepreneurs are emerging out to be an important driver of economic growth and innovation in the world, especially the case in emerging economies with MSMEs being the pillar of the economy. Furthermore, women-owned MSMEs (micro, small and medium

enterprises) relevant to women not only generate GDP growth but are also crucial for creating jobs, lifting poor people out of poverty and inclusiveness to the society (Dutta et al., 2024; Gibertini, 2025). However, women entrepreneurs experience different types of bottlenecks, such as market access, skill gaps, and the lack of business advisory services (Irene



et al., 2025; Maheshwari et al., 2025). BDS has become a fundamental type of non-financial intervention to mitigate these issues through capacity building, provision of market linkages, and advisory services for competitiveness (Joni et al., 2025; Matlhaku & Ferreira-Schenk, 2025). However, the impact of BDS differs by context, therefore, boils down to understanding the conditions that allow the best effects on the performance of women entrepreneurs accessing BDS.

The fragmented uptake and incorporation of BDS by women led MSMEs are a key contemporary concern in entrepreneurship literature, especially in the developing world. The results of recent studies suggest access index of BDS has a high impact on business performance, however, others indicate that there are a range of bottlenecks that drive disparities resulting from low access to BDS; in terms of lack of awareness, shortage of inputs and discrepancy in institutional support available to partners (Norris et al., 2025; Ullah et al., 2025; Weber et al., 2025). In addition, while the assumption that a culture of supportive leadership could potentialize the advantages of business interventions (Özkan et al., 2025; Sharma & Sahoo, 2025; Wang et al., 2025) provides important insight into the relationship between the adoption of BDS and managerial support, the potential interplay between these two aspects needs further investigation. The adoption gaps and the heterogeneous effects indicate a pressing research agenda on the interaction between BDS and managerial support and their combined influences on entrepreneurship outcomes.

The Resource-Based View (RBV) theory/ness highlights that sustainable competitive advantage Barney (2018), Gupta (2018), is primarily derived from intangible resources like skills and networks used to transform them into organizational capability. In addition to RBV, the

Capability Theory has brought attention to the importance of building operational capabilities such as management skill and ability to react to changing market conditions to ensure the sustainability of the firm (Sen, 1999). Combined, these frameworks offer a strong perspective for understanding the ways in which BDS through training, market access, and advisory services create key resources and capabilities that shape entrepreneurial performance, while managerial support serves as a moderator of those relationships (Sharma & Sahoo, 2025).

Previous research into BDS and entrepreneurial performance has shown conflicting findings. Certain studies indicate that BDS has a positive impact on firm growth and income generation (Ali et al., 2025; Erdogan & Solarin, 2025; Hasan & Li, 2025) whereas others reveal limited or context-specific benefits (Akadiri et al., 2025; Hassouna & Lewaaelhamd, 2025; Saeed et al., 2025). These inconsistencies stem partly from differences in methodological approaches and measurement indicators, but also from socio cultural constraints (Aguado et al., 2025; Lopez et al., 2025; Woldie et al., 2025). In addition to that, so far, few researches have really investigated how managerial support moderates the conversion of resources to performance (Al-Hashimy, 2025; Gazi et al., 2025). Thus, there is an important research gap on counterpart abilities of managerial support in recycling the positives that BDS can unleash with respect to the functioning of women entrepreneurs. Through its synthesis of RBV and Capability Theory, this paper provides a new framework for resolving these empirical contradictions, thus advancing theory, as well as the design of practical policy.

To this aim, this study investigates the influence of three BDS training and skills development, market access facilitation and business advisory services on the performance

of women entrepreneurs and managerial support as a moderator variable. This is because the aims are to examine: 1) the direct effects of each BDS component on performance; 2) the moderating role of managerial support; and 3) implications for policy to help make women-led MSMEs more competitive. Together, the findings are an addition to the global debate on achieving inclusive economic development through information on how to best leverage non-financial support services for their value in generating entrepreneurship.

2. Critical Review

2.1 Impact of Training and Skills Development on Entrepreneurial Performance

Skills and training development is one of the most essential determinants of entrepreneurial performance in the functioning venture, as it provides incremental managerial skills and innovative capacity required to adapt to dynamic markets. According to recent research, structured training enhances entrepreneurs' decision-making, operational efficiency, and ability to exploit market opportunities, resulting in enhanced revenue growth and business sustainability (Kwartawaty et al, 2023; Eister & Msimango-Galawe, 2024). Additionally, by helping entrepreneurs to think strategically and solve problems, skills development helps overcome challenges faced by entrepreneurs, such as limited resources and market competition (Haikal et al., 2024). Promising evidence from women-led MSMEs also indicates that productivity and business resilience can be significantly enhanced through targeted and sector-specific training interventions (Mahato et al., 2024). Therefore, in line with the Resource-Based View, training and skills contributions represent unique intangible assets that reinforce competitive advantage and that can also has positive effects on entrepreneurial performance.

H1: Training and skills development positively influence entrepreneurial performance.

2.2 Impact of Market Access Facilitation on Entrepreneurial Performance

Increasing customer bases, increasing sales volumes, and also enabling sustainability of ventures over the long term, market access facilitation enhances entrepreneurial performance. Connecting MSME to new market via trade fairs, digital platforms and strategic partnerships have recently been proved contribute to revenue growth and brand visibility (Khademi Kolahlou & Pourzare, 2024; Wahdi et al., 2024). Moreover, facilitated access to markets allows entrepreneurs to diversify products, scale in response to consumer preferences, and connect into competitive value chains (Haikal et al., 2024). In the case of women-led business, market linkages help reduce systemic barriers for example, geographical isolation and limited networks and thus enhance the competitiveness and profitability (Mahato et al., 2024). In line with the Capability Theory, The facilitation of access to markets enhances operational capacity to detect and exploit business opportunities and, in the end, has a positive impact on entrepreneurial performance.

H2: Market access facilitation positively influences entrepreneurial performance.

2.3 Impact of business advisory services on entrepreneurial performance

Business advisory moving ahead a key function which is improving entrepreneurial performance in terms of strategic planning, financial management and operational efficiency. There is new evidence that advisory support contributes to entrepreneurs' informed decision-making, risk management, and resource allocation to improve productivity and profitability (Eister & Msimango-Galawe, 2024; Haikal et al., 2024). These types of services also promote innovation and adaptability by enabling

firms to identify emerging trends in the market and align their operations with industry best practices (Mahato et al., 2024). Access to professional advisory networks reduces supply and knowledge shortages faced by women-led MSMEs, making them more competitive in other challenging business environments (Wahdi et al., 2024). In line with the Resource-Based View, business advisory services offer important intangible resources, which when positively used, impact the performance of entrepreneurs.

H3: Business advisory services positively influence entrepreneurial performance.

2.4 Moderating role of managerial support

Managerial support is a major facilitator that enhances the impact of business development interventions through guidance, resource management, and strategic direction. Research indicates that training and skill development programs are better absorbed and used in practice with a firm managerial sanction, and hence the improvement in performance at a sustained level (Haikal et al., 2024; Mahato et al., 2024). Such support guarantees that newly learned techniques are incorporated into business strategies, therefore, boosting innovation, productivity, and competitive positioning (Eister & Msimango-Galawe, 2024). Women-led MSMEs which received managerial encouragement enhanced their confidence and diminished the implementation hurdles while creating a conducive setting for learning which in turn boosted the effectiveness of capacity building initiatives on business performance.

Furthermore, managerial support facilitates the effects of market access facilitation and business advisory services, by allowing entrepreneurs to take advantage of new opportunities and apply experts recommendations. According to the research, the facilitation of the leader for constructing

networks, contracting and taking advice helps more enterprises achieve better market penetration and revenue growth (Khademi Kolahlou & Pourzare, 2024; Wahdi et al., 2024). This is in line with the Resource-Based View which suggests that managerial support is an intangible asset that works in concert with business development services (BDS) to add further value to the intervention. Thus, it is hypothesized that managerial support would strengthen the positive correlations between training, access to markets and advisory services and entrepreneurial performance.

H4: Managerial support strengthens the relationship between training and skills development and entrepreneurial performance.

H5: Managerial support strengthens the relationship between market access facilitation and entrepreneurial performance.

H6: Managerial support strengthens the relationship between business advisory services and entrepreneurial performance.

3. Method Innovations

3.1 Research design

A quantitative, cross-sectional survey design is employed within which causal relationships can be tested between independent (training and skills development, market access facilitation, business advisory services) and dependent variables (entrepreneurial performance) with managerial support as a moderator variable. Survey method was chosen to allow for data to be collected from a large number of respondents when a large amount of data need to be collected and time is constrain (Bryman, 2016). Data were gathered from January to March 2025 through a structured questionnaire with a five-point Likert type scale applied to women-led MSMEs in Makassar, Indonesia. The quantitative approach is planed as it enables a hypothesis test and

statistical analysis to assess the strength and direction of the relationships between variables (Hair et al., 2022). The design fits with the Resource-Based View (Barney, 1991) and Capability Theory (Sen, 1999), which allows findings to be firmly grounded in theory. Additionally, previous BDS studies have shown the effectiveness of a structured approach to data collection to identify what determines performance in Micro and Small Enterprises (MSEs) (Lwesya et al., 2021; Haikal et al., 2024).

3.2 Population and sample

Women owned MSMEs in Makassar City that have been established for at least 2 years and employ 2-50 workers. This requirement is intended to limit these businesses to established businesses which are likely to have benefited from BDS30. Purposeful sampling was used since the respondents needed to have a direct managerial responsibility which also suits the research aim of having a moderating variable as a managerial support (Creswell & Creswell, 2018). Using the Krejcie and Morgan (1970), the sample sizes for each study sample group are then determined and met statistically so that $n = 150$ respondents. It is larger than the minimum needed for multiple regression and moderation analysis on SPSS (Hair et al., 2022), also increasing the strength of statistical inference. This study collected data using face-to-face and online surveys as a way to ease accessibility considering the different levels of access to the internet among business owners. This strategy is in line with recent MSMEs research which adopts a combination of purposive and convenience sampling, which strikes a balance between representativeness and logistics (Mahato et al., 2024).

3.3 Instrument variable

In terms of measurement, this study used an instrument in the form of a structured questionnaire that was developed based on

previous studies measuring variables using the scale used but we rewrite in accordance with the local MSME context. The materials dedicated to all of the above were measured with a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), capturing the extent of agreement with statements related to each construct. The independent variables; training and skills development, and market access facilitation & business advisory services were modified from Eister & Msimango-Galawe (2024) and Kwartawaty et al. (2023). We assessed the dependent variable, entrepreneurial performance, with revenue growth, employment growth, and asset expansion (Mahato et al., 2024). The managerial support, the moderating variable was adapted from Khademi Kolahlou & Pourzare (2024) Managerial support (leadership support, decision making support and resource allocation). The questionnaire was validated by experts and pilot tested with 20 subjects to confirm reliability and construct validity (Cronbach's $\alpha > 0.7$), based on best practices in quantitative research instrument design (refer to Hair et al., 2022).

3.4 Data analysis research

The present study used IBM SPSS Statistics version 26 to analyze the data, including descriptive statistics, reliability analysis, correlation analysis, multiple regression, and moderation analysis with the PROCESS macro (Hayes, 2018). Respondent characteristics and central tendencies of variables were summarized by descriptive statistics, and internal consistency reliability was assessed by Cronbach's alpha (Nunnally & Bernstein, 1994) with a recommended threshold of 0.70. A Pearson correlation analysis was used to investigate preliminary relationships between variables and to identify potential multicollinearity (Hair et al., 2022). Direct Effects (H1-H3) of the Independent Variables on Entrepreneurial Performance Were Tested via Multiple Regression Analysis and the

Moderation Analysis (PROCESS Model 1) Examined if Managerial Support Significantly Modified These Relationships (H4–H6). For the analysis, SPSS and PROCESS macro is a plausible choice in line with recent MSME studies that necessitate complex and statistically high in power tests of direct and interaction effects (Mahato et al., 2024). Such an analytical approach guarantees that the observed results are statistically valid, theoretically-based, and replicable, laying a robust ground for significant conclusions about the impact of BDS and managerial support on the performance of female entrepreneurs.

4. Innovations Result and Discussion

4.1 Descriptive statistics of respondents

Table 3 presents the demographic and business characteristics of the 150 women-owned MSMEs surveyed in Makassar, Indonesia. The majority of respondents (62%) were between 31–45 years of age, indicating a concentration of entrepreneurs in their most productive working years, while 28% were aged ≤ 30 years and only 10% were above 45 years. In terms of education, more than half (58%) held a diploma or bachelor's degree, suggesting a relatively well-educated entrepreneurial group, with 34% having completed high school or below and 8% possessing postgraduate qualifications. The largest business sector represented was food and beverage (38.7%), followed by retail (28%), services (21.3%), and creative industries (12%), reflecting the dominance of consumer-oriented sectors in the local MSME landscape. Regarding business age, nearly half (46%) had been in operation for 3–5 years, 28% for 2–3 years, and 26% for more than five years, suggesting a mix of emerging and established enterprises. Most firms employed 2–10 workers (71.3%), consistent with the small-scale nature of MSMEs, while 22% had 11–30 employees and only 6.7% employed 31–50 workers. These profiles align

with recent MSME studies in Southeast Asia that emphasize the prevalence of small-scale, service- and product-based enterprises led by women entrepreneurs.

4.2 Reliability and validity analysis

Results of reliability and validity analysis for all Study Constructs are depicted in Table 4. The Cronbach's alpha values ranged between 0.812 and 0.891 which for all cases exceeded the reference value of 0.70 that indicates acceptable internal consistency (Nunnally & Bernstein, 1994). The values of Composite Reliability (CR) ranges from 0.835 to 0.905, which reflects the overall reliability of the latent constructs is greater than 0.70 which is acceptable according to Hair et al. (2022) and confirming measurement stability. The AVE values (ranging from 0.603 to 0.664) are all above the 0.50 cut-off, indicating satisfactory convergent validity whereby the constructs account for more variance from their indicators than from measurement error. The greatest reliability is obtained for managerial support ($\alpha = 0.891$; CR = 0.905; AVE = 0.664), indicating that this moderator variable is consistently measured. Likewise, training and skills development also demonstrates high internal consistency ($\alpha = 0.884$; CR = 0.902; AVE = 0.649) similar to past entrepreneurship studies focused on formalized capacity-building activities. In summary, these findings affirm that our measurement model meets global guidelines for construct reliability and validity, thus establishing a solid basis for hypothesis testing (Bang et al.).

4.3 Descriptive statistics

Descriptive statistics for the main study variables are presented in Table 5. The highest mean score ($M = 4.21$, $SD = 0.51$) was identified in the managerial support factor, which suggests that the participants in these studies usually perceived strong managerial support in strategy implementation along with the acquisition of resources. Although relatively high ($M = 4.05$, $SD = 0.58$), the positive score indicates that most

entrepreneurs underwent a training and skills development program to achieve the necessary skill sets. Entrepreneurial performance, with an average score of 4.02 (SD = 0.57), indicated that individuals generally report favorable assessments of their business growth in terms of revenue, employment, and assets. Business advisory services had a mean of 3.94 (SD = 0.55), indicating a moderate level of professional advice and consultancy usage. Despite BDS for MSMEs, market access facilitation (M = 3.87, SD = 0.62) had the lowest mean suggesting perhaps limitations in reaching out to broader markets. The minimum and maximum values across all variables is in a reasonable range, indicating a level of variability in respondent experiences. This finding is consistent with previous MSME research across Southeast Asia (Haikal et al., 2024; Mahato et al., 2024) showing that managerial support and training are more favourably developed aspects of business but that market access continues to be a regional barrier for women-led enterprises.

4.4 Correlation analysis

Pearson correlation coefficients between study (the variables are shown in Table 6. The independent variables of training and skills development (X1), market access (X2), and business advisory services (X3) have a strong positive correlation with entrepreneurial performance (Y) at $p < 0.01$ level. There are, of course, a number of other factors (in terms of their effects on entrepreneurial performance), but managerial support ($r = 0.642$) seems to be the most on point, confirming that supportive leadership is a necessary ingredient in achieving business success. Business advisory services ($r=0.573$) and market access ($r=0.561$) have a moderate to strong relationship with performance followed by training and skills development ($r = 0.589$) of all independent variables. More specifically, intercorrelations among the independent variables ranged from

0.498 to 0.532, which were all lower than the multicollinearity concern cut-off point of 0.80 (Hair et al., 2022), meaning that the constructs are indeed related but at the same time, acceptably unique. The significant and positive correlations between the all variables lend preliminary evidence consistent with the direct relationships postulated in H4–H6 and suggest that managerial support has the capacity to moderate the aforementioned effects. Such results align with earlier research that highlights the linkages between building capacity, connecting to markets, providing advisory support and leadership, and influencing MSME performance (Eister & Msimango-Galawe, 2024; Mahato et al., 2024).

4.5 Multiple regression analysis

The direct effects of the three BDS components on entrepreneurial performance were examined using a multiple regression analysis and the results are given in Table 7. Overall, the model is statistically significant ($F = 42.586$, $p < 0.001$) and exhibits strong explanatory power (i.e., $R^2 = 0.543$) with R^2 value showing that 54.3 per cent variance in entrepreneurial performance has been explained by the model. The training and skills development ($\beta = 0.331$, $p < 0.001$), market access ($\beta = 0.315$, $p < 0.001$), and business advisory services ($\beta = 0.287$, $p < 0.001$) exert positive and significant effects on performance (see Table 6). The most significant predictor is training and skills development; investments in capacity-building initiatives are therefore benefitting women-led MSMEs with enormous performance increases. Facilitation of market access also plays an important role, as connecting entrepreneurs with new markets and customer segments also shows a positive impact. Business advisory aids managerial decisions, financial plans, and operational strategies positively. The findings are consistent with earlier existing empirical evidence (Haikal et al.,

2024; Mahato et al., 2024), that the integration of skills building, linkages to market, and professional consultancy increases the competitiveness and viability of MSMEs. The results offer strong support for H1, H2 and H3.

4.6 Moderation analysis managerial support

The results from the moderation analysis of managerial support on the influence of training and skills development on entrepreneurial performance are in Table 8. The interaction term is statistically significant ($\beta = 0.119$, $p = 0.012$), thus showing that the effect of managerial support is positively strengthening this relationship. In particular, high managerial support strengthens the role of training and skills development on performance, indicating that supportive leadership serves as capabilities mediators that facilitates skill usage and transfer, thus enhancing business performance. Also significant are the main effects of training and skills development ($\beta = 0.285$, $p < 0.001$) and managerial support ($\beta = 0.298$, $p < 0.001$), further confirming their independent roles in explaining variation in entrepreneurial performance. These results are in corroboration with previous studies (Khademi Kolahlou & Pourzare, 2024; Mahato et al., 2024) identifying the role of leadership in acquiring the most from capacity-building efforts. The results are consistent with H4 (provide empirical support to H4) complementarity of managerial support as an intangible (complex) resource in allowing the strategic integration of the training outcomes into daily business functions in the line with RBV.

4.7 Moderation analysis managerial support on X2

The moderation effect of managerial support on the path of market access facilitation (X2) and entrepreneurial performance are analysed Presented in Table 9. The interaction term ($\beta=0.102$, $p=0.021$) is significant, suggesting that managerial support reinforces a positive link

between market access and performance. This indicates that, due the availability of managerial support, entrepreneurs are able to capitalize new market opportunities, negotiated terms as well as maintain linkages which BDS programs helped due to availability of managerial resources. As for market access ($\beta = 0.261$, $p < 0.001$) and managerial support ($\beta = 0.277$, $p < 0.001$) they are also confirmed to have a direct effect on performance, which is in line with prior evidence that support from strategic leadership and network can facilitate MSME competitiveness (Wahdi et al., 2024; Haikal et al., 2024). That is, these results provide empirical support for H5 suggesting that managerial involvement is a multiplier in terms of realizing business growth from market access interventions. This evidence is consistent with the Capability Theory, managerial support adds to capability that leverage new market opportunities products/services more appropriately for sustainable competitive advantages.

4.8 Moderation analysis managerial support on relationship

Moderating effect of Managerial Support on the re-lation-ship between Busi-ness-Advisor-ser-vice (X3) and Enter-prise-Performance Table (10) As expected, the interaction term ($\beta = 0.126$, $p = 0.008$) is significant, indicating that the positive effect of advisor services on performance is strengthened by managerial support. Thus, managers supporting entrepreneurs can drive the effective implementation of advisory recommendations, enhance operational decision-making, and adjust business strategies to market developments. As a result, the main effects of business advisory services ($\beta = 0.248$, $p < 0.001$) and managerial support ($\beta = 0.283$, $p < 0.001$) are significant, proving the independent impact of the business advisory services on business outcomes. The results are consistent with H6, indicating that managerial support acts as a

complement through which firms leverage the use of external managerial guidance as a resource for competitive advantage (consistently supported by the Resource-Based View). Recent MSME research (Eister & Msimango-Galawe, 2024; Mahato et al., 2024), has also reached similar conclusions that the involvement of leadership is required for advisory content to be transformed into quantifiable enhancements in performance.

4.9 Discussion

This study presents perhaps the firmer empirical evidence regarding the critical role which Business Development Services or BDS can play in enhancing the performance of women-owned MSMEs, while the reinforcing role of managerial support is also evident, as emphasised by the findings. The large positive impacts of training and skills provision, market linkages, and business advisory services found in this study confirm the important role of these non-financial supports as drivers of competitiveness and sustainability (Eister & Msimango-Galawe, 2024; Haikal et al., 2024), as identified in previous research. The most prominent predictor was found to be training and skills development, consistent with Resource-Based View (RBV) principles, which argue that sustainable competitive advantage is based on firm-specific resources such as knowledge and competencies (Barney 1991). It implies that operational effectiveness and growth potential can be meaningfully boosted through targeted capacity-building interventions, especially in a resource-constrained MSME setting (Mahato et al., 2024).

Results also indicated that overall, facilitation of market access provides a key role in determining the performance of the company, highlighting the necessity of connecting the entrepreneurs to the wider market and value chains. We also find this result aligns with other

recent studies showing that increased market-linkedness helps MSMEs diversify customers, sell more, and ultimately become more robust businesses (Khademi Kolahlou & Pourzare, 2024; Wahdi et al., 2024). For women entrepreneurs, breaking through the market entry barriers, which are based mostly on limited networks and socio-cultural barriers are the key indicators for growing their business operations and ultimately survive in the long run (Gede & Warie, 2024). The performance was also shown to be positive and significant for the business advisory service, considering they provide customized instruction on strategy, operations and finance. This advisory support equips entrepreneurs with knowledge, stimulates innovation, and enhances responsiveness to competition (Kwartawaty et al., 2023).

Apart from these direct effects, the moderation analysis provide valuable insights on both theoretical and practical grounds. There were positive relationship among the three BDS components and performance, which was significantly strengthened by managerial support. This supports the Capability Theory perspective that the actual conversion of resources to meaningful outputs is contingent on availability of an enabling environment that provides well-tested and scaled up leadership, engagement (Sen, 1999). In terms of training and skills building, high managerial support should assist in embedding fresh capacities into everyday business activities to work faster and be more innovative (Haikal et al., 2024). Within market access, this could help entrepreneurs negotiate contracts, maintain relationships and leverage opportunities (Wahdi et al., 2024). Likewise, managerial engagement boosts the incorporation of advisory suggestions meaning that adjustments in strategy are more likely to translate into concrete business benefits (Eister & Msimango-Galawe, 2024).

Taken together, these findings imply that while the quality of services delivered is important, the process and success of BDS interventions is potentially more dependent on the internal organizational context perhaps especially on a committed and supportive leadership. This reinforces new writings calling for a more holistic perspective to MSME development, where external enabler services are paired with internal capacity building and governance enhancement (Mwaniki et al., 2022; Masrie, 2024). Therefore, the study contributes to theory and practice by substantiating the idea of management support as a synergistic role, suggesting that BDS programs that aim at increasing women-led MSME entrepreneurship are likely to be most effective if they are simultaneously paired with programs to develop internal leadership skills.

5. Conclusion

In this research, we assessed the effects of three major BDS components (training and skills development, market access facilitation, and business advisory services) on women MSME performance in Makassar, Indonesia, with managerial support as a moderating variable. It shows that the three BDS components have strong and positive impacts on entrepreneurial

performance and training and skills development have the highest explanatory power. Additionally, market access facilitation and business advisory services have significant contributions through access to wider market, better operational decision-making and efficient resource utilization. Most important, the moderation analysis indicates that managerial support not only significantly strengthens the relationship between each BDS component and performance, but that the role of supportive leadership is in effect a switch to facilitate the conversion of external resources into concrete business outcomes. These findings are in line with Resource-Based View and Capability Theory, emphasising that whilst BDS interventions provide key resources, these effects are enhanced through sound management internally. Insights from the study imply that, to fully unleash potential, policymakers, development agencies and BDS providers need to integrate leadership development along with external support services. These integrated interventions, which respond to both external and internal capacity factors, can strengthen the ability of women-led MSMEs to go beyond structural barriers in order to attain sustainable growth and contribute to inclusive economic development better.

6. Image and Data Table

Appendix A – Research Data Summary

Table A1. Research Dataset Summary

Variable	Mean	Std. Deviation	Minimum	Maximum	Scale Range
Training & Skills Development (X1)	4.05	0.58	2.8	5	1-5
Market Access (X2)	3.87	0.62	2.6	5	1-5
Business Advisory (X3)	3.94	0.55	2.75	5	1-5
Entrepreneurial Performance (Y)	4.02	0.57	2.9	5	1-5
Managerial Support (M)	4.21	0.51	3	5	1-5
Age (years)	36.2	7.1	22	54	–
Business Age (years)	4.2	2.1	2	10	–
Employees (number)	9.4	7.2	2	45	–

Appendix B – Research Instrument Items



Table B1. Questionnaire Items for Each Variable

Variable	Dimension	Item Code	Questionnaire Statement
Training & Skills Development	Training frequency, relevance	X1.1	I have attended relevant business training in the past year.
		X1.2	The training I attended improved my business skills.
		X1.3	I regularly update my skills through workshops or online courses.
		X1.4	The training content was relevant to my business needs.
		X1.5	I apply skills from training in my daily business operations.
Market Access	Linkages, sales growth	X2.1	I gained new customers through BDS market facilitation.
		X2.2	BDS helped me access new markets beyond my local area.
		X2.3	My sales have increased because of improved market access.
		X2.4	I have established long-term relationships with new customers through BDS programs.
		X2.5	Market access initiatives have expanded my business network.
Business Advisory	Strategic, operational, finance	X3.1	I apply recommendations from advisory consultations.
		X3.2	Advisory services improved my business decision-making.
		X3.3	I have improved my financial planning after receiving advisory support.
		X3.4	Advisory services helped me solve operational challenges.
		X3.5	I seek advisory support when facing complex business issues.
Entrepreneurial Performance	Revenue, employees, assets	Y1	My annual revenue increased in the last year.
		Y2	The number of employees in my business increased in the last year.
		Y3	My business assets have grown over the past year.
		Y4	My customer base has expanded compared to the previous year.
Managerial Support M	Guidance, resources, encouragement	M1	My manager supports me in implementing new strategies.
		M2	My manager provides resources to help me achieve my business goals.
		M3	I receive constructive feedback from my manager.
		M4	My manager encourages me to attend training and development activities.
		M5	My manager supports innovation and new ideas in my business.

Table 3. Demographic and Business Characteristics

Characteristic	Category	Frequency	(%)
Age	≤ 30 years	42	28
	31-45 years	93	62
	> 45 years	15	10
Education Level	High school or below	51	34
	Diploma/Bachelor	87	58
	Postgraduate	12	8
Business Sector	Food & Beverage	58	38.7
	Retail	42	28
	Services	32	21.3
Business Age	Creative Industry	18	12
	2-3 years	42	28
	3-5 years	69	46
Number of Employees	> 5 years	39	26
	2-10	107	71.3
	11-30	33	22
	31-50	10	6.7

Table 4. Reliability and Validity of Constructs

Variable	Items	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Training & Skills Dev	5	0.884	0.902	0.649
Market Access	5	0.869	0.885	0.627
Business Advisory	5	0.854	0.876	0.621
Entrepreneurial Perf.	4	0.812	0.835	0.603
Managerial Support (M)	5	0.891	0.905	0.664

Table 5. descriptive statistics of variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Training & Skills Dev.	4.05	0.58	2.80	5.00
Market Access	3.87	0.62	2.60	5.00
Business Advisory	3.94	0.55	2.75	5.00
Entrepreneurial Perf.	4.02	0.57	2.90	5.00
Managerial Support (M)	4.21	0.51	3.00	5.00

Table 6. Pearson Correlation

Variable	X1	X2	X3	Y	M
Training & Skills Dev.	1	0.532**	0.498**	0.589**	0.547**
Market Access		1	0.514**	0.561**	0.522**
Business Advisory			1	0.573**	0.536**
Entrepreneurial Perf.				1	0.642**
Managerial Support					1

Table 7. Multiple Regression Analysis Results (Direct Effects)

Predictor Variable	Unstandardized β	Std. Error	Standardized β	t-value	p-value
Constant	0.952	0.214	-	4.45	0.000***
Training & Skills Dev. (X1)	0.341	0.061	0.331	5.59	0.000***
Market Access (X2)	0.298	0.058	0.315	5.138	0.000***
Business Advisory (X3)	0.276	0.062	0.287	4.452	0.000***

Table 8. Moderation Effect of Managerial Support on Training-Performance Relationship

Variable	β	Std. Error	t-value	p-value
Training & Skills Dev.	0.285	0.067	4.254	0.000***
Managerial Support	0.298	0.069	4.319	0.000***
Interaction	0.119	0.046	2.554	0.012*

Table 9. Moderation Effect of Managerial Support on Market Access-Performance Relationship

Variable	β	Std. Error	t-value	p-value
Market Access (X2)	0.261	0.065	4.015	0.000***
Managerial Support (M)	0.277	0.067	4.134	0.000***

Interaction (X2 × M)	0.102	0.044	2.329	0.021*
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Table 10. Moderation Effect of Managerial Support on Advisory-Performance Relationship

Variable	β	Std. Error	t-value	p-value
Business Advisory (X3)	0.248	0.064	3.875	0.000***
Managerial Support (M)	0.283	0.066	4.288	0.000***
Interaction (X3 × M)	0.126	0.046	2.69	0.008**

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