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Entrepreneurship Training and Psychological Well-Being as Predictors of Women's Psychological Empowerment in Indonesian SMEs

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Abstract
Women-owned small and medium enterprises (SMEs) contribute to inclusive economic participation, yet women entrepreneurs often encounter capability constraints and psychological pressures that may limit their agency in managing and developing their businesses. This study examines whether entrepreneurship training and psychological well-being are associated with women's psychological empowerment among SME owners in Indonesia. A cross-sectional online survey generated 204 responses, of which 200 usable responses were retained after eligibility and completeness screening. Entrepreneurship training was measured with nine items, psychological well-being with 21 items covering six eudaimonic dimensions, and psychological empowerment with 12 items covering meaning, competence, self-determination, and impact. Multiple linear regression was conducted using SPSS 25. Both predictors were positively and significantly associated with psychological empowerment. Entrepreneurship training had a positive coefficient ($B = 0.270$, $\beta = 0.314$, $t = 3.754$, $p < .001$), while psychological well-being showed the stronger standardized association ($B = 0.264$, $\beta = 0.668$, $t = 7.989$, $p < .001$). The overall regression model was significant, $F(2, 197) = 34.738$, $p < .001$. These findings suggest that empowerment initiatives for women entrepreneurs should combine practical business-capability development with support for autonomy, environmental mastery, purpose, and personal growth. Because the study is cross-sectional and uses purposive online sampling, the results indicate associations rather than causal effects and should not be interpreted as nationally representative.

1. Introduction

Women's entrepreneurship is increasingly recognized as an important pathway to economic participation, household resilience, and more inclusive development. In Indonesia, women are highly active in the micro, small, and medium enterprise landscape, but women-led firms continue to face constraints related to finance, markets, digital access, business skills, and gendered expectations. Recent assessments of women-led MSMEs in Indonesia therefore emphasize that expanding the number of businesses is not sufficient; women entrepreneurs also need the capabilities, resources, and agency required to sustain and develop their enterprises [1].

The socioeconomic relevance of empowerment lies in its connection to women's ability to make strategic choices, control productive resources, and convert business participation into meaningful outcomes for themselves, their households, and their communities. Huis et al. [2] conceptualizes empowerment through the interrelated elements of resources, agency, and achievements. Within an entrepreneurial setting, agency is reflected in an owner's ability to make decisions, apply her capabilities, influence business outcomes, and regard her work as meaningful. This study focuses specifically on this intrapersonal or psychological dimension of empowerment rather than treating empowerment solely as income growth or business ownership.

Two complementary conditions may shape this form of empowerment. First, entrepreneurship training represents an external capability-building mechanism. Training can improve business knowledge, problem-solving, planning, and confidence, thereby strengthening an entrepreneur's capacity to act. Evidence from women-focused entrepreneurship programs shows, however, that training outcomes depend not only on venture creation but also on whether participants can translate learning into realistic goals, decision-making, and sustained functioning [3]. Second, psychological well-being represents an internal resource. Entrepreneurship requires autonomy, environmental mastery, purpose, self-

acceptance, positive relationships, and continued personal growth—the central dimensions of eudaimonic well-being [4], [5].

Because the study uses a cross-sectional survey, entrepreneurship training and psychological well-being are framed as predictors associated with women's psychological empowerment rather than as direct causal determinants. This framing maintains consistency among the research design, hypotheses, statistical analysis, and conclusions.

Although research has examined women's entrepreneurship, training, and well-being separately, fewer studies have assessed how an external developmental resource and an internal psychological resource jointly relate to psychological empowerment among women SME owners in Indonesia [6]. This study addresses that gap by examining the following question: To what extent are entrepreneurship training and psychological well-being associated with women's psychological empowerment in Indonesian SMEs? The study contributes by integrating capability development and eudaimonic well-being within a single empirical model and by providing practical implications for multidisciplinary programs involving entrepreneurship, psychology, gender studies, and community development.

2. Literature Review and Hypothesis Development

2.1. Women's Psychological Empowerment

Empowerment is a multidimensional concept. At the broader development level, it concerns the expansion of resources and agency that enables people to make strategic life choices [7]. At the intrapersonal level, psychological empowerment concerns how individuals interpret their role and capacity to influence outcomes. Olwanda et al. [8] proposed that empowerment is rooted in cognitive assessments of meaning, competence, choice, and impact. Huang et al. [9] operationalized these dimensions as meaning, competence, self-determination, and impact.

In the context of women entrepreneurs, meaning refers to the alignment between business activities and personal values; competence reflects confidence in performing entrepreneurial tasks; self-determination refers to autonomy in initiating and regulating action; and impact reflects the perceived ability to influence business outcomes. These dimensions are coherent with women's entrepreneurial agency because they capture whether business ownership is experienced as purposeful, manageable, self-directed, and consequential. Accordingly, the dependent variable in this study is termed women's psychological empowerment.

2.2. Entrepreneurship Training and Psychological Empowerment

Entrepreneurship training is a structured effort to strengthen knowledge, skills, and behaviors relevant to creating and managing a business. Training may support empowerment by improving the entrepreneur's ability to recognize opportunities, plan activities, manage resources, solve problems, and make informed decisions. In this sense, training expands practical resources that can be converted into agency and achievement. Women-focused entrepreneurship initiatives also indicate that accessible training, mentoring, and peer networks can improve business skills and confidence, although program design must account for the constraints women experience in applying newly acquired knowledge [10].

Empirical research similarly suggests that entrepreneurship learning and capability development can support social and economic well-being and strengthen women's capacity to act [11]. Greenberg & Mollick [5] and Setiawan et al., [12] further show that participation in entrepreneurship training does not automatically generate flourishing; the benefits become more meaningful when women can develop concrete goals, realistic expectations, and supportive relationships. Taken together, these arguments imply that higher perceived training effectiveness should be associated with stronger meaning, competence, self-determination, and impact.

H1: Entrepreneurship training is positively associated with women entrepreneurs' psychological empowerment.

2.3. Psychological Well-Being and Psychological Empowerment

Psychological well-being extends beyond short-term happiness or satisfaction. Ryff's eudaimonic model defines well-being through self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth [13]. These dimensions are directly relevant to entrepreneurship because running a business requires self-direction, confidence in managing changing conditions, meaningful goals, and the capacity to learn from experience.

Recent entrepreneurship research highlights that well-being is not merely an outcome of entrepreneurial activity but also a condition that shapes how entrepreneurs organize their work and sustain purposeful action [14]. Research focused specifically on women entrepreneurs reports a close relationship between psychological well-being and empowerment, while also showing that gender roles and institutional constraints can weaken women entrepreneurs' well-being in lower- and middle-income settings [15], [16]. A woman entrepreneur who experiences greater autonomy, mastery, purpose, and growth is therefore more likely to perceive herself as capable of making decisions and influencing business outcomes.

H2: Psychological well-being is positively associated with women entrepreneurs' psychological empowerment.

3. Research Method

3.1. Research Design and Respondents

This study employed a quantitative, cross-sectional survey design. Data were collected through an online questionnaire distributed to women entrepreneurs operating SMEs in Indonesia. The sampling approach was non-probability purposive sampling rather than "purposive random sampling," because respondents were selected according to eligibility criteria and were not drawn through a known probability mechanism.

The questionnaire began with screening questions. Eligible respondents identified themselves as women and indicated that they owned a business. A total of 204 responses were recorded, and 200 usable responses were retained after eligibility and completeness screening. The resulting sample size is adequate for a multiple regression model with two predictors and substantially exceeds common minimum respondent-to-predictor recommendations [17]. Nevertheless, because the sample was recruited online and purposively, it should not be interpreted as nationally representative.

3.2. Measures

The study used three multi-item constructs. Entrepreneurship training was represented by nine indicators covering learning, individual, and organizational performance dimensions. Psychological well-being consisted of 21 indicators covering self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth [18]. Women's psychological empowerment was measured with 12 indicators covering meaning, competence, self-determination, and impact [19]. Table 1 summarizes the construct dimensions, item counts, and primary measurement sources.

Table 1. Measurement Blueprint

Construct	Dimensions	Number of items	Primary source
Entrepreneurship training	Learning performance; individual performance; organizational performance	9	Falola et al. (2014)
Psychological well-being	Self-acceptance; positive relations; autonomy; environmental mastery; purpose in life; personal growth	21	Ryff (2014)
Women's psychological empowerment	Meaning; competence; self-determination; impact	12	Spreitzer (1995)

3.3. Data Analysis

Data were analyzed using SPSS version 25. Item validity was evaluated by comparing item correlations with the critical value reported in the original analysis ($r = 0.1388$, $df = 198$, two-tailed $\alpha = .05$). Internal consistency was evaluated using Cronbach's alpha, with .70 treated as the minimum acceptable threshold. The regression diagnostics included visual inspection of the normal probability plot, visual inspection of standardized residuals against standardized predicted values, and collinearity statistics using tolerance and variance inflation factor (VIF).

Multiple linear regression was used to estimate the associations of entrepreneurship training (X1) and psychological well-being (X2) with women's psychological empowerment (Y). Statistical significance was evaluated at $\alpha = .05$. The analytical model was specified as $Y = a + b1X1 + b2X2 + \varepsilon$. Because the design is cross-sectional, regression coefficients are interpreted as adjusted associations and not as causal effects.

4. Discussions and Findings

4.1. Respondent Characteristics

The final analytical sample consisted of 200 women entrepreneurs. Food and beverage businesses were the largest sectoral group (36.5%), followed by fashion (28.0%) and accessories (19.5%). Respondents were predominantly 20–25 years old (43.5%), and the largest education category was a bachelor's degree (32.0%). Marital status is reported descriptively only; no motivational inference is made from respondents' marital status.

Table 2. Demographic Characteristics of Respondents (n = 200)

Characteristic	Frequency	Percentage (%)
Business sector: Food and beverage	73	36.5
Business sector: Fashion	56	28.0
Business sector: Accessories	39	19.5
Business sector: Services	10	5.0
Business sector: Crafts	9	4.5
Business sector: Other (not further specified)	13	6.5
Age: <20 years	48	24.0
Age: 20–25 years	87	43.5
Age: 26–30 years	41	20.5
Age: 30–35 years	17	8.5
Age: >35 years	7	3.5
Education: Secondary school	49	24.5
Education: Diploma	51	25.5
Education: Bachelor's degree	64	32.0
Education: Master's degree	32	16.0
Education: Doctoral degree	4	2.0
Marital status: Single	124	62.0
Marital status: Married	61	30.5
Marital status: Widowed	15	7.5

4.2. Measurement Quality

All item correlations exceeded the reported critical value of 0.1388. Item correlations ranged from 0.702 to 0.830 for entrepreneurship training, from 0.412 to 0.797 for psychological well-being, and from 0.479 to 0.707 for women's psychological empowerment. Cronbach's alpha values ranged from 0.827 to 0.925, exceeding the .70 threshold and indicating acceptable to excellent internal consistency.

Table 3. Summary of Item Validity and Reliability

Construct	Items	Range of item correlations	Cronbach's α	Assessment
Entrepreneurship training	9	0.702–0.830	0.907	Valid items; excellent reliability
Psychological well-being	21	0.412–0.797	0.925	Valid items; excellent reliability
Women's psychological empowerment	12	0.479–0.707	0.827	Valid items; good reliability

4.3. Regression Diagnostics

The normal probability plot shows that the standardized residual points generally follow the diagonal reference line. This visual pattern is consistent with approximate residual normality, although a P–P plot alone does not prove perfect normality.

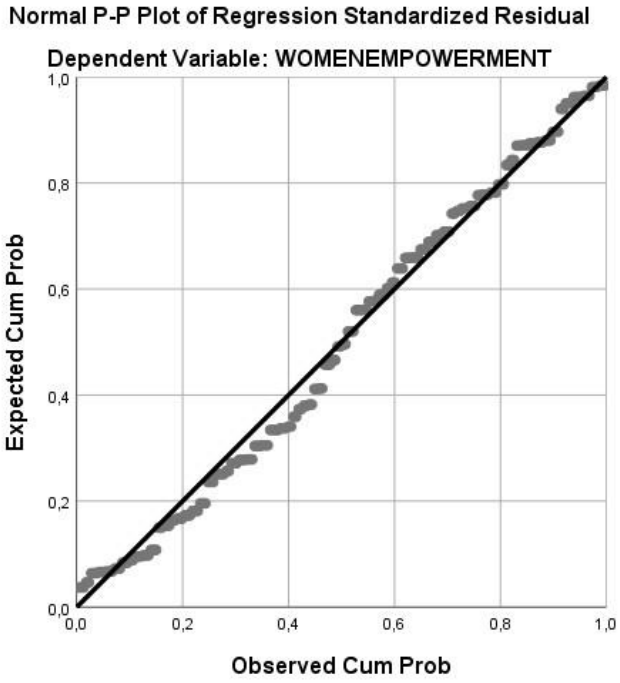

Figure 1. Normal P–P Plot of Standardized Residuals

The residual scatterplot does not display a clear funnel shape or systematic curve. The residuals are dispersed around the zero line across the range of predicted values, which is consistent with the homoscedasticity assumption. This conclusion is based on visual inspection and should therefore be stated cautiously.

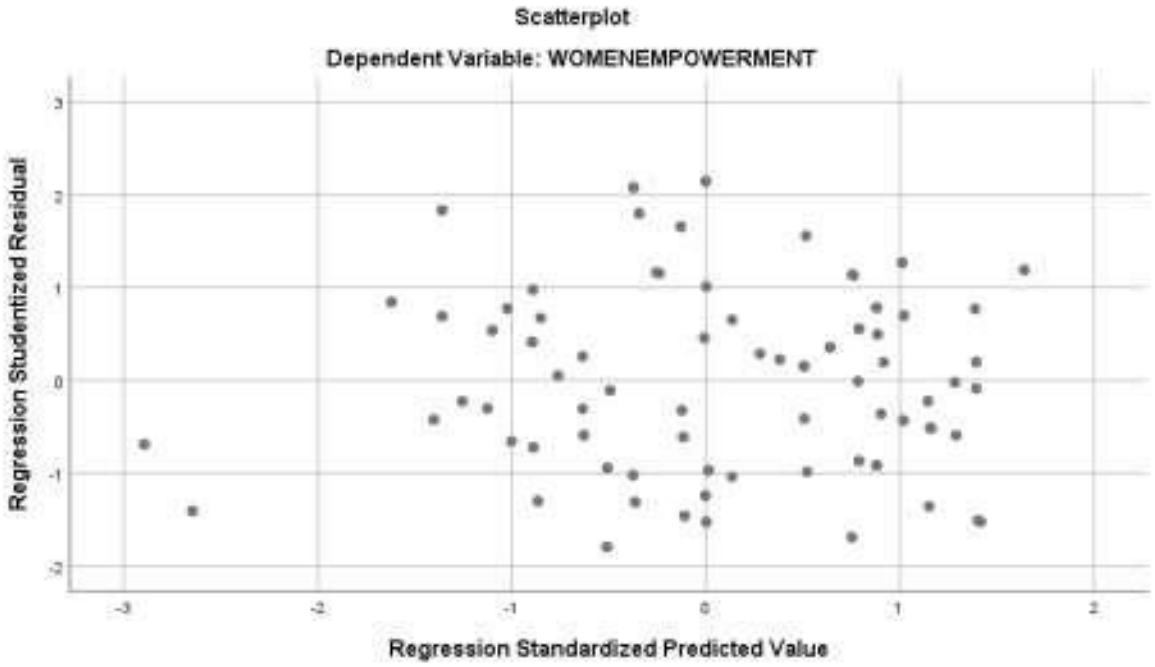

Figure 2. Standardized Residuals versus Standardized Predicted Values

The two predictors had tolerance values of 0.529 and VIF values of 1.891. These values are comfortably within commonly used cutoffs (tolerance > .10 and VIF < 10), indicating that multicollinearity was not a concern in the estimated model.

Table 4. Multicollinearity Diagnostics

Predictor	Tolerance	VIF
Entrepreneurship training	0.529	1.891
Psychological well-being	0.529	1.891

4.4. Multiple Regression Results

The regression analysis examined the unique association of each predictor with women's psychological empowerment while holding the other predictor constant. The estimated equation was:

$$\hat{Y} = 40.247 + 0.270(\text{Entrepreneurship Training}) + 0.264(\text{Psychological Well-Being})$$

Entrepreneurship training was positively associated with psychological empowerment (B = 0.270, SE = 0.072, β = 0.314, t = 3.754, p < .001). Holding psychological well-being constant, a one-unit increase in the entrepreneurship-training score was associated with a 0.270-unit increase in the psychological-empowerment score. This coefficient must not be interpreted as a 27% increase.

Psychological well-being was also positively associated with psychological empowerment (B = 0.264, SE = 0.033, β = 0.668, t = 7.989, p < .001). Holding entrepreneurship training constant, a one-unit increase in the psychological-well-being score was associated with a 0.264-unit increase in psychological empowerment. The standardized coefficient indicates that psychological well-being had the stronger association in this model.

Table 5. Multiple Regression Predicting Women's Psychological Empowerment

Predictor	B	SE	β	t	p	Hypothesis
Constant	40.247	2.245	—	17.930	< .001	—
Training	0.270	0.072	0.314	3.754	< .001	H1 supported
Psychological well-being	0.264	0.033	0.668	7.989	< .001	H2 supported

The model was statistically significant overall, $F(2, 197) = 34.738$, $p < .001$. This result indicates that the two-predictor model explains a statistically significant portion of variation in psychological empowerment. The intercept is retained for model specification but is not substantively interpreted because a score of zero may lie outside the meaningful range of the composite measures.

4.5. Discussion

This study examined entrepreneurship training and psychological well-being as predictors of women's psychological empowerment among Indonesian SME owners. Both hypotheses were supported. The findings are coherent with a view of empowerment as an interaction between external capability-building resources and internal psychological functioning.

First, entrepreneurship training was positively associated with psychological empowerment. Training can strengthen the knowledge and perceived competence needed to evaluate opportunities, manage operations, and respond to business problems. It can also make entrepreneurial work more meaningful by connecting learning with the owner's goals and can increase self-determination by expanding the range of actions she feels capable of taking. This interpretation is consistent with recent evidence that entrepreneurship programs can support women's agency, but their effectiveness depends on whether participants are able to translate training into realistic goals and sustained action [22], [23]. The result therefore supports training that is practical, contextual, and accompanied by mentoring rather than isolated classroom instruction.

Second, psychological well-being was positively associated with psychological empowerment and displayed the larger standardized coefficient. The result is theoretically plausible because several dimensions of psychological well-being overlap with the functional resources required for entrepreneurial agency. Autonomy supports self-directed decisions; environmental mastery supports the management of complex business demands; purpose in life strengthens the meaning attached to entrepreneurial work; and personal growth encourages learning and adaptation. Recent studies have similarly emphasized the close relationship between well-being, empowerment, and entrepreneurial functioning among women [10], [23], [24].

The stronger standardized association of psychological well-being does not imply that training is unimportant. Rather, it suggests that skills may be more effectively converted into empowerment when women also possess sufficient internal resources to apply them. A technically capable entrepreneur may still struggle to exercise agency when she experiences low autonomy, weak environmental mastery, limited purpose, or poor social support. Conversely, psychological well-being without relevant business capabilities may not be sufficient for effective enterprise management. The practical implication is that women's entrepreneurship programs should integrate business knowledge with mentoring, peer support, realistic goal setting, confidence building, stress management, and referral pathways for psychosocial support.

The study also contributes to multidisciplinary scholarship. Entrepreneurship research benefits from recognizing well-being as a core component of venture functioning rather than treating it only as a secondary personal outcome. Psychology gains an applied setting in which autonomy, mastery, purpose, and growth are connected to economic agency. Gender and development studies gain evidence that business participation should be evaluated not only by ownership or income but also by whether women experience meaning, competence, self-determination, and impact.

5. Conclusion

The study concludes that entrepreneurship training and psychological well-being are both positively associated with women's psychological empowerment among the surveyed SME owners in Indonesia. Psychological well-being showed the stronger standardized association, while entrepreneurship training remained a significant independent predictor. These results support an integrated empowerment approach that combines practical entrepreneurial capability development with initiatives that strengthen autonomy, environmental mastery, purpose, positive relationships, self-acceptance, and personal growth.

For policymakers, universities, business associations, community organizations, and SME-support institutions, the findings suggest that training programs should move beyond one-off technical workshops. Programs may be more effective when they include needs assessment, hands-on business exercises, mentoring, peer learning, realistic action plans, follow-up support, and attention to participants' psychological well-being. Such a design aligns economic, educational, psychological, and social dimensions of women's empowerment.

Several limitations must be acknowledged. The cross-sectional design does not establish causality or temporal ordering. Purposive online sampling limits generalizability and may overrepresent younger, digitally connected entrepreneurs. The measures are self-reported and may be affected by common-method bias. The available dataset does not disaggregate the "Other" business category, and the manuscript does not contain the exact questionnaire wording or detailed regional distribution. Future research should use longitudinal or experimental designs, probability-based or stratified samples, objective business indicators, and additional variables such as business age, firm size, training duration, household responsibilities, social support, and access to finance.

References:

[1] M. Binder, "Entrepreneurial worries: Self-employment and potential loss of well-being," Journal of Economic Psychology, vol. 105, p. 102773, 2024, doi: 10.1016/j.joep.2024.102773.

[2] M. A. Huis, N. Hansen, S. Otten, and R. Lensink, "A Three-Dimensional Model of Women's Empowerment: Implications in the Field of Microfinance and Future Directions," Frontiers in Psychology, vol. 8, p. 1678, 2017, doi: 10.3389/fpsyg.2017.01678.

[3] A. Y. Merung, I. R. Sofyan, N. A. Sudirman, and A. Sma, "Do Entrepreneurial Competence and Psychological Well-Being Affect Entrepreneurial Interest among Young Entrepreneurs?" Indonesian Journal of Business and Entrepreneurship Research, vol. 2, no. 1, pp. 63–75, 2024, doi: 10.62794/ijober.v2i1.1445.

[4] A. Darmawan, "Meningkatkan Peran Inkubator Bisnis Sebagai Katalis Penciptaan Wirausaha Di Asia Pasifik: Tinjauan Ekonomi Makro," Equity: Jurnal Ekonomi, vol. 7, no. 1, pp. 1–12, 2019, doi: 10.33019/equity.v7i1.24.

[5] J. Greenberg and E. Mollick, "The 'devil' you don't know: A test of the detriments and benefits of co-founding with strangers," Journal of Business Venturing, vol. 41, no. 1, p. 106537, 2026, doi: 10.1016/j.jbusvent.2025.106537.

[6] A. K. Hayya and A. Darmawan, "Pengaruh Ketimpangan Gender Dalam Bidang Ekonomi Pembangunan Di Indonesia: Kajian Teoritis Dan Empiris," unpublished.

[7] N. Kabeer, "Resources, agency, achievements: Reflections on the measurement of women's empowerment," Development and Change, vol. 30, no. 3, pp. 435–464, 1999.

[8] E. Olwanda et al., "Women's autonomy and maternal health decision making in Kenya: Implications for service delivery reform—A qualitative study," BMC Women's Health, vol. 24, no. 1, p. 181, 2024, doi: 10.1186/s12905-024-02965-9.

[9] M. Huang, J. Wang, and X. Su, "The Impact of Social Support on Entrepreneurial Well-being: The Role of Entrepreneurial Passion and Entrepreneurial Efficacy," Sage Open, vol. 14, no. 4, p. 21582440241297232, 2024, doi: 10.1177/21582440241297232.

[10] E. Gardiner, J. Adams, J. Debrulle, and J. Maes, "Exploring the impact of entrepreneurship on physical and psychological health in the context of active ageing: A systematic review," Entrepreneurship & Regional Development, pp. 1–21, 2024, doi: 10.1080/08985626.2024.2394877.

[11] C. Wang, N. Mundorf, and A. Salzarulo-McGuigan, "Psychological Well-Being Sustainable during Entrepreneurial Process—The Moderating Role of Entrepreneurial Creativity," Sustainability, vol. 13, no. 19, p. 10732, 2021, doi: 10.3390/su131910732.

[12] B. Setiawan, A. Darmawan, and M. Marselina, "Identify The Effect Of Trade Openness, Government Spending And Labor Force on Economic Growth IN ASEAN Countries," Equity: Jurnal Ekonomi, vol. 11, no. 1, pp. 46–55, 2023, doi: 10.33019/equity.v11i1.113.

[13] N. Shir, B. N. Nikolaev, and J. Wincent, "Entrepreneurship and well-being: The role of psychological autonomy, competence, and relatedness," Journal of Business Venturing, vol. 34, no. 5, p. 105875, 2019, doi: 10.1016/j.jbusvent.2018.05.002.

[14] J. Been, E. Suari-Andreu, and D. Wisselo, "Gender differences in the added (home) worker effect," Economics Letters, vol. 244, p. 111998, 2024, doi: 10.1016/j.econlet.2024.111998.

[15] I. Chatterjee, D. A. Shepherd, and J. Wincent, "Women's entrepreneurship and well-being at the base of the pyramid," Journal of Business Venturing, vol. 37, no. 4, p. 106222, 2022, doi: 10.1016/j.jbusvent.2022.106222.

[16] C. Trudel-Fitzgerald, P. James, E. S. Kim, E. S. Zevon, F. Grodstein, and L. D. Kubzansky, "Prospective associations of happiness and optimism with lifestyle over up to two decades," Preventive Medicine, vol. 126, p. 105754, 2019, doi: 10.1016/j.ypmed.2019.105754.

[17] I. Aliska, S. Knudsen, Z. Mehdi, and S. Anson, "Inclusivity through co-creation: Insights for practitioners to engage vulnerable populations in risk communication development," International Journal of Disaster Risk Reduction, vol. 118, p. 105214, 2025, doi: 10.1016/j.ijdrr.2025.105214.

[18] C. D. Ryff, "Psychological well-being revisited: Advances in the science and practice of eudaimonia," Psychotherapy and Psychosomatics, vol. 83, no. 1, pp. 10–28, 2014.

[19] S. Theresia, S. O. Sihombing, and F. Antonio, "From Effectuation to Empowerment: Unveiling the Impact of Women Entrepreneurs on Small and Medium Enterprises' Performance—Evidence from Indonesia," Administrative Sciences, vol. 15, no. 6, p. 198, 2025, doi: 10.3390/admsci15060198.

[20] H. O. Falola, A. O. Osibanjo, and S. I. Ojo, "Effectiveness of training and development on employee's performance and organisation competitiveness in the Nigerian banking industry," Bulletin of the Transilvania University of Braşov, vol. 7, no. 56, pp. 161–170, 2014.

[21] G. M. Spreitzer, "Psychological empowerment in the workplace: Dimensions, measurement, and validation," Academy of Management Journal, vol. 38, no. 5, pp. 1442–1465, 1995.

[22] M. Abreu, O. Oner, A. Brouwer, and E. van Leeuwen, "Well-being effects of self-employment: A spatial inquiry," Journal of Business Venturing, vol. 34, no. 4, pp. 589–607, 2019, doi: 10.1016/j.jbusvent.2018.11.001.

[23] D. Wach, U. Stephan, E. Weinberger, and J. Wegge, "Entrepreneurs' stressors and well-being: A recovery perspective and diary study," Journal of Business Venturing, vol. 36, no. 5, p. 106016, 2021, doi: 10.1016/j.jbusvent.2020.106016.

[24] C. D. Ryff, "Entrepreneurship and eudaimonic well-being: Five venues for new science," Journal of Business Venturing, vol. 34, no. 4, pp. 646–663, 2019, doi: 10.1016/j.jbusvent.2018.09.003.