

The Construction of the Neo-SMEFRI Index Model for Single Motherpreneurs Facing Pandemic

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Abstract

Single-mother entrepreneurs (SMPs) play a vital role in bolstering the economy through their entrepreneurial endeavors. Women's entrepreneurship, including that of single mothers, catalyzes economic empowerment, granting women financial autonomy, decision-making autonomy, and control over their economic assets. This empowerment not only benefits the individual but also yields positive societal outcomes, as empowered women are more likely to invest in the education, health, and well-being of their families and future generations. This study aims to construct the Neo-SMEFRI Index Model (Single Motherpreneurs Financial Management and Resources Resilience Index) using the resource based view theory as a basis and to extend the theory for index formulation and construction. The specific objective for this paper are to come out with the new index that can be used by the government or any institutions in the authority to analyse the readiness score or level of single motherpreneurs in facing pandemic using certain measures. The index model has been formulated via three stages of data collection. The outcome of this study would help authorities via results from Neo-SMEFRI Index to discover the seriousness level of single motherpreneurs in term of entrepreneurial financial literacy, financial knowledge, self-efficacy, and resilience response in facing and coping with pandemic. This new index shall be used by other researchers from other countries for an ideal reference in knowing the status of single motherpreneurs resilience response level for their countries.

Keywords: Single-mother entrepreneurs, financial literacy, financial knowledge, self-efficacy, resilience

INTRODUCTION

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The COVID-19 pandemic had a significant impact on single-mother entrepreneurs. The pandemic heightened the urgency for businesses to embrace knowledge and new business strategies. Single mother entrepreneurs who needed more business literacy to adapt their businesses to the changing landscape. As such, it is evident that there is a serious problem resulting from single mothers' lack of knowledge, skills, and social support, which will impact their social well-being and business sustainability. Scared risk and low entrepreneurship ability among single mothers show low self-efficacy and financial literacy to ensure business sustainability (Owusu et al., 2019; Ismail et al., 2016). They are not able to sustain the knowledge and skills that they

received during the training to be applied in the business for continuously managing resources, recording business transactions, projecting income for several years in front and mapping the future of their business to be a sustainable enterprise for a more extended period (going concern concept).

The headline of the Malay Mail newspaper has stated that “Single mothers among hardest hit by Movement Control Order (MCO), bear double burden of work and family’ which includes the survey that they have conducted during this pandemic (Lim, 2020). As mentioned by writer, 12 per cent or 55 women are single mothers, out of the 442 Selangor women polled with the Selangor Women’s Empowerment Institute (IWB) noting that this category of women were very much affected by the Movement Control Order (MCO) as they are both the sole caregiver for their dependents and the breadwinner for their families. Most of the single mothers in Selangor are earning less than RM3,000 per month according to a survey done by IWB. About 40% of them were also either forced to take unpaid leave or close their respective businesses during the second week of the implementation of the MCO. Recently, a single mother entrepreneur, Mrs. Norasiah, who is the owner of a restaurant in Kedah, has stated that her source of income is affected due to the movement control order which came into effect in early January 2021(Noor, 2021). Through the Malaysian Insight, Aisyah, SMPs which sells cookies and cake through online business said that there is a big chance that she could not pay electricity bills, housing bill, and car loan since she can’t afford it due to MCO (Farid, 2020). As a mother of two children, she only gained around RM1500 monthly which is obviously not enough to afford their daily expenses.

Due to this problem together with the COVID-19 pandemic, single mothers will remain in the state of the inadequacy of income and in the worst-case scenario, they will be becoming the potential of new faces of BN40 in which money will always be the biggest problem (Free Malaysia Today, 2021).

LITERATURE REVIEW

Resource-based view (RBV) Theory

RBV has been the most widely used method for evaluating resources and explaining the competitive advantage of women's entrepreneurship (Barney, 1991; Zainol & Al Mamun, 2018). RBV stems from Penrose's earlier work (1959) stressed the importance of using firms’ capital to achieve competitive advantage. RBV believes that to provide a sustainable competitive advantage, resource requirements must be met. The resource-based view also take part in identifying resources that seems to provide

sustainable competitive advantage but may in fact provide only enduring advantages (Greeve, 2020).

In this study, SMPs are seen to underutilize their potential skills and competencies, as the main issue discussed in the Resource-Based View (RBV) theory. During any crisis, such as the COVID-19 pandemic, they panic and lose income due to the total economic lockdown. The introduction of EFL, ESE and ERR as dimension of entrepreneurial competence in RBV theory created new insight of competitive advantage for single-mother entrepreneurship. RBV Theory alone can not give precise or accurate indicators due to the emerging pandemic such as COV-19 that required the researchers to come up with the new integration of theory with elements from current issues and approaches among single motherpreneurs. Therefore, our RBV research in the field of women entrepreneurship represents an evocative study dealing with specific domains where general theoretical frameworks may be available. However, the operationalization of concepts and the identification of interactions between concepts is still unknown. Consequently, there are still gaps in women's entrepreneurial knowledge base.

As entrepreneurial skills are essential to women's business growth and success, the discussion of women's skills in literature is still limited (Kanapathipillai & Azam, 2019; Dalborg, Von Friedrichs, & Wincent, 2015). Nonetheless, women entrepreneurs who are financially illiterate are more likely to be the reason why they fail to make good financial management decisions, especially on savings and investments, debt and mortgages, financial planning, and wealth accumulation.

Single Motherpreneurs (SMPs)

Single mothers are among the most economically and socially disadvantaged groups who experience higher rates of financial hardship, poverty, and social isolation. Holding a double role to run a family and being the primary source of financial contributors is not an easy task (Mahat et al., 2019). Numerous cases of depression and attempted suicide have been reported in our media to convey the message of the great impact of being a solo parent in the family. A stigma arises along with the term 'single mother', which signalled an unfavorable scenario of single mothers who had to face life and upbringing of children without the true breadwinner of the family.

Based on the Single Mother Empowerment Action Plan (2015-2020), *Kementerian Pembangunan Wanita dan Keluarga Malaysia (KPWKM)* considers single mothers based on the following definitions: Women (Citizens) who are the Head of Household for the category: (i) marriage status of widow or divorced/divorced permanently and have unmarried children in the same household, (ii) having a husband (her husband is unhealthy and unable to work) and has an unmarried child in the household and (iii) never married but have children (adopted child or illegitimate child).

There have been records of various cases of depression and attempted suicide, exposing significant struggles and sorrows that remain despite having the title of a single mother (Sofiah & Mustafa, 2019). The 2015 National Health and Morbidity Survey reported that 29 percent of Malaysians suffer from depression and anxiety disorder, and 30.8% of women reported having mental health problems. Scholars show that there is a link between financial hardship and poor cognitive health of single working mothers (Mahat et al., 2019; Ismail et al., 2019). They are more likely to suffer an episode of depression when they fall under the lower socioeconomic group.

Socioeconomic status can be further explained in terms of under-employment, lower income, financial hardship, and lower educational levels. Hence, it is crucial to minimize this problem via Neo-RBV to ensure proper health conditions can be maintained. Indeed, the National Priority Area underpins health as one of the key pillars. In addition, wellness is an active process of becoming aware of and making choices toward a healthy and fulfilling life (Ismail et al., 2019).

Previous Empirical Studies on Single Mother Entrepreneurs in Malaysia

The discussion of single mothers and their entrepreneurial activities in literature is much related to the challenges they face and how these challenges affect the performance of their business. Topimin et al. (2019), and Mahat et al. (2019) outlined the key challenges facing SMPs only. Meanwhile, Ismail et al. (2015) came up with an entrepreneurial, inspirational concept and an entrepreneurial motivation model, respectively, which does not explain how the resources can be well-managed by the SMPs to achieve business sustainability. Although useful, this discussion provides less empirical findings and explanation on how single mothers manage their business survival, specifically on managing resources (RBV theory).

Topimin et al. (2019) and Ismail et al. (2016) posited that single mother entrepreneurs require adequate business skills and knowledge, and they need proper training to be 'skilled entrepreneurs. In-depth interviews were conducted in the Topimin et al. (2019) study with 27 single-mother entrepreneurs who operate their entrepreneurial activities in Kota Marudu, Sabah. Their study discovered that single-mother entrepreneurs are not capable of generating higher income (sales and profits). Their findings strongly indicated that how single mother entrepreneurs operate their businesses largely depends on the level of human capital they possess. The findings also show that financial constraints were found to affect most single-mother entrepreneurs in this study. Meaning that even though they have financial support from the government, they need guidance in managing the resources. The study also found that single mothers face difficulty in getting a strategic business location and suitable business premises/buildings. To ensure the survival of their businesses, single mother entrepreneurs in their study were mostly dependent on their informal support system and inner strengths. Although useful, the informal support system is unable to support the business survival of their businesses and strengthen their financial position. Hence, it requires the fundamental theory to support the operationalization of the SMPs scenario.

The Rationale and Gap Discovery for the Construction of Neo-SMEFRI Index Model

There is a lack of comprehensive formulation for women's resilience index to cope with pandemics or crises. In 2014, the Economic Intelligence Unit (EIU) came up with the South Asia Women's Resilience Index to assess the role of women in preparing for and recovering from disaster. The majority of indices can be found for entrepreneurs but do not focus on women or the SMPs. There are several indexes, such as those developed by Al Mamun et al. (2021) and named the entrepreneurial index for low-income households in Malaysia.

Buang (2012) also produced an entrepreneurial index but only for start-up firms. Many of the components of resilience indices up to the present time are not important to the resilience of the economy or individual businesses during the primary stages of the recovery process; this can be observed by comments such as incomplete, some irrelevance, including mitigation, partly complete, single case study, process-oriented and narrowly economic (Rose et al., 2013). Hence, it is crucial to conduct an in-depth study on the previous index weaknesses or problems to cater to the most specific group

of SMPs. It is quite challenging to find an index that has been formulated related to women in the case of the COVID-19 pandemic locally or abroad studies related to resilience index for single mother entrepreneurs. Therefore, it becomes a necessity to have an index in this corner to identify problems and find the best solution to help this group.

METHODOLOGY

The **first stage** of this research was focused on refuting or supporting theories that explain how views in RBV theory affect the sustainability of business performance. The RBV theory has been analyzed from literature with the potential inclusion of entrepreneurial financial literacy (EFL), entrepreneurial self-efficacy (ESE) and entrepreneurial resilience response (ERR) perspectives as suggested by other scholars/researchers as mentioned before. The three perspectives (EFL, ESE, and ERR) have been formulated as three constructs in the overall index. For every construct there will be items in explaining the indicators.

The **second stage** involved an interactive interview with 30 single motherpreneurs via focus group discussions (FGDs) to identify their current views and approaches regarding business during pandemic as single motherpreneurs (Abdul Rahim et al., 2023). Participants have been asked about their opinion on what constitutes survival and sustainability business performance and their views and approaches that lead to sustain and survive in business. The focus group interview session taped and transcribed. Participants were also expected to provide information pertaining to the challenges to handle business as a single mother or single source of income. This was best assist the researchers to understand the issue and/or problems in hand prior, during, and post COVID-19 Pandemic. The transcribing process has been done. There were themes and sub-theme for each aspect added in the theory and mapped in the overall index as a proposed Neo-SMEFRI.

The **final stage** was the process for the Strategic Experts (Professors and Practitioners) to structure the constructs and items together ideally and practically. The Neo-SMEFRI index model was finalised at this stage.

FINDINGS AND DISCUSSION

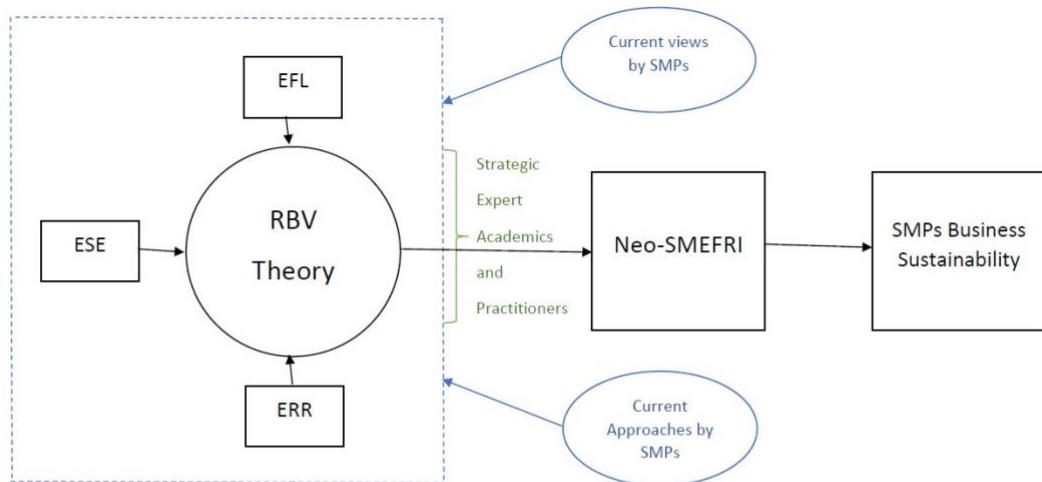
The construction of Neo-SMEFRI

The Neo-Single Motherpreneurs Financial Management and Resources Resilience Index (Neo-SMEFRI) is an index that incorporates three dimensions of original RBV such as Entrepreneurial Financial Literacy (EFL), Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Resilience Response (ERR). The new findings from the in-depth interview in the FGDs has led to the new discovery of Entrepreneurial Financial Knowledge (EFK) as an essential item to be added to the RBV Theory for single motherpreneurs to sustain in the business. Literally, 'neo' comes from the Greek word 'neos,' meaning new and recent. Neo-SMEFRI explains the newly formulated concept and index from another perspective on the entrepreneurship performance of single mothers, which can be seen as in the Figure 1.

Figure 1: *The RBV Theory and Current Views in impacting SMPs Performance*

Crafted with input from single motherpreneurs, expert validation by the strategic experts, academia, practitioners/government agencies, and non-governmental organizations, the Neo-SMEFRI consists of 22 indicators to identify pandemic preparedness, mitigation, and recovery needs among single mothers. This study integrates the scores of four key indicators into a comprehensive overall score. The

Neo-Single Mothers' Financial Resilience Index (Neo-SMFRI) aggregates scores by category (this can be referred as in Figure 2).



Indicator:

RBV Theory= Resource-Based View Theory

EFL= Entrepreneurial Financial Literacy

ESE= Entrepreneurial Self-Efficacy

ERR= Entrepreneurial Resilience Response

N-SMEFRI= Neo-Single Motherpreneur Financial Management and Resources Resilience Index

Figure 2: *Conceptual Framework of Neo-SMEFRI*

The index construction for Neo-SMEFRI is an aggregate score for each of the primary indicators listed in our proposed index. The index is first aggregated by category, and each main category, for example, EFL, EFK, ESE, and ERR, and lastly, the overall score will be based on the merged primary category scores. Lastly, in creating category scores, each primary indicator will be aggregated, referring to an assigned weighting. A scale of 0 to 100 will be used to rebase the category scores for

the next application for future research. The whole process can be clearly illustrated in Figure 3.

No.	CONSTRUCTS AND ITEMS	Additional Construct/ Items FGD – 30 SMPs	PATTERN MATCHING	VALIDITY 10 STRATEGIC EXPERTS	INITIAL NEO-SMEFRI	300 SMPs (weights and score)	Neo-SMEFRI Total Score And Score for respective Construct	Indicators (HIGH, MEDIUM AND LOW SCORE)	Suggestions for SMPs to ameliorate business sustainability. (can be used as a reflection mirror to policymaker in developing training or structure of financial assistance)
1 1 st Construct	EFL								
	Item 1								
	2 3.....								
2 2 nd Construct	ESE								
	Item 1								
	2 3.....								
3 3 rd Construct	ERR								
	Item 1								
	2 3.....								
4 - ...	*** 4-								

*** 4 - If any additional constructs and items after getting input (30 SMPs FGDs) and validating by 10 strategic experts

Figure 3: Neo-SMEFRI Index Formulation

In this study viewpoint, approaches to sustainable business together using RBV with the concept of entrepreneurial financial literacy, entrepreneurial self efficacy, and entrepreneurial resilience response is not the only factors that affect the success of single-mother entrepreneurs, but it must be related to entrepreneurial financial knowledge, and thus provide a sustainable SMPs in business. Table 1 is a summary of the comprehensive list of items that can be used for the scoring and ranking purposes for Neo-SMEFRI Index by any researchers.

Table 1: A List of Neo-SMEFRI Index Model (New Index Model to Compute and Measure Business Sustainability of Single Motherpreneurs during pandemic)

ENTREPRENEURIAL FINANCIAL LITERACY (EFL)
<i>I always ensure the development of my business from a financial point of view.</i>
<i>I always ensure the best financial management for my business.</i>
<i>I am well informed about alternative financial sources as business capital.</i>
<i>I always know how to use capital, buy business stock, sell stock and reinvest for the purpose of business survival after deducting all operational and business management costs.</i>
<i>I use economic and financial information in making business decision.</i>
ENTREPRENEURIAL FINANCIAL KNOWLEDGE (EFK)
<i>I always record cash in and out every day and monthly cash in-out summary.</i>
<i>I collect debt as per agreement from debtors.</i>
<i>I pay suppliers accordingly to schedule as per promised/agreed.</i>
<i>I have a way/ways to save money from profits made for the sake of business survival.</i>
<i>I have my own strategy/ies to cope with any dangers and risks in managing business.</i>
ENTREPRENEURIAL SELF-EFFICACY (ESE)
<i>I feel confident in overcoming the difficulties of expanding the business.</i>
<i>I do not give up easily if the business sale is less demanding.</i>
<i>I always enrich myself on the knowledge, skills and competency in managing business from varieties of courses.</i>
<i>I feel enthusiastic in facing challenges in business.</i>
<i>I am positively inspired and optimistic after seeing many of my friends' businesses succeed.</i>
ENTREPRENEURIAL RESILIENCE RESPONSE (ERR)
<i>I tend to bounce back quickly after hard times.</i>
<i>I do not have a hard time making it through stressful events.</i>
<i>I snap back easily even when something bad happens to me.</i>
<i>I do not tend to take a long time to get over set-backs in my life.</i>
<i>I look for creative ways to alter difficult situations.</i>
<i>Regardless of what happens to me, I believe I can control my reaction to it in a positive way.</i>
<i>I never tired of finding a way to overcome the loss problem I face in business.</i>

CONCLUSION

In the entrepreneurship landscape, single mothers represent a dynamic and resilient segment, contributing significantly to economic growth and innovation. The proposed Neo-SMEFRI emerges as a vital tool in understanding and enhancing entrepreneurial skills and capabilities in line with RBV theory. The Neo-SMEFRI provides a detailed assessment of single mothers' financial management skills, self-efficacy, and resilience by categorizing scores into High, Medium, and Low. These scores diagnose areas of strength and improvement and guide personalized recommendations, empowering single mothers to manage their businesses more effectively by using 22 indicators/indices.

The categories and underlying indicators of the Neo-SMFRI constitute four critical pillars of pandemic resilience and a nation's ability to anticipate and respond to such crises. A solid foundation in financial literacy among entrepreneurs facilitates effective planning and response to pandemics. At the same time, access to credit facilities is paramount for women entrepreneurs to absorb and rebound from shocks. Moreover, adequate financial knowledge is essential for businesses to maintain cash flow, competitiveness, and productivity during entrepreneurship endeavors.

The study contributes to the proposed index, "A Neo-Financial Management and Resources Resilience Index" (Neo-SMEFRI) by including EFL, EFK, ESE, and ERR. The index will be able to materialize the Nation's Strategic Pillar No. 1 under the *Pelan Tindakan Pemerkasaan Ibu Tunggal 2015-2020* to empower the economics of single mothers through improvement in skills and knowledge in entrepreneurship, support for access to financial aid for business and marketing support. Furthermore, the results of this study can promote the newly launched National Entrepreneurship Policy 2030 (NEP 2030), which aims to create a holistic and supportive entrepreneurial ecosystem to support an inclusive, balanced, and sustainable economic development agenda.

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