

# FEAR OF FAILURE IN ENTREPRENEURSHIP: ADAPTATION AND VALIDATION OF THE ENTREPRENEURIAL FEAR OF FAILURE (EFF) MEASURE IN INDONESIA

<sup>1</sup>SITI ZAHRENI, <sup>2</sup>SEGER HANDOYO<sup>3</sup>FAJRIANTHI FAJRIANTHI

<sup>1</sup>UNIVERSITAS AIRLANGGA, SURABAYA, INDONESIA

UNIVERSITAS SUMATERA UTARA, MEDAN, INDONESIA

<sup>2</sup>UNIVERSITAS AIRLANGGA, SURABAYA, INDONESIA

<sup>3</sup>UNIVERSITAS AIRLANGGA, SURABAYA, INDONESIA

This study aims to adapt and validate the Measure of Entrepreneurial Fear of Failure (EFF) for use in the Indonesian context. The cross-cultural adaptation followed the International Test Commission (ITC) Guidelines. Confirmatory Factor Analysis (CFA) was used to confirm the construct validity. The scale was administered to 296 micro and small business owners in Indonesia. Our findings support previous research, favouring the six-factor model over the seven-factor and single-factor models. Furthermore, the EFF Measure showed satisfied content validity, high internal consistency and good discriminant and convergent validity. These findings provide empirical evidence for the validity and reliability of the Indonesian version of the EFF measure, enabling more accurate assessments of entrepreneurial fear of failure in research and practice. Moreover, this study will create new opportunities for the development of fear-of-failure studies in Indonesia and contribute to policymakers in the entrepreneurship area.

**Keywords:** fear of failure, entrepreneurship, measurement, adaptation, validation, Indonesian context

*Correspondence concerning this article should be addressed to Siti Zahreni, Doctoral Psychology Program, Faculty of Psychology, Universitas Airlangga, Surabaya, Indonesia. Email: siti.zahreni-2021@psikologi.unair.ac.id.*

Fear of Failure (FoF) is an inherent and unavoidable aspect of entrepreneurship (Hunter et al., 2021a; Kollmann et al., 2017). However, many entrepreneurs tend to fear and avoid failure, leading them to choose business opportunities with higher chances of success (McGrath, 1999). Previous studies have identified FoF as a major psychological barrier in entrepreneurship, preventing individuals from transforming their entrepreneurial ideas and intentions into actual business actions (Cacciotti et al., 2020; Gao et al., 2024; Kong et al., 2020). Nevertheless, FoF can also act as a motivational driver, encouraging entrepreneurs to prepare themselves for business uncertainties better (Hunter et al., 2021; Mitchell & Shepherd, 2011; Morgan & Sisak, 2016). The dual nature of FoF—both as a barrier and a source of motivation—makes it a highly intriguing topic for entrepreneurship researchers.

Research on FoF in entrepreneurship presents different theoretical perspectives in explaining the nature of this construct. Fear of Failure (FoF) was first conceptualised in Achievement Motive Theory, which defines it as an individual's motive to avoid success to prevent humiliation due to failure (Acquah et al., 2021; Graham, 2020). From this perspective, FoF is defined as a dispositional tendency based on the avoidance of failure due to feelings of shame or humiliation (Atkinson & Feather, 1966), as well as a dispositional tendency based on anxiety about failure under achievement pressure (Atkinson & Litwin, 1960). Subsequently, the Appraisal Theory of Emotions (Lazarus, 1991) defines FoF as an experience that involves cognitive, emotional, relational, and motivational processes (Conroy, 2001). Lazarus (1991) suggests that fear arises from anticipating unfavourable outcomes generated by evaluating perceived threats, which may change over time or under different circumstances. Such

unfavourable anticipations stem from past experiences, indicating that fear is a cognitive response, a lower-order cognitive skill, and is associated with dispositional traits (Chua & Bedford, 2016). Moreover, from the perspective of Coping Theory, FoF is defined as an emotional response to a stressful situation (Poczwadowski & Conroy, 2002). This theory emphasises the emotional dimension and the strategies people use to cope with negative feelings. Coping Theory assumes that when experiencing fear of failure, individuals generate coping responses—either behavioural or cognitive—to adapt to stressful situations.

Various theoretical perspectives have shaped two primary views on the construct of FoF: (1) Fear of failure as a stable disposition (McClelland, n.d.) and (2) Fear of failure as a psychological state (Conroy, 2001). Unlike trait-based perspectives, which assume FoF is a fixed personality characteristic, conceptualising FoF as a state allows for a more dynamic understanding, recognising its fluctuations across different entrepreneurial contexts (Cacciotti et al., 2016). Research examining entrepreneurial behaviour through personal traits has yielded inconsistent and inconclusive results (Schlaegel & Koenig, 2014). In contrast, a state-based perspective provides a more nuanced framework for understanding FoF, highlighting its variable impact across different entrepreneurial stages and its interaction with other relevant factors (Cacciotti, 2015; Cacciotti et al., 2016). Furthermore, treating FoF as an event-based experience (Dimov, 2007) captures its responsiveness to situational influences rather than assuming it to be a static trait. Framing FoF as a psychological state also clarifies its dual nature, manifesting in both approach and avoidance behaviours. This perspective offers deeper insights into the interplay between FoF and various contributing variables, including dispositional factors (Cacciotti, 2015; Cacciotti et al., 2016).

Entrepreneurship is inherently characterised by uncertainty and ambiguity (Townsend et al., 2018), which significantly differ from educational and sports settings, where most research on FoF has been conducted (e.g., Conroy, 2001; Covington & Teel, 1996). Entrepreneurs face varied tasks and are constantly exposed to the possibility of success or failure (Hitt et al., 1998), are subject to judgment and criticism, and must develop the competencies required to avoid failure (Cacciotti et al., 2016). In line with the Coping Theory perspective (Conroy, 2001), given the dynamic and process-based nature of entrepreneurship (McMullen & Dimov, 2013), the concept of entrepreneurial fear of failure (Cacciotti et al., 2016), which is viewed as a state. Entrepreneurial fear of failure as a negative affective reaction based on cognitive evaluation of the possibility of failure in an ambiguous and uncertain entrepreneurial context (Cacciotti et al., 2020). This definition emphasises the temporary nature of FoF and considers its origins, rooted in the relationship between the individual and the environment (Lazarus, 1991). This means that the fear of failure is a socially situated experience resulting from various uncertainties and challenges entrepreneurs face (Cacciotti et al., 2020). For instance, some entrepreneurs fear failure due to concerns about funding, while others fear failure due to a perceived inability to execute essential tasks or manage their venture effectively (Cacciotti et al., 2020; Muñoz et al., 2020).

Based on this definition, “The Measure of Entrepreneurial Fear of Failure” was developed to address previous theoretical and operational limitations in measuring FoF (e.g., GEM, PFAI) (Cacciotti et al., 2020). This instrument is a multidimensional and formative measure consisting of reflective first-order dimensions, which combine into a formative second-order construct (Law et al., 1998). The multidimensional nature of this measure indicates that entrepreneurs experience fear of failure from different sources, including financial security, personal ability, ability to fund the venture, the potential of the idea, a threat to social esteem, opportunity cost, and venture capacity to execute (Cacciotti et al., 2020). Each dimension consists of three items assessed using a five-point Likert scale (ranging from “strongly disagree” to “strongly agree”) with the stem “Over the past few months, I have been afraid...”. Not all individuals must experience every dimension to be categorised as having entrepreneurial fear of failure. These dimensions can stand alone or compensate for one another (Cacciotti et al., 2020).

Indonesia has a relatively high fear of failure in entrepreneurship. The Global Entrepreneurship Monitor (GEM) 2022 survey reported that Indonesia’s FoF index for engaging in entrepreneurial activities stands at 36.81%, ranking 8th out of 10 Asian countries with the highest FoF levels (GEM, 2023). Unfortunately, research on FoF in Indonesia remains limited, with only a few studies investigating FoF in the Indonesian sample (e.g., Games et al., 2023). Moreover, validated instruments measuring fear of failure in the Indonesian context are non-existent. Therefore, we see the importance of adapting and validating this measurement tool in the Indonesian context. Adapting and validating the Measure of Entrepreneurial Fear of Failure for the Indonesian context will support further research and

allow for cross-cultural comparisons, consequently helping improve entrepreneurship policy in Indonesia.

Given the above considerations, this study has two primary objectives:

1. This study sought to adapt and validate The Measure of Entrepreneurial Fear of Failure (EFF Measure) in the Indonesian context and evaluate its content validity.
2. Examine the validity of the newly translated Indonesian version of EFF Measure using Confirmatory Factor Analysis (CFA) and estimate the validity of evidence based on content, response process, and internal structure.

## METHOD

### Study 1: Cross-Cultural Adaptation and Content Validity of the EFF Measure

The cross-cultural adaptation of psychological instruments requires a rigorous methodological approach. This study followed the International Test Commission (ITC) guidelines (ITC, 2017), which were considered more comprehensive than alternative frameworks (Gudmundsson, 2009). The first step involved obtaining permission from Gabriella Cacciotti, the original author of the Entrepreneurial Fear of Failure measure, who approved the cross-cultural adaptation of the instrument. The initial translation from English to Bahasa Indonesia was conducted by three independent professionals: (1) a translator with expertise in psychology and instrument development, (2) a translator with expertise in entrepreneurship, and (3) a linguist. Each translator produced an independent version of the translated scale.

In the second stage, the three translations were synthesized through a discussion among the translators, with the researcher acting as an observer and recording points of agreement. Discrepancies were resolved through consensus, resulting in a single, harmonized translation. For back-translation, two new translators—who were not involved in the initial translation—were tasked with translating the synthesized version back into English. To minimize bias, the translators were not provided with background information on the research constructs. This step produced two back-translated versions, which an expert committee then reviewed.

The expert committee compared the original scale and back-translated versions and synthesized forward translation to assess semantic, idiomatic, empirical, and conceptual equivalence. Following this review, the finalized version of the scale was further evaluated by eight experts in industrial and organizational psychology and entrepreneurship, who acted as expert judges. The Content Validity Index (CVI) analysis (Lynn, 1986; Polit et al., 2007) was applied at this stage, where the experts rated each item's relevance and clarity on a four-point Likert scale (1 = very little to 4 = very much). A CVI value of  $\geq .83$  was considered adequate (Lynn, 1986).

After expert evaluation, the first version of the instrument was assessed by the target group to evaluate language clarity, appropriateness of instructions, and item comprehension. This stage involved individual interviews with eight SME owners/managers or entrepreneurs. Participants first completed the Entrepreneurial Fear of Failure instrument, followed by cognitive interviews, where the researcher explored their understanding of each item. Feedback from this process informed the final draft of the instrument, marking the completion of the adaptation procedures.

### Study 2: Validation of the EFF Measure

#### *Participants*

The internal structure validity of the instrument was assessed using responses from individuals who met the following criteria: (1) they were owners of micro or small businesses, and (2) they had been actively running their businesses for at least three months. Participants were recruited through convenience sampling, a non-probability sampling technique.

Data collection was conducted offline between July and August 2024 by distributing questionnaires directly to research participants. A total of 367 questionnaires were returned, with a completion rate of 80%. Cases with missing data on the EFF Measure were excluded, resulting in a final sample size of 294 participants. The sample comprised 29.6% male and 68.7% female respondents, with ages ranging from 13 to 69 years ( $M = 40.75$ ,  $SD = 10.75$ ). Most participants had completed high

school education (53.1%), and the average length of business operation was 9.80 years (SD = 7.78). The participants were drawn from various cities across Indonesia and represented a broad spectrum of business types and sectors. All participants were informed of the study's anonymity and confidentiality policies and were explicitly told that participation was voluntary, with the option to withdraw at any time. Before participation, individuals provided informed consent after receiving details about the study's objectives. Ethical approval for the study was obtained from the Universitas Airlangga ethics committee.

#### *Instruments*

The Measure of Entrepreneurial Fear of Failure (EFF Measure) (Cacciotti et al., 2020) is a 21-item self-report instrument designed to assess entrepreneurs' perceptions and experiences of fear of failure across seven dimensions, namely, Financial security, Personal ability, Ability to fund the venture, Potential of the idea, Threat to social reputation, Opportunity cost, Venture execution ability. Each item is rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate a greater fear of entrepreneurial failure, whereas lower scores reflect a reduced fear of failure. Example items include: "Stem: *In the last few months, I have been afraid...* (1) *...of being unable to finance the business*; (2) *...that this is not a valuable business idea*). The scale demonstrated good internal consistency, with Cronbach's alpha ( $\alpha$ ) ranging from 0.75 to 0.89.

#### *Data Analysis Procedures*

Validation was conducted at the level of first-order dimensions using Confirmatory Factor Analysis (CFA). The analysis was conducted using JASP (JASP Team, 2024) with Maximum Likelihood (ML) estimation. To assess model fit, we examined multiple goodness-of-fit indices, including Absolute fit indices (Goodness-of-Fit Index (GFI), Standardized Root Mean Square Residual (SRMR)), Relative fit indices (Tucker-Lewis Index (TLI), Comparative Fit Index (CFI)), Centrality-based indices (Root Mean Square Error of Approximation (RMSEA)). Model fit was interpreted based on the following cut-off values: SRMR < 0.08 (Hu & Bentler, 1999) indicates an acceptable fit, GFI, TLI, and CFI  $\geq 0.90$  indicate a good model fit (Hu & Bentler, 1998). RMSEA between 0.08 and 0.10 suggests a fair fit, while values below 0.08 indicate a good fit (MacCallum et al., 1996). Additionally, we assessed the internal consistency of the instrument using Cronbach's alpha ( $\alpha$ ). Reliability was considered adequate if  $\alpha$  and  $\omega$  values were  $\geq 0.70$  (Cheung et al., 2024).

## RESULTS

#### *Validity Evidence Based on Content*

The EFF Measure was evaluated using two key criteria: linguistic clarity and theoretical relevance. For linguistic clarity, all items achieved a Content Validity Index (CVI) score above 0.8, ranging from 0.8125 to 1.0. Regarding theoretical relevance, all items exceeded the expected CVI threshold of 0.80. Although these values met the minimum requirements, we revised items with a CVI score of 0.8125 to enhance clarity based on reviewer feedback. Specifically, items 5, 7, 11, 15, and 20 contained Indonesian translations that had ambiguous meanings for respondents. Words in these items were modified to improve readability and ensure comprehension among the target group.

#### *Validity Evidence Based on Response Process*

Validity based on response processes was examined through cognitive interviews (Peterson et al., 2017). Participants completed the questionnaire and were subsequently probed about their understanding of each item. Responses were analysed to determine whether they aligned with the intended construct. The findings revealed that some participants struggled with clause-like items (e.g., "*...of running out of money*"; "*...of other people's expectations of me*"), leading to confusion and a tendency to overlook instructions. To address this issue, the items were reformulated by adding the subject phrase "I was afraid" to enhance clarity (e.g., "*I was afraid of running out of money*"; "*I was afraid of other people's expectations of me*"). After these modifications, the revised instrument was retested with the target group, confirming that the items and instructions were now clear and suitable for respondents.

#### *Validity Evidence Based on Internal Structure and Reliability*

To assess the internal structure of the EFF Measure, we tested three competing measurement models: Model 1: Six-factor structure, Model 2: Seven-factor structure, and Model 3: One-factor structure. Confirmatory Factor Analysis (CFA) was conducted, and model fit was evaluated using multiple indices (Crowley & Fan, 1997) as no single index is sufficient to determine model adequacy. Table 1 presents the fit indices for all three models. The results indicate that Model 1 (six factors) exhibited the best fit, as shown by SRMR within the acceptable threshold (Hu & Bentler, 1999), RMSEA within the good-fit range (MacCallum et al., 1996) and CFI indicating a good fit, TLI falling within an acceptable range (Hu & Bentler, 1998). Model 2 (seven-factor) also demonstrated adequate fit, with a marginally lower GFI but acceptable CFI and TLI values. Model 3 (one-factor), however, failed to meet fit criteria, showing poor fit statistics with CFI and TLI values below acceptable thresholds and an elevated RMSEA value. These results provide statistical support for a six-factor structure. Evaluating model fit using multiple indices is essential, but parsimony is equally important. Model 1 demonstrates not only the best fit, but also offers the more parsimonious approach, providing strong support for six six-factor.

TABLE 1: Fit Indices for Different Models

Models	X <sup>2</sup> /df	SRMR	RMSEA [CI 90%]	GFI	TLI	CFI
Model 1: Six-Factor	2.681	0.037	0.076	0.951	0.942	0.955
Model 2: Seven-factor	2.568	0.036	0.073	0.939	0.940	0.952
Model 3: One-factor	9.717	0.091	0.172	0.737	0.664	0.698

Note. X<sup>2</sup> = chi-square; df = degree of freedom; SRMR = standardized root mean square residual; RMSEA = root-mean-square error of approximation; CI=Confidence Interval; GFI = goodness of fit index; TLI = Tucker–Lewis index; CFI = comparative fit index.

TABLE 2: Validation study: Item loadings of the EFF measure

No	Item	F	PI	TSE	OC	PA	FS
1	...of not getting enough funding to move the company forward/ <i>Saya takut tidak memperoleh dana yang cukup untuk mengembangkan usaha</i>	0.826	-	-	-	-	-
2	...of not being able to finance the business/ <i>Saya takut tidak mampu memodali usaha yang saya miliki.</i>	0.876	-	-	-	-	-
3	...of not being able to get the required funding for the business/ <i>Saya takut tidak mampu mendapatkan dana yang dibutuhkan untuk usaha</i>	0.885	-	-	-	-	-
4	...that no one will be interested in the product/service/ <i>Saya takut tidak ada yang akan tertarik pada produk/layanan yang saya tawarkan</i>	-	0.779	-	-	-	-
5	...that this is not a valuable business idea/ <i>Saya takut ini bukan ide bisnis yang menguntungkan</i>	-	0.821	-	-	-	-
6	...that there is no need for our product/service out there/ <i>Saya takut produk/pelayanan kami tidak dibutuhkan</i>	-	0.851	-	-	-	-
7	...of other people's expectations of me/ <i>Saya takut tidak mampu memenuhi harapan orang-orang terdekat terhadap saya</i>	-	-	0.896	-	-	-
8	...of disappointing the people who are important to me/ <i>Saya takut mengecewakan orang-orang terdekat yang penting bagi saya</i>	-	-	0.871	-	-	-
9	...of losing the trust of people who are important to me/ <i>Saya takut kehilangan kepercayaan orang-orang terdekat yang penting bagi saya</i>	-	-	0.656	-	-	-
10	...that running the business is taking my time away from other activities/ <i>Saya takut usaha yang saya miliki menyita banyak waktu saya</i>	-	-	-	0.738	-	-
11	...of missing important events of my life because of my business/	-	-	-	0.872	-	-



	<i>Saya takut kehilangan peristiwa penting dalam hidup saya karena menjalankan usaha</i>							
12	...of not being able to spend enough time with my family and friends/	-	-	-	0.899	-	-	
	<i>Saya takut tidak bisa menghabiskan cukup waktu bersama keluarga dan teman-teman karena menjalankan usaha</i>							
13	...of not being able to manage people effectively/	-	-	-	-	0.861	-	
	<i>Saya takut tidak berhasil mengelola karyawan</i>							
14	...of not being able to manage the business effectively/	-	-	-	-	0.881	-	
	<i>Saya takut tidak berhasil mengelola usaha ini</i>							
15	...of not being able to fulfil all the roles that this job requires/	-	-	-	-	0.862	-	
	<i>Saya takut tidak mampu memenuhi tuntutan peran sebagai seorang wirausahawan</i>							
16	...of running out of money/	-	-	-	-	-	0.862	
	<i>Saya takut kehabisan modal</i>							
17	...of losing all my savings/	-	-	-	-	-	0.926	
	<i>Saya takut kehabisan seluruh tabungan saya</i>							
18	...of losing all I have invested in the business/business activities/	-	-	-	-	-	0.921	
	<i>Saya takut kehilangan semua modal yang sudah ditanamkan untuk usaha ini</i>							

Note. F=Ability to fund the venture; PI=Potential of the idea; TSE=Threat to social esteem; OE=Opportunity costs; PA=Personal ability; FS=Financial security. All items loaded significantly on their respective factors ( $p < .001$ ).

TABLE 3: Validation studies: Means, standard deviations, average variance extracted and reliabilities

Dimensions	M	SD	AVE	Cronbach $\alpha$
Ability to fund the venture	3.35	0.80	0.747	0.898
Opportunity costs	3.22	0.92	0.707	0.872
Potential of the idea	3.07	1.06	0.665	0.858
Threat to social esteem	3.12	1.03	0.669	0.774
Financial security	3.30	3.58	0.816	0.928
Personal ability	3.28	1.04	0.753	0.900

Note. N=294. M=Means; SD=Standard Deviations; AVE= Average Variance Extracted; Cronbach  $\alpha$ =Reliabilities.

### Convergent Validity

Convergent validity was assessed by analyzing standardized factor loadings (SFL) for each item in the EFF Measure. Table 2 shows that all SFL values exceeded 0.5, indicating strong item-factor relationships. Additionally, the Average Variance Extracted (AVE) values were greater than 0.50, exceeding the shared variance between factors (Fornell & Larcker, 1981). This confirms that the items within each dimension of FoF measure a common underlying construct. Furthermore, internal consistency reliability was evaluated using Cronbach's alpha ( $\alpha$ ) for each dimension. Table 3 shows that all reliability estimates exceeded the 0.70 threshold (Cheung et al., 2024), confirming satisfactory internal consistency (minimum  $\alpha=0.847$ , maximum  $\alpha=0.928$ ). These results indicate that the EFF Measure is a reliable instrument for measuring entrepreneurial fear of failure. Additionally, discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT). All HTMT values were below 0.90 (Table.4) (Henseler et al., 2015), indicating no issues with discriminant validity.

TABLE 4: Heterotrait-monotrait of EFF Measure

Ability to Fund The Venture	Potential of the Idea	Threat to Social Esteem	Opportunity Costs	Personal Ability	Financial Security
1.000	-	-	-	-	-
0.646	1.000	-	-	-	-
0.470	0.861	1.000	-	-	-
0.344	0.691	0.703	1.000	-	-
0.517	0.844	0.794	0.808	1.000	-
0.700	0.702	0.618	0.628	0.781	1.000

## DISCUSSION

This study aimed to adapt and validate the Entrepreneurial Fear of Failure (EFF) measure in the Indonesian context. The adaptation process followed the International Test Commission (ITC) guidelines (2017), ensuring methodological rigor at each stage, from preparation and translation to validation. Using multiple translators and expert committee reviews enhanced the equivalence between the original and adapted versions (Epstein et al., 2015). Additionally, since the EFF measure's core concepts are not significantly different in Indonesian, the translation process encountered minimal challenges. Any discrepancies among translators were resolved through consensus.

Beyond semantic and idiomatic equivalence, effective adaptation also requires conceptual equivalence (Beaton et al., 2000). This study assessed both the theoretical relevance and linguistic clarity of the translated EFF measure. The Content Validity Index (CVI) analysis played a crucial role in strengthening construct validity (Polit et al., 2007), with satisfactory results indicating that the adapted measure accurately reflects the underlying construct.

Furthermore, validity evidence based on the response process was obtained through cognitive debriefing. This ensured that the target group comprehended all aspects of the instrument, including instructions, response formats, and question items. Some sentence structures in the original scale were challenging for respondents, necessitating a revision from clause-based items to complete sentences. This modification aligns with the argument that resolving syntactic ambiguity enhances interpretability (Ferreira, 2003). The revised version was retested, confirming that the changes improved clarity and comprehension.

To address the second research objective, Confirmatory Factor Analysis (CFA) was conducted to evaluate the internal structure of the EFF measure. Results supported a multidimensional structure, with the six-factor and seven-factor models demonstrating better fit than the single-factor model. These findings align with (Cacciotti et al., 2020), reinforcing the multidimensional nature of fear of failure. The six-factor model exhibited a slightly better fit than the seven-factor model, suggesting that venture execution capability, while conceptually relevant, may not be a distinct factor. Nevertheless, given the subtle statistical distinctions observed between the six-factor and seven-factor models, coupled with inductive evidence supporting this dimension's presence (Cacciotti et al., 2016). We maintain that incorporating a venture's capability to execute into the EFF measure remains both theoretically sound and methodologically justifiable, especially when studying populations where execution capability is a salient concern.

Additionally, the Indonesian version of the EFF measure demonstrated strong internal consistency, convergent validity, and satisfactory discriminant validity. Together, these findings contribute to validating the EFF measure among Indonesian entrepreneurs, providing insights into its generalizability and the instrument's quality.

### Theoretical and Practical Contributions

This study offers both theoretical and practical contributions. Theoretically, this study provides evidence supporting the validity and reliability of the Indonesian version of the EFF measure. It corroborates findings that reinforce that entrepreneurial fear of failure is a multidimensional psychological state (Cacciotti et al., 2020). The results confirm the internal structure validity of the measure (AERA et al., 2014). This research extends the applicability of the EFF measure to Eastern cultures, which differ from the Western settings where the measure was originally developed.

In practical terms, this study can foster research on entrepreneurial fear of failure across all stages of entrepreneurship in Indonesia. Consequently, it can serve as a foundation for entrepreneurship development programs in Indonesia. Lastly, it will open avenues for cross-cultural research, allowing comparisons of fear of failure across different cultural settings.

### Limitations and Future Research Directions

Despite its contributions, this study has some limitations. First, this study focused only on practicing entrepreneurs. Future research should compare findings with aspiring and nascent entrepreneurs to determine whether measurement models differ across entrepreneurial stages. Second, the CFA did not examine measurement invariance across subgroups. Future research should investigate psychometric equivalence across demographics (e.g., age, gender, education level). Moreover, the gender imbalance in the sample shows that caution should be given when drawing generalisations for all

gender groups. Third, Further studies should explore how FoF relates to external variables, such as entrepreneurial self-efficacy, resilience, and persistence.

## CONCLUSION

This study successfully adapted and validated the Entrepreneurial Fear of Failure (EFF) Measure in the Indonesian context, confirming its multidimensional structure and good measurement quality. The adapted measure consists of six dimensions, each with three items, and has demonstrated robust validity and reliability. These findings indicate that the EFF measure is well-suited for assessing fear of failure in the Indonesian entrepreneurial context.

## ACKNOWLEDGEMENTS

We extend our gratitude to the Higher Education Financing Centre (BPPT) of the Indonesian Ministry of Education, Culture, and Technology Research and the Indonesian Education Endowment Fund Agency (LPDP) of the Ministry of Finance. Additionally, we thank the Directorate General of Higher Education, Republic of Indonesia, and the anonymous reviewers and editors for their constructive feedback.

## REFERENCES

- Acquah, A., Nsiah, T. K., Antie, E. N. A., & Otoo, B. (2021). Literature review on theories of motivation. *EPRA International Journal of Economic and Business Review*, 9(5), 25–29.
- Atkinson, J. W., & Feather, N. T. (1966). *A theory of achievement motivation* (Vol. 66). Wiley New York.
- Atkinson, J. W., & Litwin, G. H. (1960). Achievement motive and test anxiety conceived as motive to approach success and motive to avoid failure. *The Journal of Abnormal and Social Psychology*, 60(1), 52.
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186–3191. <https://doi.org/10.1097/00007632-200012150-00014>
- Cacciotti, G. (2015). *Fear of failure in entrepreneurship a review, reconceptualization and operationalization* [The University Of Warwick]. <http://go.warwick.ac.uk/wrap/73258>
- Cacciotti, G., Hayton, J. C., Mitchell, J. R., & Allen, D. G. (2020). Entrepreneurial fear of failure: Scale development and validation. *Journal of Business Venturing*, 35(5), 106041. <https://doi.org/10.1016/j.jbusvent.2020.106041>
- Cacciotti, G., Hayton, J. C., Mitchell, J. R., & Giazitzoglu, A. (2016). A reconceptualization of fear of failure in entrepreneurship. *Journal of Business Venturing*, 31(3), 302–325. <https://doi.org/10.1016/j.jbusvent.2016.02.002>
- Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. In *Asia Pacific Journal of Management* (Vol. 41, Issue 2). Springer US. <https://doi.org/10.1007/s10490-023-09871-y>
- Chua, H. S., & Bedford, O. (2016). A qualitative exploration of fear of failure and entrepreneurial intent in Singapore. *Journal of Career Development*, 43(4), 319–334.
- Commission, I. T. (2017). The ITC Guidelines for Translating and Adapting Tests (Second edition). In *Gefunden am*. <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:International+Test+Commission+Guidelines+for+Translating+and+Adapting+Tests#0>
- Conroy, D. E. (2001). Fear of failure: An exemplar for social development research in sport. *Quest*, 53(2), 165–183.
- Covington, M., & Teel, K. (1996). Overcoming student failure. *Washington: American Psychological Association*.
- Crowley, S. L., & Fan, X. (1997). Structural equation modeling: Basic concepts and applications in personality assessment research. In *Journal of Personality Assessment* (Vol. 68, Issue 3, pp. 508–



- 531). Lawrence Erlbaum. [https://doi.org/10.1207/s15327752jpa6803\\_4](https://doi.org/10.1207/s15327752jpa6803_4)
- Dimov, D. (2007). Beyond the single-person, single-insight attribution in understanding entrepreneurial opportunities. *Entrepreneurship Theory and Practice*, 31(5), 713–731.
- Epstein, J., Santo, R. M., & Guillemin, F. (2015). A review of guidelines for cross-cultural adaptation of questionnaires could not bring out a consensus. *Journal of Clinical Epidemiology*, 68(4), 435–441. <https://doi.org/10.1016/j.jclinepi.2014.11.021>
- Ferreira, F. (2003). The misinterpretation of noncanonical sentences. *Cognitive Psychology*, 47(2), 164–203. [https://doi.org/10.1016/S0010-0285\(03\)00005-7](https://doi.org/10.1016/S0010-0285(03)00005-7)
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <http://www.jstor.org/stable/3151312>.
- Games, D., Zikria, R., Agustina, T. S., & Lupiyoadi, R. (2023). *Fear of Failure, Financial Performance, and Entrepreneurial Well-being: Some Insights from Start-ups in an Emerging Market Economy* (Issue Icelbi 2022). Atlantis Press International BV. [https://doi.org/10.2991/978-94-6463-350-4\\_18](https://doi.org/10.2991/978-94-6463-350-4_18)
- Gao, Y., Wang, X., Lu, J., Chen, B., & Morrin, K. (2024). Entrepreneurial fear of failure among college students: A scoping review of literature from 2010 to 2023. *Heliyon*, 10(10).
- Graham, S. (2020). An attributional theory of motivation. *Contemporary Educational Psychology*, 61, 101861.
- Gudmundsson, E. (2009). Guidelines for translating and adapting psychological instruments. *Nordic Psychology*, 61(2), 29–45. <https://doi.org/10.1027/1901-2276.61.2.29>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135.
- Hill, S., Ionescu-Somers, A., Coduras, A., Guerrero, M., Menipaz, E., Boutaleb, F., Zbierowski, P., Schott, T., Sahasranamam, S., & Shay, J. (2023). *Global Entrepreneurship Monitor 2022 / 2023 Global Report Adapting to a “ New Normal .”* 255. <https://www.gemconsortium.org/reports/latest-global-report>
- Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Perspectives*, 12(4), 22–42.
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. In *Psychological Methods* (Vol. 3, Issue 4, pp. 424–453). American Psychological Association. <https://doi.org/10.1037/1082-989X.3.4.424>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hunter, E., Jenkins, A., & Mark-Herbert, C. (2021a). When fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy. *International Small Business Journal: Researching Entrepreneurship*, 39(5), 407–423. <https://doi.org/10.1177/0266242620967006>
- Hunter, E., Jenkins, A., & Mark-Herbert, C. (2021b). When fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy. *International Small Business Journal*, 39(5), 407–423.
- Kollmann, T., Stöckmann, C., & Kensbock, J. M. (2017). Fear of failure as a mediator of the relationship between obstacles and nascent entrepreneurial activity—An experimental approach. *Journal of Business Venturing*, 32(3), 280–301.
- Kong, F., Zhao, L., & Tsai, C.-H. (2020). The relationship between entrepreneurial intention and action: the effects of fear of failure and role model. *Frontiers in Psychology*, 11, 229.
- Law, K. S., Wong, C.-S., & Mobley, W. M. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, 23(4), 741–755.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46(8), 819.
- Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, 35(6), 382–386.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130.
- McGrath, R. G. (1999). Falling forward: Real options reasoning and entrepreneurial failure. *Academy of*

- Management Review*, 24(1), 13–30.
- McMullen, J. S., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, 50(8), 1481–1512.
- Mitchell, J. R., & Shepherd, D. A. (2011). Afraid of opportunity: The effects of fear of failure on entrepreneurial action. *Frontiers of Entrepreneurship Research*, 31(6), 1.
- Morgan, J., & Sisak, D. (2016). Aspiring to succeed: A model of entrepreneurship and fear of failure. *Journal of Business Venturing*, 31(1), 1–21.
- Muñoz, P., Cacciotti, G., & Ucbasaran, D. (2020). Failing and exiting in social and commercial entrepreneurship: The role of situated cognition. *Journal of Business Venturing Insights*, 14, e00196. <https://doi.org/https://doi.org/10.1016/j.jbvi.2020.e00196>
- Peterson, C. H., Peterson, N. A., & Powell, K. G. (2017). Cognitive interviewing for item development: Validity evidence based on content and response processes. *Measurement and Evaluation in Counseling and Development*, 50(4), 217–223.
- Poczwadowski, A., & Conroy, D. E. (2002). Coping responses to failure and success among elite athletes and performing artists. *Journal of Applied Sport Psychology*, 14(4), 313–329.
- Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health*, 30(4), 459–467.
- Schlaegel, C., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, 38(2), 291–332. <https://doi.org/10.1111/etap.12087>
- Team, J. (2024). *JASP (Version 0.19.0)[Computer software]*.
- Townsend, D. M., Hunt, R. A., McMullen, J. S., & Sarasvathy, S. D. (2018). Uncertainty, knowledge problems, and entrepreneurial action. *Academy of Management Annals*, 12(2), 659–687