

Examining incubated and nonincubated startups from fear of failure and entrepreneurial well-being during crises

Examining
incubated and
nonincubated
startups

Donard Games, Dessy Kurnia Sari, Venny Darlis and Danny Hidayat
Department of Management, Universitas Andalas, Padang, Indonesia, and
Bader Albatati
*College of Advertisement, University of Business and Technology,
Jeddah, Saudi Arabia*

Received 1 March 2023
Revised 17 July 2023
6 October 2023
Accepted 25 November 2023

Abstract

Purpose – This research aimed to examine entrepreneurial fear of failure and entrepreneurial well-being from the perspectives of incubated and nonincubated startups during crises.

Design/methodology/approach – Data were collected by distributing online questionnaires to 152 respondents comprising 43 incubated and 109 nonincubated startups in Indonesia. A multivariate discriminant analysis procedure was used to examine the interrelationships between both groups at the discovery, validation, customer creation and construction stages.

Findings – The result showed a significant difference between these startups at various stages, which was analyzed to provide insights into the relevant dimensions of fear of failure for startups. The essence of entrepreneurial well-being during crises is in accordance with the role of business incubators in an emerging market economy.

Practical implications – Startups need to innovate in order to grow while considering other factors such as work-life balance and financial resource availability. This is important to ensure they have sufficient motivating dosage of fear of failure.

Originality/value – The present study evaluates incubated and nonincubated startups in an emerging market economy by using both the entrepreneurial fear of failure and well-being to capture possible differences between groups. The context of pandemic crises helps us formulate appropriate approaches taken by incubators and startups in the future crises.

Keywords Business incubators, Entrepreneurial well-being, Entrepreneurial fear of failure, Startups, Startups' stage, Innovation

Paper type Research paper

1. Introduction

There is limited knowledge on the effectiveness of business incubators in strengthening startups (e.g. Games, Kartika, Sari, & Assariy, 2020; Leitão, Pereira, & Gonçalves, 2022), despite being the main concern in entrepreneurship research. This is specifically the case in developing

© Donard Games, Dessy Kurnia Sari, Venny Darlis, Danny Hidayat and Bader Albatati. Published in *Innovation & Management Review*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

This work was supported by RIIM, the National Research and Innovation Agency of Indonesia. The authors also acknowledge the editor of *Innovation and Management Review*, Professor Leonardo Augusto de Vasconcelos Gomes, as well as anonymous reviewers for their helpful comments and suggestions.



countries where business incubators are expected to focus on high-tech-based startups that allow the companies to foster business partnership and business growth (Liñán & Jaén, 2022), but with a high failure rate (Joseph, Aboobaker, & KA, 2023; Davila, Foster, He, & Shimizu, 2015). Furthermore, there is little research examining startups responses during crises, more specifically, in terms of their psychological states. In this situation, incubators tend to evaluate their potential tenants' willingness and capabilities to innovate and grow, but we want to know whether they can provide appropriate approaches that help startups during crises.

The research objective is to examine entrepreneurial fear of failure and entrepreneurial well-being from the perspectives of incubated and nonincubated startups during the pandemic. This means that we can also see the role of business incubators for startups from comparisons with those who never join incubators. Morgan and Sisak (2016) stated that fear can motivate rather than demotivate because it encourages entrepreneurs to perform better. High-growth businesses are expected to benefit from government policies, including those implemented during crises (Ratten, 2020). This research also aims to determine the difficulty in every business startups stage. This process is usually due to unavailability of funds, financial insecurity, inability to run the business effectively and threat to social esteem (Cacciotti, Hayton, Mitchell, & Allen, 2020). These sources of fear of failures may inhibit or motivate startup growths, but it is argued that underperformance is more influential to startups and co-founders during the pandemic.

Crises related to pandemics cause psychological tensions capable of exacerbating the situation for startup co-founders (Liñán & Jaén, 2022). Therefore, they need to utilize better strategies to ensure greater scalability rather than profits. Entrepreneurial well-being suits this stage as it emphasizes the importance of life satisfaction, self-confidence, purpose and independence (Ryff, 2019). This present research contributes to the body of knowledge in three ways. Firstly, this paper evaluates incubated and nonincubated startups in Indonesia as an emerging market economy during crises. Both of them represent technology-based startups that pursue business growth. Previous research has indicated that there are significant differences between these two groups; the incubated startups are seen as those who have high-growth business aspirations. They are regarded as representatives of opportunity-driven entrepreneurs who aspire to effectively implement innovation, or more specifically technological innovation, based on particular business strategies. We are not too sure thus far what will differentiate incubated startups to nonincubated startups, but as suggested by Miranda, Nodari, Severo, and De Guimarães (2023), business incubators can play a greater role if they can help startups in acquiring external knowledge. While the COVID-19 pandemic crises have caused unprecedented changes in many ways for business owners, this paper rather focuses on how startups can deal with crises especially in terms of how the co-founders psychologically prepare and even benefit from crises.

Secondly, it uses both the entrepreneurial fear of failure and well-being to capture possible differences between groups. Wiklund, Nikolaev, Shir, Foo, and Bradley (2019) suggested that well-being can be used as a variable to capture psychological dimensions that are not included in a construct, such as business or entrepreneurial performance. Additionally, Cacciotti *et al.* (2020) pointed out that entrepreneurial fear of failure can indicate psychological states that motivate or demotivate business owners. Therefore, the present study may provide a greater understanding of psychological state during the most intense period such as pandemic crises by examining startup owner's fear of failure and wellbeing during crises. Lastly, it focuses on the meaning of entrepreneurial well-being during the pandemic in the context of Indonesia. The country has relied on "everyday entrepreneurs" with approximately 64 million business units rather than opportunity-driven ones, including those owners committed to innovation and growth. Therefore, this led to following two questions:

- RQ1.* What are the differences between incubated and nonincubated startup owners from different startup stages in responding to fear of failure and well-being?

RQ2. What are the sources of financial and nonfinancial sources of fear of failure for both incubated and nonincubated startups?

Examining
incubated and
nonincubated
startups

The present study provides guidelines for startups in dealing with the challenges arising in times of crisis as it is seen as worthwhile to learn from the past. Further, policymakers can have a more comprehensive understanding as guides for future decision-making in empowering and assisting startups to be scalable. The structure of this paper is as follows. [Section 2](#) details the theoretical background, especially entrepreneurial fear of failure and wellbeing among startups during crises. [Section 3](#) presents the research method, while the results are presented in [Section 4](#). [Section 5](#) discusses these results, and the paper concludes with [Section 6](#), which provides conclusions including limitations and future research opportunities, as well as managerial and policy implications.

2. Startups and psychological aspects: a closer look

2.1 *Startup characteristics in emerging market economies, startups stage and crises*

Startups in emerging market economies have different characteristics than their Western counterparts due to the lack of an entrepreneurial ecosystem that acts as a support system ([Chari & Dixit, 2015](#)). Scalable startups require funding and partnership ([Picken, 2017](#)), which is unavailable in developing countries due to the difficulties in accessing general assistance ([Games, Soutar, & Sneddon, 2021](#)). This means that those in the emerging market economies have different challenges and trajectories to have successful commercialization and sustainable business innovation.

[Antunes, Vasconcelos, Oliveira, and de Corrêa \(2021\)](#) identified four startup stages, namely ideating, structuring, management and scalability, and establishment. [Costa, Guerino, Leal, Balancieri, and Galdamez \(2022\)](#) also identified four moments, namely discovery, validation, customer creation and construction. Initially, startups deal with new venture ideas and validation, followed by business model formulation. At the later stage, they focus on finding a repeatable and scalable business model and finally creating innovative products and services ([Costa et al., 2022](#)). The initial stage represents their main tasks with the need for frequent innovation to keep track of business growth ([Pugliese, Bortoluzzi, & Zupic, 2016](#)). This means that the initial stage requires specific capabilities and strategies to achieve the next level successfully.

Crises can be seen as a test for startups to test whether they are still motivated and aspire to pursue business growth. Crises such as pandemic crises may also make them realize that uncontrollable external factors can make or break their business growths. They are mostly required to keep innovating even if they have limited resources during crises ([Rodrigues & Noronha, 2021](#)). Startups co-founders are characteristically young, technology savvy and independent ([Del Bosco, Mazzucchelli, Chierici, & Di Gregorio, 2021](#)) and crises have challenged them to see whether they can benefit from their attributes or not ([Games & Sari, 2022](#)). Business is undoubtedly highly uncertain, but being startup owners can further increase the level of uncertainty. With their embedded challenges as startup owners during crises and the context of emerging economies that may not be supportive, startups may need to have particular psychological states that define their journey during crises.

2.2 *Business incubators, entrepreneurial fear of failure, startups' stage, entrepreneurial well-being*

There are several reasons for the higher possibility of business failure in every stage of startups. [Games et al. \(2021\)](#) stated that the root of all the problems is a lack of strategies and an inadequate entrepreneurial ecosystem. Business incubators are designed to strengthen startups to solve problems associated with business failures ([Nair & Blomquist, 2019](#)).

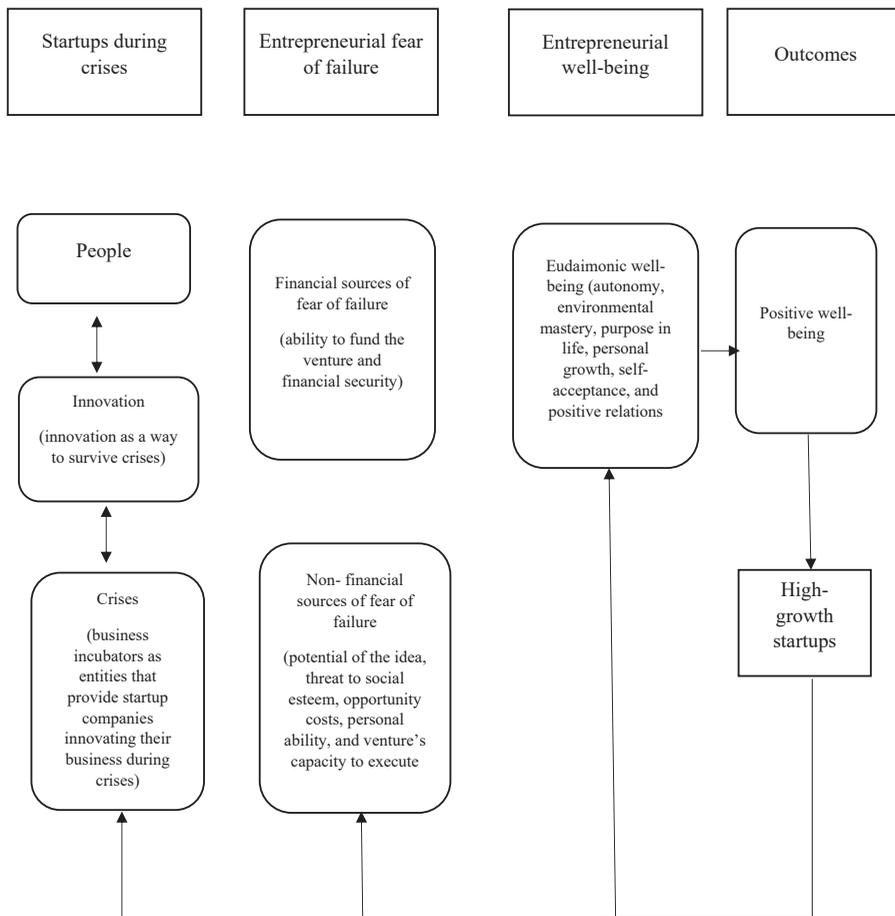
Accordingly, Games, Sari, Khairiyyah, and Shaikh (2023) identified entrepreneurial fear of failure as a turning point during and after a pandemic, representing their confidence in benefiting from business opportunities and sacrifices to survive during difficulties. Accordingly, they also emphasized the importance of business incubators in assisting startups dealing with psychological factors in particular fear of failure and well-being as well as commercialization strategies.

Uncertainty may be further exacerbated by negative effects which in turn increase the level of fear (Patzelt & Shepherd, 2011; Cacciotti *et al.*, 2020) during crises (Games & Sari, 2023). This may affect entrepreneurial well-being (Games *et al.*, 2023; Uy, Sun, & Foo, 2017). Nevertheless, entrepreneurs may have interpreted feelings and experiences differently. Some entrepreneurs may see fear of failure as motivating and even lead to positive wellbeing (Games & Sari, 2023; Morgan & Sisak, 2016), while for some others, this fear inhibits entrepreneurial action (Engel, Noordijk, Spoelder, & van Gelderen, 2021) and cause negative effects on their wellbeing (Games *et al.*, 2023). The most important reason why fear of failure can lead to positive well-being is the fact that some entrepreneurs inherently have sense of purpose (Gopinath & Mitra, 2017) that is to pursue business growth even if they deal with difficulties.

Cacciotti *et al.* (2020) stated that entrepreneurial fear of failure consists of several dimensions validated. These are ability to fund the venture, potential of the idea, threat to social esteem, opportunity, personal ability and venture's capacity to execute, and financial security. The sources of fear of failure are both financial, consisting of the ability to fund the venture and security, as well as nonfinancial sources that are a threat to social esteem, and the venture's capacity to execute the business. These attributes are likely to reduce entrepreneurial activities (Cacciotti, Hayton, Mitchell, & Giazitzoglu, 2016), with entrepreneurs scared of future failure. Accordingly, fear of failure may capture the essence of entrepreneurship during and after post-pandemic crises as entrepreneurs may experience financial and nonfinancial sources (Ratten, 2020; Kuckertz *et al.*, 2020).

Entrepreneurial fear of failure can be experienced by entrepreneurs in all stages of their journey, even though there may be an exception in which the venture's capacity to execute may be more relevant to the latter (Cacciotti *et al.*, 2020). Startups, specifically those who prepare a strong foundation to pursue business growth, perceive fear of failure as motivating factors in terms of psychological outcomes (Picken, 2017). At the earlier stages, discovery and validation have typical measures for business performance such as return on investment (ROI), profitability and sales growth (West & Noel, 2009). Picken (2017) stated that profitable growth is irrelevant to startup owners, who are characteristically concerned with product and early customer development. Wiklund *et al.* (2019) reported that entrepreneurial well-being can be used as a dependent variable. In this case, while Shir, Nikolaev, and Wincent (2019) preferred eudaimonic well-being as a way to measure entrepreneurial well-being. This is because it involves relevant indicators for startups' autonomy, environmental mastery, life satisfaction and self-confidence (Ryff, 2019). Additionally, well-being can result in entrepreneurial growth and success as it helps in establishing entrepreneurial organization (Gopinath & Mitra, 2017). In brief, entrepreneurial well-being can represent a more appropriate psychological outcome as it involves positive outcomes that can contribute positively to entrepreneurial business entities such as startups.

In general, entrepreneurial fear of failure and entrepreneurial well-being can be seen as ways of evaluating startups during crises (Games *et al.*, 2023). Figure 1 summarizes the overarching conceptual framework to examine the relationship between fear of failure, well-being and high-growth startups during crises in which business incubators can play a particular role in this regard. We expect fear of failure can lead to positive outcomes if only fear of failure is seen as a motivating factor for pursuing business growth through innovation even if crises occurred.



Source(s): Adapted from Gopinath and Mitra (2017); Cacciotti *et al.* (2020); Games *et al.* (2023); Games and Sari (2022)

Figure 1.
An overarching
conceptual framework
for the study of
entrepreneurial fear of
failure and well-being
among startup owners
during crises

3. Research methodology

The present study used a quantitative approach used to provide answers to RQ1 and RQ2. Data were collected from 152 startup companies in Indonesia through an online survey. The sample was divided between incubated and nonincubated startups consisting of delivery, validation, customer creation and construction phases, as shown in Table 1. We sent an online questionnaire that elaborated on the essence of the research. The sample consists of co-founders/chief executive officers (CEOs) who have pro-business growth as they are connected to business incubators and startup communities. However, the numbers of incubated and nonincubated respondents were unequal. Tables 1 and 2 show demographic information and provide a summary of the way the study's various constructs were measured and the sources of the scales used. We analyze the startups from three themes, namely financial and nonfinancial sources of fear of failure and entrepreneurial well-being, as shown in Table 2. A Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to obtain the required responses.

Total sample size = 152

Incubated startups = 43; Nonincubated startups = 109

Startup's stage: Discovery = 31; Validation = 79; Customer = 29; Construction = 13

Demographics

Incubated startups

Gender – Males (72%); Females (28%)

Age – 15–24 years (7%); 25–34 years (42%); 35–44 years (42%); 45–54 years (9%)

Education – high school or less (19%); diploma (5%); bachelor degree (60%); master degree (11%); doctoral degree (5%)

Nonincubated startups

Gender – Males (45%); Females (55%)

Age – 15–24 years (64%); 25–34 years (28%); 35–44 years (7%); 45–54 years (1%)

Education – high school or less (27%); diploma (31%); bachelor degree (39%); master degree (1%); doctoral degree (2%)

Firm size

Incubated startups

Number of employees – 1–3 people (42%); 4–7 people (35%); 8–15 people (12%); >15 people (11%)

Nonincubated startups

Number of employees – 1–3 people (76%); 4–7 people (13%); 8–15 people (8%); >15 people (3%)

Source(s): Created by authors

Table 1.
The sample's characteristics

Themes and construct	Number of items	Sample item	Alpha	Sources
A. Financial sources of fear of failure	5		0.840	Cacciotti <i>et al.</i> (2020)
A1. Ability to fund the venture	2	Afraid of not getting enough funds to move the company forward	0.804	
A2. Financial security	3	Afraid of running out of money	0.850	Cacciotti <i>et al.</i> (2020)
B. Nonfinancial sources of fear of failure	13		0.920	
B1. Potential of the idea	3	Afraid that people will be interested in the product/service	0.819	
B2. Threat to social esteem	2	Afraid of other people's expectations	0.816	
B3. Opportunity costs	3	Afraid of not being able to spend enough time with my family and friends	0.841	
B4. Personal ability	2	Afraid of not being able to fulfill all the roles that the job requires	0.660	Ryff (1989, 2019)
B5. Venture's capacity to execute	3	Afraid of the organization's ability to overcome technical challenges	0.833	
C. Entrepreneurial well-being	7	Some people wonder aimlessly through life, but I am not one of them	0.898	

Table 2.
The constructs

Source(s): Created by authors

This present research uses multivariate discriminant analysis (MDA) to determine the differences between groups and measure the relative importance of explanatory variables in splitting the characteristics (Mazzarol *et al.*, 2021). This analysis is appropriate if the dependent variable is categorical (nominal or nonmetric) (Hair, Black, Babin, & Anderson, 2018). In this case, the sample was classified mainly by two groups (incubated and nonincubated startups) and the startups' stage. The present study also comprises eight

independent variables, including ability to fund the venture, financial security, potential of the idea, threat to social esteem, opportunity costs, personal, venture's capacity to execute and entrepreneurial well-being. Subsequently, as seen in [Table 1](#), eight groups were composed in the final MDA analysis.

4. Results

[Table 2](#) shows that all of the constructs were reliable because their Cronbach's alpha coefficients ranged from 0.66 to 0.92 for all, with most above 0.80. In addition, [Table 3](#) shows most respondents had higher mean scores in terms of ability to fund the venture, potential idea, opportunity cost, personal ability, venture capacity and entrepreneurial well-being above 3.00 on the 5-point scale. There were also reasonable variations in the standard deviations as these scores ranged from 0.33 to 1.59, suggesting further worthwhile study.

[Table 3](#) describes the eight constructs used in the final analysis, divided into the three categories, namely financial and nonfinancial sources of fear of failure and entrepreneurial well-being, as shown in [Figure 1](#). The mean scores, results of the multivariate analysis of variance (MANOVA) tests and significant differences for each group are shown in [Table 3](#). Furthermore, incubated startups from customer creation and construction phases have the highest score in terms of the idea's potential and threat to social esteem. The highest mean score in opportunity cost and personal ability was from incubated startups in the discovery and customer phases. The construction of the nonincubated startup has the highest mean score for the venture's capacity. Lastly, the highest mean score for entrepreneurial well-being comes from incubated startups from the customer creation phase.

[Table 4](#) shows a comparison between incubated and nonincubated startup groups over 8 constructs, which are generally aligned in the same direction. Both incubated and nonincubated groups have a high fear of failure and entrepreneurial well-being even though incubated respondents had a higher mean score with an insignificant difference. In terms of themes, the first and second are based on the financial and nonfinancial sources of fear of failure. [Table 4](#) shows three significant differences among startup groups, including opportunity costs, venture's capacity to execute and entrepreneurial well-being ($p < 0.05$). Additionally, F-statistics were used to examine the variables to obtain Chi-square, with p-values of 94.285 and $0.001 < 0.05$ at 24.3% of the variation between the groups.

[Table 5](#) shows standardized discriminant function coefficients that can be used to determine each variable contribution to the discriminant function. In this case, the venture's capacity had the biggest contribution, followed by opportunity costs and financial security at 0.757, 0.743 and 0.723, while personal ability had the least contribution at 0.278. [Mazzarol et al. \(2021\)](#) stated that vectors can represent the structural correlations between discriminant functions and relevant constructs. Their lengths signify varying directions with varying directions of the estimated discriminant functions. [Figure 2](#) indicates some general associations emerge when the group means are plotted on the first two functions. It shows that nonincubated startups have higher mean scores in the discovery phase, followed by incubated startups in the stage of discovery stage, incubated startups in the stage of customer creation and incubated startups in the stage of validation, while nonincubated startups in construction phase have the lowest mean scores.

5. Discussion

The findings that provided answers to the first research questions as follows:

RQ1. What are the differences between incubated and nonincubated startup owners from different startup stages in responding to fear of failure and well-being?

Table 3.

A comparison between incubated startups and nonincubated startups groups by phase

Construct	Incubated startups (Mean scores)				Nonincubated startups (Mean scores)			
	Discovery	Validation	Customer creation	Construction	Discovery	Validation	Customer creation	Construction
<i>Financial sources of fear of failure (theme 1)</i>								
Ability to fund the venture	3.278	3.545	3.375	3.313	3.068	3.465	3.180	3.400
Financial security	3.741	3.439	3.500	3.250	3.076	3.076	2.880	3.067
<i>NonFinancial sources of fear of failure (theme 2)</i>								
Potential of the idea	3.630	3.884	4.500	3.833	3.121	3.509	3.333	3.667
Threat to social esteem	3.667	3.614	3.625	4.063	2.864	3.175	3.100	3.500
Opportunity costs	4.037	3.909	3.750	3.917	3.894	3.345	3.253	3.400
Personal ability	3.722	3.545	4.250	3.563	3.159	3.149	3.140	3.100
Venture's capacity to execute	3.481	3.697	3.750	3.667	3.045	3.199	3.107	4.000
<i>Entrepreneurial well-being (theme 3)</i>	3.952	4.247	4.643	4.536	4.318	3.855	3.857	3.194
Source(s): Created by authors								

Examining
incubated and
nonincubated
startups

Construct	N	Incubated startup Mean rating score		Sig	Nonincubated start-up Mean rating score		Sig
		Mean	Sig		Mean sig	Sig	
<i>Financial sources of fear of failure (theme 1)</i>							
Ability to fund the venture	43	3.37	0.73	109	3.28	0.73	
Financial security	43	3.48	0.32	109	3.02	0.32	
<i>Nonfinancial sources of fear of failure (theme 2)</i>							
Potential of the idea	43	3.96	0.07	109	3.41	0.07	
Threat to social esteem	43	3.74	0.09	109	3.16	0.09	
Opportunity costs	43	3.90	0.02*	109	3.47	0.02*	
Personal ability	43	3.77	0.08	109	3.14	0.08	
Venture's capacity to execute	43	3.65	0.03*	109	3.38	0.03*	
<i>Entrepreneurial well-being (theme 3)</i>	43	4.34	0.01*	109	3.99	0.01*	

Note(s): *Two-tailed *t*-tests show significant differences between the incubated and nonincubated groups at the 0.05 level

Source(s): Created by authors

Table 4.
A comparison between
incubated and
nonincubated startup
groups over constructs

	Function						
	1	2	3	4	5	6	7
Ability to fund the venture	-0.350	-0.380	0.150	-0.145	0.334	0.798	0.457
Financial security	0.723	-0.589	-0.354	0.772	0.282	0.012	-1.185
Potential of the idea	-0.368	0.590	-0.899	-0.280	0.499	0.212	-0.117
Threat to social esteem	-0.638	-0.155	0.782	0.538	-1.265	0.394	-0.049
Opportunity costs	0.743	-0.070	0.619	0.191	0.385	0.175	0.683
Personal ability	0.278	0.434	-1.140	0.158	-0.297	-0.392	0.661
Venture's capacity to execute	-0.757	0.630	0.938	-0.229	0.591	-0.659	0.055
Entrepreneurial wellbeing	0.588	0.448	0.016	-0.590	-0.214	0.277	-0.454

Source(s): Created by authors

Table 5.
Standardized
discriminant function
coefficients

The findings confirm that with or without joining business incubators, startups in this research have a high fear of failure and entrepreneurial well-being. However, tenants of the incubators had higher mean scores, which indicate a greater ability to capture success during the pandemic. Previous studies have emphasized the importance of fear of failure as a way to motivate entrepreneurs in pursuing business growth, which does not negatively affect their well-being (Cacciotti *et al.*, 2020; Games *et al.*, 2021, 2023) especially for incubated startup founders, as they have been prepared with the necessary skills and, more importantly an entrepreneurial mindset that supports innovation even during crises (Games *et al.*, 2023). Accordingly, business incubators can assist startups to innovate by shifting the paradigm of fear of failure as an inhibitor to fear of failure as a source of opportunities (Page & Holmström, 2023). This may confirm a need to balance between fear of failure and well-being as the former should not lead to negative well-being. There are significant differences between incubated and nonincubated startups in terms of opportunity costs, venture's capacity to execute and entrepreneurial well-being. Opportunity costs represent work-life balance; venture's capacity to execute represents capability to implement business strategies. Additionally, entrepreneurial well-being represents happiness, autonomy and consciousness that contribute positively to establish entrepreneurial organizations (Gopinath & Mitra, 2017) especially during crises in which incubated startups expect their business incubators to be able to enhance their entrepreneurial competencies, more importantly, in approaching target

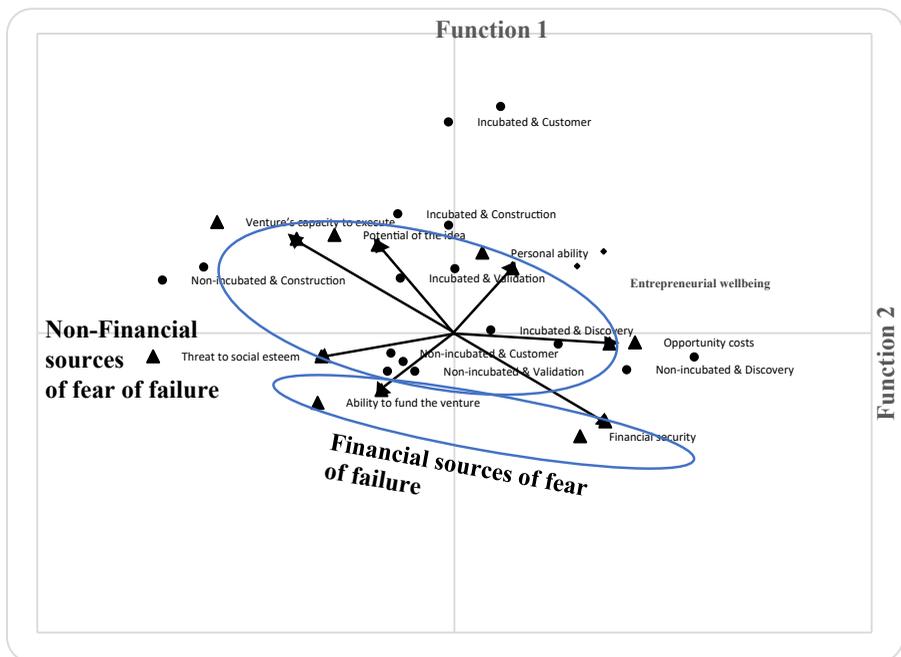


Figure 2.
Discriminant
analysis plot

Note(s): Incubated and non-incubated groups from different startups' stage
Source(s): Created by authors

markets (Games *et al.*, 2023). Interestingly, MDA found that the nonincubated group from the discovery stage has the highest mean score, followed by the incubated group from discovery, customer creation and validation. This means that those not incubated have higher fear of failure in the early stage, which was significantly reduced.

In contrast to nonincubated startups, incubated startups have relatively high expectations (Joseph *et al.*, 2023) as well as fear of not being able to fulfill their objectives due to the pandemic (Nair & Blomquist, 2019). Consequently, in the latter stages, they deal with high fear of failure especially in the ineffectiveness of business strategies and work-life imbalance. In other words, tenants of the incubators in this study are having difficulties in implementing effectively their business strategies, not in terms of defining strategies. They simply need quick wins that indicate their ability to survive difficulties during crises. They also need to have a sense of work-life balance as most of the respondents in this study come from Generation Z and millennials who may never experience great actual failures or crises. These are exactly what startups need from incubators during crises: highly effective business strategy implementation and incubation (i.e commercialization) processes that consider startup founder's human relations such as with families and friends.

RQ2. What are the sources of financial and nonfinancial sources of fear of failure for both incubated and nonincubated startups?

There are three dimensions of entrepreneurial fear of failure that contribute significantly to discriminant function. These are the venture's capacity to execute, opportunity costs and financial security. Venture's capacity to execute represents their capabilities to deal with a new level of expectations of customers, internal company and new demand in technology

(Cacciotti *et al.*, 2020). In other words, a venture's capacity to execute is strongly related to difficulties in commercialization and pursuit of business growth. Opportunity costs represent the strong will to balance life with business success. Furthermore, financial security is still considered as a source of fear of failure (e.g. afraid of running out money) during crises even if it is more relevant to those who are not the tenants of the incubators in this study.

In a broader sense, this research confirms that the financial performance may not solely evaluate startups as work-life balance is also seen as an important consideration during crises. Games *et al.* (2021) stated that young entrepreneurs show autonomy and individualistic values, but this research indicates their commitment to pursuing business growth through long-term perspectives. This means that business success criteria during crises for startups or entrepreneurial organizations need to include entrepreneurial well-being as a dependent variable which is also suggested by Wiklund *et al.* (2019). Davidsson, Recker, and von Briel (2021) and Liñán and Jaén (2022) identified that entrepreneurs benefit from pandemic crises by combining technological and marketing innovation based on the understanding of customer segments. Additionally, Arthi and Parman (2021) stated that pandemic and post-pandemic crises change the way humans' well-being and the need to balance health and economic activity are interpreted.

In general, startups in the discovery and validation stages were seemingly concerned with inadequate funds and financial security. More specifically, incubated startups are more concerned with nonfinancial sources, such as the venture's capacity to execute, enhance business growth and opportunity costs. This is in line with the research by Kuckertz *et al.* (2020), stating that financial impacts during crises have become the primary concern of entrepreneurs. It offers new perspectives indicating that social esteem is higher in incubated startups due to consumer creation. At that stage, they tend to prove to people that their inner group comprises successful business owners. Another perspective is that startups can be better evaluated by considering their growth expectations and work-life balance to complete entrepreneurial or eudaimonic well-being.

6. Conclusions

This research provides additional perspectives and a greater understanding of the role of incubation in responding to the fear of failure and entrepreneurial well-being. These findings show that fear of failure and entrepreneurial well-being is higher in incubated groups compared to nonincubated startups as these are designed to pursue business growth. In this case, business incubators can play their role in assisting startups to normalize fear of failure during crises. They, in particular, can do so by effectively helping business strategies' implementation. Therefore, startup owners may see this type of fear as a motivating factor. Additionally, startups in this study have suggested three sources of fear of failure during crises: venture's capacity to execute (business strategies), opportunity costs (work-life balance) and financial security. Again, this confirms that during crises business incubators may need to evaluate, assess and assist startups based on psychological outcomes such as entrepreneurial well-being.

6.1 Limitations and future research

The present study is limited to collecting data from business incubators and creative communities in Indonesia. Therefore, subsequent research needs to focus on high technology startups, which may potentially provide higher business growth and engage in relatively high-risk businesses that can stimulate a greater level of fear of failure. This research was undertaken in one country with a small sample size, and its findings cannot be generalized across other cultures and jurisdictions. Future research needs to explore these issues in

different settings such as high and low-tech startups, two or more countries' comparisons especially those with different cultures. It also needs to focus on examining startup performance and entrepreneurial well-being, including new perspectives from work-life balance, spiritual capital, support system from inner groups and gender and generational differences.

6.2 Managerial implications

There are significant differences in incubated and nonincubated startups' responses regarding opportunity costs, venture's capacity to execute and entrepreneurial well-being. Therefore, startups need to innovate to grow while considering other factors such as work-life balance and financial resource availability, especially during crises. This is important to ensure they have the motivating dosage of fear of failure, which will invariably inhibit business innovation in the long run. This means that startup owners need to see fear of failure as a way to motivate themselves as well as to enhance positive well-being during crises. In this case, fear of failure can be manifested in well-being that includes psychological outcomes such as sense of autonomy, purpose in life and acceptance. Fear of failure and entrepreneurial well-being is higher in incubated startups suggesting that startup founders may consider incubation as a way to motivate them to do better. However, they may experience, for example, a lack of market demand that can be demotivating as the latter of startup stages provide a greater challenge for startups in this study. Additionally, nonincubated startups were seemingly greatly excited in the early stages of their entrepreneurship journey, but they are more demotivated during crises. Therefore, it is important for startups to prepare themselves in all stages of their journey as entrepreneurs.

6.3 Policy implications

Policymakers in an emerging market that shift their focus from necessity to opportunity-driven entrepreneurs are also likely to renew their commitment to strengthen startups through business incubators, including considering psychological aspects. In this case, business incubators can assist startups, especially in facilitating innovation strategies and their implementation during crises. More importantly, the role of business incubators in this regard is related to infrastructure or technical ability and psychological factors such as fear of failure and well-being. The present study also strengthens the notion that business incubators can enhance well-being by considering the fear of failure and innovation during crises.

Startups should not be seen as one-dimensional business entities, as the initial stage sometimes signifies different priorities and approaches. Some startups intentionally prolong their stay as tenants to benefit from incentives from business incubators. Therefore, policymakers need to provide varying approaches in the initial stage. As suggested by [Mineiro, Assis de Souza, and Carvalho de Castro \(2021\)](#), business incubators need to include universities in enhancing startup innovation. Business incubators can consider psychological states and outcomes as additional ways to evaluate startups, particularly during crises. More specifically, startups may also be evaluated from nonfinancial performance, such as entrepreneurial well-being consisting of work-life balance, spiritual capital and a support system that assists them in benefit during crises or extreme events.

References

- Antunes, L. G. R., Vasconcelos, F. F., Oliveira, C. M., & de Corrêa, H. L. (2021). Dynamic framework of performance assessment for startups. *International Journal of Productivity and Performance Management*, 71(7), 2723–2742. doi: [10.1108/IJPPM-07-2020-0382](https://doi.org/10.1108/IJPPM-07-2020-0382).

-
- Arthi, V., & Parman, J. (2021). Disease, downturns, and wellbeing: Economic history and the long-run impacts of COVID-19. *Explorations in Economic History*, 79, 101381. doi: [10.1016/j.eeh.2020.101381](https://doi.org/10.1016/j.eeh.2020.101381).
- 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. doi: [10.1016/j.jbusvent.2016.02.002](https://doi.org/10.1016/j.jbusvent.2016.02.002).
- 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. doi: [10.1016/j.jbusvent.2020.106041](https://doi.org/10.1016/j.jbusvent.2020.106041).
- Chari, M. D. R., & Dixit, J. (2015). Business groups and entrepreneurship in developing countries after reforms. *Journal of Business Research*, 68(6), 1359–1366. doi: [10.1016/j.jbusres.2014.12.006](https://doi.org/10.1016/j.jbusres.2014.12.006).
- Costa, M. A. S., Guerino, G. C., Leal, G. C. L., Balancieri, R., & Galdamez, E. V. C. (2022). Exploring performance measurement practices in Brazilian startups. *Total Quality Management and Business Excellence*, 33(5-6), 637–663. doi: [10.1080/14783363.2021.1884063](https://doi.org/10.1080/14783363.2021.1884063).
- Davidsson, P., Recker, J., & von Briel, F. (2021). COVID-19 as External Enabler of entrepreneurship practice and research. *Business Research Quarterly*, 24(3), 214–223. doi: [10.1177/23409444211008902](https://doi.org/10.1177/23409444211008902).
- Davila, A., Foster, G., He, X., & Shimizu, C. (2015). The rise and fall of startups: Creation and destruction of revenue and jobs by young companies. *Australian Journal of Management*, 40(1), 6–35. doi: [10.1177/0312896214525793](https://doi.org/10.1177/0312896214525793).
- Del Bosco, B., Mazzucchelli, A., Chierici, R., & Di Gregorio, A. (2021). Innovative startup creation: The effect of local factors and demographic characteristics of entrepreneurs. *International Entrepreneurship and Management Journal*, 17, 145–164. doi: [10.1007/s11365-019-00618-0](https://doi.org/10.1007/s11365-019-00618-0).
- Engel, Y., Noordijk, S., Spoelder, A., & van Gelderen, M. (2021). Self-compassion when coping with venture obstacles: Loving-kindness meditation and entrepreneurial fear of failure. *Entrepreneurship Theory and Practice*, 45(2), 263–290. doi: [10.1177/1042258719890991](https://doi.org/10.1177/1042258719890991).
- Games, D., Kartika, R., Sari, D. K., & Assariy, A. (2020). Business incubator effectiveness and commercialization strategy: A thematic analysis. *Journal of Science and Technology Policy Management*, 12(2), 176–192. doi: [10.1108/JSTPM-03-2020-0067](https://doi.org/10.1108/JSTPM-03-2020-0067).
- Games, D., Soutar, G., & Sneddon, J. (2021). Personal values and SME innovation in a Muslim ethnic group in Indonesia. *Journal of Entrepreneurship in Emerging Economies*, 13(5), 1012–1032. doi: [10.1108/JEEE-01-2020-0008](https://doi.org/10.1108/JEEE-01-2020-0008).
- Games, D., & Sari, D. K. (2022). Entrepreneurial fear of failure during crises: Some insights from opportunity-driven entrepreneurs in a muslim ethnic group in Indonesia. In Alserhan, B. A., Ramadani, V., Zeqiri, J., & Dana, L. P. (Eds.), *Strategic Islamic Marketing: A Roadmap for Engaging Muslim Consumers* (pp. 229–250). Cham: Springer, doi: [10.1007/978-3-030-98160-0_15](https://doi.org/10.1007/978-3-030-98160-0_15).
- Games, D., & Sari, D. K. (2023). Impulsivity and entrepreneurial fear of failure in a Muslim society: Some insights from startups during crises in an emerging market economy. In Ramadani, V., Alserhan, B., Dana, L. P., Zeqiri, J., Terzi, H., & Bayirli, M. (Eds.), *Research on Islamic Business Concepts* (pp. 15–35). Singapore: Springer, doi: [10.1007/978-981-99-5118-5_2](https://doi.org/10.1007/978-981-99-5118-5_2).
- Games, D., Sari, D. K., Khairiyah, N., & Shaikh, H. A. (2023). Entrepreneurial fear of failure and well-being of incubated and non-incubated startups during crises. *Journal of Science and Technology Policy Management*, Vol. ahead-of-print No. ahead-of-print. doi: [10.1108/JSTPM-03-2022-0052](https://doi.org/10.1108/JSTPM-03-2022-0052).
- Gopinath, N., & Mitra, J. (2017). Entrepreneurship and well-being: Towards developing a novel conceptual framework for entrepreneurial sustainability in organisations. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 3(1), 62–70. doi: [10.1177/2393957516684464](https://doi.org/10.1177/2393957516684464).
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate data analysis* (8th ed.). Andover, Hampshire: EMEA, Cengage Learning.

-
- Joseph, G., Aboobaker, N., & KA, Z. (2023). Entrepreneurial cognition and premature scaling of startups: A qualitative analysis of determinants of start-up failures. *Journal of Entrepreneurship in Emerging Economies*, 15(1), 96–112. doi: [10.1108/JEEE-11-2020-0412](https://doi.org/10.1108/JEEE-11-2020-0412).
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Morales Reyes, C. A., Prochotta, A., . . . Berger, E. S. C. (2020). Startups in times of crisis – a rapid response to the COVID- 19 pandemic. *Journal of Business Venturing Insights*, 13, e00169. doi: [10.1016/j.jbvi.2020.e00169](https://doi.org/10.1016/j.jbvi.2020.e00169).
- Leitão, J., Pereira, D., & Gonçalves, Â. (2022). Business incubators, accelerators, and performance of technology-based ventures: A systematic literature review. *Journal of Open Innovation Technology Market Complexity*, 8(46), 46. doi: [10.3390/joitmc8010046](https://doi.org/10.3390/joitmc8010046).
- Liñán, F., & Jaén, I. (2022). The Covid-19 pandemic and entrepreneurship: Some reflections. *International Journal of Emerging Markets*, 17(5), 1165–1174. doi: [10.1108/IJOEM-05-2020-0491](https://doi.org/10.1108/IJOEM-05-2020-0491).
- Mazzarol, T., Soutar, G., McKeown, T., Reboud, S., Adapa, S., Rice, J., & Clark, D. (2021). Employer and employee perspectives of HRM practices with in SMEs. *Small Enterprise Research*, 28(3), 247–268. doi:[10.1080/13215906.2021.1989627](https://doi.org/10.1080/13215906.2021.1989627).
- Mineiro, A. A. D. C., Assis de Souza, T., & Carvalho de Castro, C. (2021). The quadruple and quintuple helix in innovation environments (incubators and science and technology parks). *Innovation and Management Review*, 18(3), 292–307. doi: [10.1108/INMR-08-2019-0098](https://doi.org/10.1108/INMR-08-2019-0098).
- Miranda, A. L. B. B., Nodari, C. H., Severo, E., & De Guimarães, J. C. F. (2023). Antecedents of absorptive capacity: Context of companies' incubators in Northeastern Brazil. *Innovation and Management Review*, 20(1), 2–16. doi: [10.1108/INMR-03-2020-0022](https://doi.org/10.1108/INMR-03-2020-0022).
- Morgan, J., & Sisak, D. (2016). Aspiring to succeed: A model of entrepreneurship and fear of failure. *Journal of Business Venturing*, 31(1), 1–21. doi: [10.1016/j.jbusvent.2015.09.002](https://doi.org/10.1016/j.jbusvent.2015.09.002).
- Nair, S., & Blomquist, T. (2019). Failure prevention and management in business incubation: Practices towards a scalable business model. *Technology Analysis and Strategic Management*, 31(3), 266–278. doi: [10.1080/09537325.2018.1495325](https://doi.org/10.1080/09537325.2018.1495325).
- Page, A., & Holmström, J. (2023). Enablers and inhibitors of digital startup evolution: A multi-case study of Swedish business incubators. *Journal of Innovation and Entrepreneurship*, 12(1), 35. doi: [10.1186/s13731-023-00306-y](https://doi.org/10.1186/s13731-023-00306-y).
- Patzelt, H., & Shepherd, D. A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice*, 35(4), 631–652. doi: [10.1111/j.1540-6520.2010.00386.x](https://doi.org/10.1111/j.1540-6520.2010.00386.x).
- Picken, C. (2017). From startup to scalable enterprise: Laying the foundation. *Business Horizons*, 60(5), 587–595. doi: [10.1016/j.bushor.2017.05.002](https://doi.org/10.1016/j.bushor.2017.05.002).
- Pugliese, R., Bortoluzzi, G., & Zupic, I. (2016). Putting process on track: Empirical research on startups' growth drivers. *Management Decision*, 54(7), 1633–1648. doi: [10.1108/MD-10-2015-0444](https://doi.org/10.1108/MD-10-2015-0444).
- Ratten, V. (2020). Coronavirus (Covid-19) and entrepreneurship: Cultural, lifestyle and societal changes. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 747–761. doi: [10.1108/JEEE-06-2020-0163](https://doi.org/10.1108/JEEE-06-2020-0163).
- Rodrigues, C. D., & Noronha, M. E. S. d. (2021). What companies can learn from unicorn startups to overcome the COVID-19 crisis. *Innovation and Management Review*, 20(3), 211–226, doi: [10.1108/INMR-01-2021-0011](https://doi.org/10.1108/INMR-01-2021-0011).
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. doi: [10.1037/0022-3514.57.6.1069](https://doi.org/10.1037/0022-3514.57.6.1069).
- Ryff, C. D. (2019). Entrepreneurship and eudaimonic well-being: Five venues for new science. *Journal of Business Venturing*, 34(4), 646–663. doi: [10.1016/j.jbusvent.2018.09.003](https://doi.org/10.1016/j.jbusvent.2018.09.003).
- Shir, N., Nikolaev, B. N., & Wincent, J. (2019). Entrepreneurship and well-being: The role of psychological autonomy, competence, and relatedness. *Journal of Business Venturing*, 34(5), 105875. doi: [10.1016/j.jbusvent.2018.05.002](https://doi.org/10.1016/j.jbusvent.2018.05.002).

- Uy, M. A., Sun, S., & Foo, M. D. (2017). Affect spin, entrepreneurs' well-being, and venture goal progress: The moderating role of goal orientation. *Journal of Business Venturing*, 32(4), 443–460. doi: [10.1016/j.jbusvent.2016.12.001](https://doi.org/10.1016/j.jbusvent.2016.12.001).
- West, G. P., & Noel, T. W. (2009). The impact of knowledge resources on new venture performance. *Journal of Small Business Management*, 47(1), 1–22. doi: [10.1111/j.1540-627X.2008.00259.x](https://doi.org/10.1111/j.1540-627X.2008.00259.x).
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M. D. and Bradley, S. (2019). Entrepreneurship and well-being: Past, present, and future. *Journal of Business Venturing*, 34(4), 579–588. doi: [10.1016/j.jbusvent.2019.01.002](https://doi.org/10.1016/j.jbusvent.2019.01.002).

Further reading

- Gopalakrishnan, S., & Kovoov-Misra, S. (2021). Understanding the impact of the Covid-19 pandemic through the lens of innovation. *Business Research Quarterly*, 24(3), 224–232. doi: [10.1177/23409444211013357](https://doi.org/10.1177/23409444211013357).

Appendix

Items in this study

Financial sources of fear of failure (Cacciotti *et al.*, 2020)

Ability to fund the venture

Stem over the past few months, I have been afraid. . .

- (1) Afraid of not getting enough funds to move the company forward
- (2) Of not being able to finance the business

Financial security

Stem over the past few months, I have been afraid. . .

- (1) Of running out of money
- (2) Of losing all my savings
- (3) Of losing all I have invested in the business/business activities

Nonfinancial sources of fear of failure (Cacciotti *et al.*, 2020)

Potential of the idea

Stem over the past few months, I have been afraid. . .

- (1) That no one will be interested in the product/service
- (2) That this is not a valuable business idea
- (3) That there is no need for our product/service out there

Threat to social esteem

Stem Over the past few months, I have been afraid. . .

- (1) Of other people's expectations of me
- (2) Of losing the trust of people who are important to me

Opportunity costs

Stem Over the past few months, I have been afraid. . .

- (1) That running the business is taking my time away from other activities
- (2) Of missing important events of my life because of my business
- (3) Afraid of not being able to spend enough time with my family and friends

Personal ability

Stem Over the past few months, I have been afraid. . .

- (1) Of not being able to manage people effectively
- (2) Of not being able to fulfill all the roles that this job requires

Venture's capacity to execute

Stem Over the past few months, I have been afraid of the organization's ability to. . .

- (1) Meet client expectations
- (2) Overcome technical challenges
- (3) Deliver upon promises

Entrepreneurial well-being (Ryff, 1989)

- (1) Some people wander aimlessly through life but I am not one of them.
- (2) When I look at the story of my life, I am pleased with how things have turned out so far
- (3) I think it is important to have new experiences that challenge how I think about myself and the world.
- (4) For me, life has been a continuous process of learning, changing and growth.
- (5) People would describe me as a giving person, willing to share my time with others.
- (6) In general, I feel confident and positive about myself.
- (7) I have been able to create a lifestyle for myself that is much to my liking.

Corresponding author

Donard Games can be contacted at: donardgames@eb.unand.ac.id