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Article

Grit and business survivability among small business during the COVID-19 pandemic: The moderating role of servant leadership

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MANAGEMENT | RESEARCH ARTICLE

Grit and business survivability among small business during the COVID-19 pandemic: The moderating role of servant leadership

Sahat Aditua Fandhitya Silalahi^{1*}, Akhmad Junaidi¹, Lokot Zein Nasution¹, Agung Sutoto¹, Adi Suryo Hutomo¹, Joko Sutrisno¹, Amos Lukas¹, Josep Ginting¹, Suropto Suropto¹ and Resanti Lestari²

Abstract: The Covid –19 pandemic has caused businesses to experience a sharp revenue decline due to lockdown policies. It takes resilience and effective leadership to steer businesses through this period of uncertainties. This paper examines how servant leadership (SL) moderates the relationship between grit facets (comprising of the perseverance of effort (PE) and the consistency of interest (CI) among Small and Medium Enterprises (SMEs) business survival (BS) during the COVID-19 pandemic. This study employed a cross-sectional survey method with a purposive sampling method toward employees from 425 SMEs located in West Java, the province hosting Indonesia’s highest number of SMEs. The questionnaire items were adapted from previous studies to encompass the variables in question effectively. The partial least square was employed in data analysis, revealing that PE positively affects BS ($p = 0.012$). The SL approach also strengthens the positive influence of PE on SME BS ($p = 0.018$). Theoretically, this study contributes to filling the gaps in the entrepreneurship literature involving grit and leadership types (in this context,

ABOUT THE AUTHOR

The authors are a group of researchers and academicians affiliated with the National Research and Innovation Agency, Republic of Indonesia, focusing on studies on cooperatives, corporations, and the people economy. The authors have been involved in several collaborations, including policies for prime cooperatives, halal certification for SMEs, and the development of marketing applications for SMEs. This study is a part of a larger research related to strengthening SMEs resilience as the foundation of national economy. For communication regarding research collaboration, the authors can be reached at.

PUBLIC INTEREST STATEMENT

The main objective of this present study is to explore the relationship between grit personality, characterized by perseverance and consistency, and the application of servant leadership in the context of Small and Medium Enterprises (SMEs) business survival during the COVID-19 pandemic. The findings indicate that servant leadership adoption plays a crucial role in augmenting the positive influence of perseverance on the SMEs’ resiliency to maintain their businesses. As a recommendation, this paper suggests that business owners should actively cultivate the grit personality within their employees and incorporate the servant leadership approaches into managerial practices. Also, the findings recommend that governments invest in training programs, focusing on the psychological aspect highlighted in this study. This training could provide long-lasting benefits while diminishing SMEs’ reliance on financial aid.



servant leadership). Specifically, the results demonstrate how SL strengthens the grit characteristics in fostering SMEs' resilience during crises. On the practical front, the findings provide insights for entrepreneurs to utilize the SL approach to enhance the SMEs' resilience during the crisis. Additionally, the results offer policy recommendations to the Government to foster the development of SL and grit character among SMEs. This approach produces longer-lasting impacts and decreases reliance on governmental aid.

Subjects: Leadership; Small Business Management; Human Resource Management

Keywords: grit; servant leadership; small business; Covid-19; business survival

1. Introduction

An appropriate leadership style is essential to guide and inspire individuals to achieve common goals. Likewise, the increasing concern about company policy's impact on society emerged demands for a more ethical people-centered leadership termed servant leadership (SL) (Dierendonck, 2011). Servant leaders are driven by empathy, altruism, and a sense of community stewardship. This type of leadership enables personal ambition fulfilment as a priority, while organizational achievement will follow (Lee et al., 2019). A servant leader pays close attention to all stakeholders' interests and employee well-being to ensure long-term profits and company sustainability (Dierendonck, 2011). This employee-focused behaviour positively influences organizational identification, mainly due to its ability to align between the organization's espoused and enacted values toward the employees (Medina-Craven et al., 2021).

Another factor determining the success of achieving goals is perseverance and passion in achieving long-term goals, defined as "Grit" (Dierendonck, 2011, p. 175). Grit entails persisting toward challenges and maintaining effort despite failure and adversity (Duckworth et al., 2007). Further, Duckworth et al. (2007) distinguished two aspects of grit; they are perseverance of effort (PE) and consistency of interest (CI). PE refers to a personal tendency to work hard regardless of obstacles. CI refers to the propensity not to change goals and interests frequently (Duckworth et al., 2007). Grit differs from the Big Five personality as it focuses on more long-term goals that require effort and interest (van Zyl et al., 2021). Hence, grit is a non-cognitive set of personalities that can better predict entrepreneurial or organizational success (Duckworth & Quinn, 2009; Duckworth et al., 2007; Mooradian et al., 2016).

Despite the importance of SL and Grit personality as contributing factors to success, scarce studies have examined the combined effects of those two constructs in an entrepreneurial context. Servant leaders could enhance the impact of grit attributes toward entrepreneurial success, as this leadership approach fosters the development of employees and prioritizes their well-being (Chan, 2016; Turner, 2022). Entrepreneurial endeavors frequently encounter numerous setbacks and demand resilience to establish sustainable businesses (Hartmann et al., 2022). Both individual and collective dedication are crucial to achieving the desired long-term SME performance. This commitment is essential for an extended period, often months or even years, as it represents the primary way to accumulate valuable experience (Hartmann et al., 2022). Hence, individuals with the SL approach play a critical role in maintaining dedication as they could strengthen the grit character among their followers.

Previous studies on grit mainly focus on investigating the influence of grit facets on various cultural settings. For example, scholars found that only PE significantly influences entrepreneurial success, while CI does not work in a collectivist society setting. Salisu et al. (2020) argued that collectivist culture needs to appreciate more of the CI facet. Hence, CI does not significantly predict the intended outcomes. Similarly, Wang et al. () argued that grit facets' relationship with other variables is, at best, context-dependent, including that of cultural settings. Also,

grit facets are responsive to interventions. Unlike the intelligence quotient (IQ), grit can be nurtured and strengthened (Crede et al., 2017; Perez, 2015). To fill the knowledge gap, this study investigates the interaction effects between SL and grit facets toward an entrepreneur's business survival (BS).

This paper aims to shed light on the combined effect of an individual's personality reflected in grit and the external environment shaped by a servant leader. The interaction between these factors may intervene the entrepreneurial behavior and collectively contribute to BS. Therefore, this present study addresses the following research questions:

RQ1: Are there any relationships between grit facets and BS?

RQ2: Are there any contributions of SL in strengthening the relationship between grit facets and BS?

Furthermore, the objectives of this study are:

RO1: To examine the influence of PE toward BS.

RO2: To examine the influence of CI toward BS.

RO3: To examine the moderating effect of SL on the relationship between PE and BS.

RO4: To examine the moderating effect of SL on the relationship between CI and BS.

This present study contributes to extending the nascent understanding of grit literature in two ways: First, it presents the combined effect between SL and grit dimensions toward BS. Second, it examines the significance of each grit facet (PE and CI) toward BS in a highly collective society such as Indonesia. Practically, this present study offers insight for small business owners in leading and directing their employees during the survival period. Also, this study offers policy alternatives for the Indonesian government that emphasize independent business practices through fostering the grit behavior and SL approach. The later parts of this paper were organized as follows: in the following section, relevant literature was described with the theories needed to develop the hypotheses. Subsequently, the research methodology was described, covering the measurement, data collection, and analysis steps. Next, the findings were presented, and key highlights were discussed. The last section is the conclusion, theoretical and practical implications, as well as limitations and directions for further studies.

2. Literature review and hypotheses development

2.1. Grit

Duckworth et al. (2007) defined grit as "the perseverance and passion for long-term goals." Further, she argued that grit entails working persistently and vigorously toward the goal while sustaining effort despite failure, setbacks, and obstacles. Grit characteristics manifest in one's decision to aim for a long-term achievement despite s/he already knowing there is a risk of loss during the process. Possessing a dedication to their goals, individuals with grit utilize their endurance to push themselves even harder toward their objectives or aspirations (Blanco, 2021). Grit is a non-cognitive factor among individuals who have drawn scholars' attention lately. Scholars found that it contributes significantly to successful outcomes in various fields, especially in learning education (Christopoulou et al., 2018; Duckworth et al., 2007). Grit interacts with individuals' potential to achieve good grades in school and success. Grit is a more reliable predictor of success than intelligence or academic achievement (Duckworth et al., 2007).

Unlike the intelligence quotient (IQ), grit is a personality that can be nurtured and strengthened (Perez, 2015). The positive effects of grit on career and other life outcomes are beyond the predictive power of IQ (Mooradian et al., 2016). Some studies argued that there is a strong relationship or even overlap between grit and conscientiousness, accentuating that both were closely and consistently related to entrepreneurial intention and performance (Zhao et al., 2010). Conscientiousness refers to being hardworking, responsible, self-disciplined, and thorough (John & Srivastava, 1999). This personality implies that more conscientious people are attracted to entrepreneurship (Zhao et al., 2010). Nonetheless, Duckworth et al. (2007) conceptually differentiated grit from conscientiousness by highlighting the “long-period” time frame as a unique characteristic of grit.

Further, Duckworth et al. (2007) distinguished grit into two dimensions: PE and CI. PE facilitates the achievement of mastery despite failure, exerts durable effort in facing challenges, and maintains the struggle for a goal that requires a long time to accomplish (Hartmann et al., 2022; Salisu et al., 2020). Shute and Ventura (2013) related grit to people’s persistence to spend more time on challenging problems and the number of revisits to unsolved problems (Shute & Ventura, 2013). Therefore, this facet implies “working hard despite failures” (Hartmann et al., 2022). CI denotes a tendency to stay focused and passionate in upholding similar interests over a long period and infrequently changing them (Duckworth et al., 2007). CI can be an essential aspect of psychological resilience and prevent individuals from being distracted from their passions (Duckworth et al., 2007; Masuyama et al., 2021). Duckworth et al. (2007) conceptualization of this construct differs from how some prominent researchers define interest. For instance, Hidi and Renninger (2006) expressed “individual interest” as “a relatively enduring tendency to re-engage particular content over time.” This definition differs from “situational interest,” which is triggered by current external stimuli. CI is more goal and action-oriented, encompassing a long-term behaviour rather than reflecting an individual’s predisposition toward a topic (Muenks et al., 2017). Similarly, Mooradian et al. (2016) asserted that both grit dimensions emphasize long-term concentration and impulse control while preserving long-term tenacity for goals.

Despite the explicit distinction between PE and CI, scholars still debate whether these two facets represent two lower orders of grit or whether grit itself is the first-order construct. The confirmatory factor analysis on the first scale, named grit-O, showed that these two facets were distinct but correlated (Duckworth et al., 2007). Nonetheless, some studies incorporated this facet separately in the first order to investigate its effect on various outcomes (Masuyama et al., 2021; Mooradian et al., 2016; Van Doren et al., 2019). Further, Duckworth and Quinn (2009) developed a shorter grit scale (grit-S) by incorporating the more predictive items of the grit-O and found that grit as a second-order construct fit adequately for some samples but not sound for others. Therefore, as Wang et al. () argued that grit is context-dependent, this present study employs confirmatory analysis to ensure the construct structure of grit for the samples.

2.2. Servant Leadership

SL is a holistic leadership approach that engages followers in multiple dimensions (e.g., relational, ethical, emotional, and spiritual). Leaders practicing SL empower their followers to foster personal growth (Greenleaf, 1970; Turner, 2022). A servant leader possesses specific characteristics such as the desire to serve others, emotional intelligence, moral maturity, and prosocial identity at the individual and team levels (Liden et al., 2014). Since its inception, the ethical and moral dimensions included in the SL have distinguished this leadership concept from other leadership theories. The philosophy of a servant leader emphasizes the development of organizations based on altruistic and ethical orientations (Greenleaf, 1970; Liden et al., 2014).

When leaders prioritize the development of their employees, they tend to exhibit higher levels of engagement in their jobs (Turner, 2022). Thus, they will put all effort into ensuring the best outcome for the organization. The SL principles contrast the traditional leadership approaches that emphasize the use of power (Greenleaf, 1970). Servant leaders refrain from excessive use of

power and concentrate on the well-being of their employees (Turner, 2022). As a result, employees will demonstrate their best efforts for the organizational goals.

It is worth noting that being a “servant” does not necessarily imply that the leaders were used merely to achieve the goals of those they serve (Dierendonck, 2011). The SL approach underscores employee involvement, encouraging autonomy, and maintaining accountability (Turner, 2022). Servant leaders encourage employees to take on new challenges, improve their work daily, and appreciate the employees as persons. This approach enables a solid peer-to-peer relationship. Further, this relationship contributes to the organizational goals without the leader’s imposition of authoritative power (Canavesi & Minelli, 2021).

Scholars attempted to distinguish between SL and other types of leadership. For instance, SL may be similar to a transformational leader with a social responsibility dimension (Graham, 1991). Besides, SL emphasizes followers and considers them as the vital element of leadership rather than the influence itself (Dierendonck, 2011). Meanwhile, Zheng et al. (2022) asserted that ethical leaders motivate their followers by cultivating a moral framework and internalizing ethical values. This ethical approach differs from the concept of servant leaders as SL highlights the need for stewardship toward employees (Dierendonck, 2011). The motivation of a servant leader stems from altruistic behaviour aimed at developing followers, which in turn benefits the organization (Greenleaf, 1970; Liden et al., 2014).

Human capital acts as an intangible asset for companies and plays a critical factor in survival due to its direct influence on performance (Hernandez et al., 2020). Companies will be burdened with extra expenses to train new employees. Thus, companies must strengthen employee commitment through employee-focused leadership personality (Craven et al., 2021; Barbuto & Wheeler, 2006). Small business owners also act as chief strategists and decision-makers (Gimeno et al., 1997). Therefore, their role is to minimize business failure probability and enhance the opportunity for survival while managing employee interest amidst the uncertain period (Canavesi & Minelli, 2021).

2.3. Business survival

Chadwick and Raver (2020) defined BS as the ability of a company to change situations that can endanger the organization. Even though well-performing companies will likely survive during a crisis, empirical evidence suggests that survival’s determinants differ substantially (Kalleberg & Laicht, 1991). Under-performed companies may last long through many economic downturns, while the well-performed ones may instantly collapse due to unpredicted shocks. Gimeno et al. (1997) argued that the performance threshold dictates whether the operation will continue amidst a crisis. This threshold refers to what extent the available alternatives become appealing; hence, it justifies the owners to liquidate the business (Porter, 1976). Exit options are not rational when the company sees no sign of better alternatives. Therefore, owners may stay in business until their original resources are depleted (Gimeno et al., 1997).

Hernandez et al. (2020) operationalized the term “survival” as the situation in which companies do not close their operations during a crisis. Durability and longevity are the key indicators of BS (Van Meerkerk et al., 2018; Sharma et al., 2013). Durability is related to resilience, which refers to the ability to respond to disruption, adapt, and stay focused on the goals in quickly changing environments (Chadwick & Raver, 2020). Therefore, a durable business can bounce back amidst disruption and adapt to the changing competitive environment. Longevity is related to the sustained existence of companies even after the founder’s death or beyond the career span of its founders (Sharma et al., 2013). Like durability, the longevity of an organization can be attributed to its ability to adapt to the changing environment and initiate new practices to address the previous problems (Sharma et al., 2013).

Every business aspires to last for a long. Expectations for ventures are generally buoyant in the early start-up stage due to a lack of knowledge about market competition or the entrepreneurs' lack of judgment regarding their abilities (Gimeno et al., 1997). In the case of small businesses, the survival rate could be higher, as a significant number of new entrepreneurs do not prevail due to overwhelming competition (Darmanto et al., 2023). The business's ability to survive during a crisis is mainly determined by its ability to maintain the availability of current assets and cash flow to fulfil its current liabilities (Najib et al., 2021; Nwokocha et al., 2021; Villares et al., 2020). A business with adequate cash flow management can guarantee sustainable longevity (Najib et al., 2021). Therefore, small business owners must implement strict financial controls to keep an adequate cash flow to run the operations during the crisis (Najib et al., 2021). Another factor determining the chance for BS is the management's ability to retain skilled and committed employees. Skilled employees play a critical role, especially in the survival period, as it directly influences company performance (Hernandez et al., 2020). In addition, skilled workers benefit the company as they are more accustomed to business processes. Hence, they can run daily operations more efficiently, which is a crucial factor for BS.

2.4. Grit Dimensions and Business Survival

2.4.1. Perseverance of effort and business survival

Achieving success is intricately associated with the determination to pursue long-term goals, even under challenging adversities (Brandstatter & Bernecker, 2022). Individuals who possess perseverance tend to stay motivated in pursuing their aspirations and remain committed to their objectives for an extended period (Blanco, 2021). PE was positively related to three aspects of career success (i.e., career satisfaction, perceived career achievement, and financial attainment) (Salisu et al., 2020). Crede et al. (2017) found that PE has significantly influenced academic performance in the academic field. Likewise, PE plays a crucial role in enhancing the performance of athletes in a competitive setting and students in the school (Albert et al., 2022; Chan, 2016).

New business formation is a formidable and daunting task. Overcoming setbacks and hurdles demands the individual's perseverance (Brandstatter and Bernecker (2022). Even for experienced entrepreneurs, perseverance remains essential as unforeseen challenges may arise within their businesses (Brandstatter & Bernecker, 2022). Financially underperforming businesses but led with a high perseverance attitude may last longer than the high performers due to their ability to maintain performance above the threshold (Gimeno et al., 1997). PE also helps entrepreneurs go through minimum survival levels due to economic downturns (Al Issa, 2020).

H1: PE positively influences BS.

2.4.2. Consistency of interest and business survival

CI pertains to an individual's inclination to adopt a consistent set of interests over a prolonged period (Duckworth et al., 2007; Hartmann et al., 2022). CI continuously strives to achieve a goal according to its passion. CI helps people stay focused on their passions and prevents them from being distracted (Duckworth et al., 2007; Masuyama et al., 2021). As people stay focused on working on their passion, CI can minimize psychological distress due to external interference (Masuyama et al., 2021). As entrepreneurs experience significant pressure to sustain their businesses, CI functions as a safeguard for their mental well-being amidst difficult times (De Hoe & Janssen, 2022). It helps entrepreneurs and their employees stay focused and put maximum effort into keeping the business amidst uncertainty.

H2: CI positively influences BS.

2.5. Servant leadership and grit dimensions

2.5.1. Servant leadership and perseverance of effort

Entrepreneurial tasks require perseverance to tackle the list of potential setbacks and obstacles. Therefore, a servant leader's role is to sincerely listen to employees' concerns, convince them, and maintain their motivation (Chan, 2016). The philosophy of servant leaders revolves around individuals, nurturing their mindset, and becoming a model in preserving long-term goals (Albert et al., 2022; Greenleaf, 1970). A servant leader is dedicated to aiding individuals in their personal and professional development (Aboramadan et al., 2021). Servant leaders also motivate people to surpass their limits (Albert et al., 2022).

H3: SL moderates (strengthens) the positive influence of PE toward BS.

2.5.2. Servant leadership and consistency of interest

A leader who embodies servant leadership encourages selflessness that ultimately benefits subordinates (Turner, 2022). SL manifested through outward orientation of individual interests while maintaining the employees' passion toward the goals (Chan, 2016). Because servant leaders place employee interests over their own, employees feel obligated to reciprocate (Aboramadan et al., 2021). A servant leader takes proactive steps to support their employees' well-being and to prevent them from experiencing psychological distress (De Hoe & Janssen, 2022). This effort strengthens the employees' psychological resilience and prevents them from being distracted from their passions (Duckworth et al., 2007; Masuyama et al., 2021). Managers with SL personalities do not emphasize an individual's talent but focus more on the journey (Chan, 2016). Thus, it helps the employee to maintain their focus of interest during the challenging periods of BS.

H4: SL moderates (strengthens) the positive influence of CI toward BS.

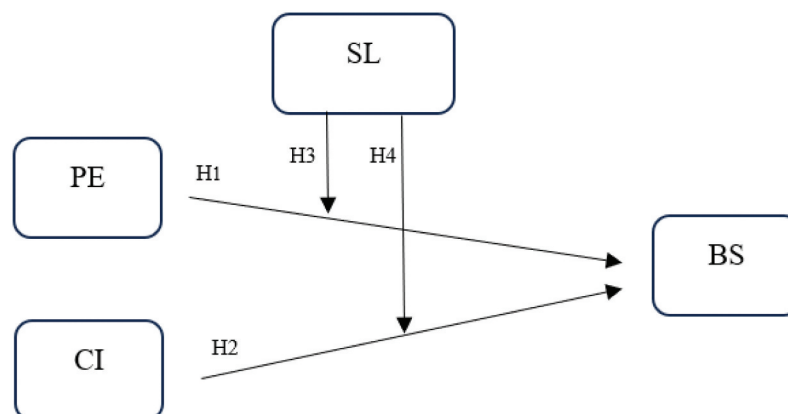
Figure [Figure 1](#) displays the proposed structural model.

3. Methodology

3.1. Research Design

This present study employed a cross-sectional approach, which examined data from samples within the population at a specific time frame. The design was chosen as it can generate multiple outcomes and is convenient for testing the proposed hypotheses (Wang & Cheng, 2020). A face-to-face survey using a questionnaire involving respondents from SME employees was incorporated to collect the data. The face-to-face survey was chosen as it provides an opportunity to persuade

Figure 1. Proposed structural model.



reluctant respondents; thus, it could increase the response rate. Furthermore, face-to-face surveys can enhance the data quality as they provide an opportunity for two-way communication and clarification of the questions (Ongena & Djikstra, 2021).

3.2. Instrument

The scales were adapted from previous studies and modified to fit the context of this present study. The PE and CI scales were adapted from grit-S as they have better psychometric properties than the original scale (Duckworth & Quinn, 2009). The scale has also been validated in Indonesia and showed adequate validity and reliability (Priyohadi et al. (2019). The SL scale was adapted from Liden et al. (2015). It was a shorter version of the SL scale developed by Barbuto and Wheeler (2006). This scale was validated on followers; hence it better reflects the critical behavioral aspect of a servant leader from the employees' side. The BS scale was adapted from a validated scale by Najib et al. (2021) and focused on cash flow availability, continuous operation, and retaining employees. These aspects were suitable proxies for BS during a crisis (Nwokocha et al., 2021; Villares et al., 2020).

The scales were translated into Indonesian and then back translated to verify their linguistic equivalence. We used the translator's services, certified by the Indonesian Translator Association (a nationally recognized association of translators), to ensure that the translation and back-translation processes do not alter the meaning linguistically. The adapted scales were then pre-tested on 30 SME employees to satisfy the central limit theorem (Pillet et al., 2023). Also, using SME employees was aimed to align with the study context. During the pre-test, we asked the respondents the following questions: What is the item asking, what does the individual word mean, and overall, asking them to figure out what the survey is about? The wording within each item was revised according to the respondents' suggestions. The procedure was repeated until the respondents could thoroughly comprehend all the items in accordance with the survey objective.

The final instrument consists of two sections. The first section contains respondents and business profiles, while the second contains questions about variables. Likert 5 scale was employed as it appears to be less confusing for respondents to increase the response rate while maintaining the response quality (Hayes, 1992; Morton-Williams, 1986). The scales ranged from 1 (not like me at all) to 5 (very much like me) for PE and CI. Due to the nature of the questions, the CI was reversely scored in the data analysis stage. Meanwhile, SL and BS scored from 1 (strongly disagree) to 5 (strongly agree). Table 1 displays the indicators of each variable and its sources.

3.3. Participants and data collection procedures

The survey was conducted in West Java, a province with the largest number of SMEs. According to the official data, 375,048 SMEs were operating in 2021 (Centre of Statistics Bureau, 2021). The authors used the Lemeshow formula to determine the required sample size, which is appropriate for conducting an opinion survey (Hsieh & Liu, 1990). The minimum required sample was 384 SMEs (CI: 95%; sig: 0.05). The survey involved purposive sampling based on the West Java Provincial Office database. Trained surveyors distributed the questionnaire to 700 SMEs whose businesses were still effectively run and had operated for more than three years. Hence, they experience the COVID-19 survival period. There was a cover letter explaining the background of the study and asking for written permission from the owners/managers to let their employees fill out the questionnaires. In addition, a letter was attached to explain that the participation was voluntary, and the respondent's identities would be anonymous. After two months, the surveyors collected 425 responses; hence it exceeded the minimum sample requirement.

3.4. Data analysis

Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity was employed to assess the sampling adequacy. Next, the common-method bias (CMB) was examined using Harman's single-factor test to avoid systematic measurement error, leading to a spurious correlation between constructs

Table 1. Indicators			
	Indicator		Source
Perseverance of effort	PE1	Setbacks do not discourage me.	Duckworth and Quinn (2009)
	PE2	I am a hard worker.	
	PE3	I am diligent.	
	PE4	I finish whatever I begin.	
Consistency of interest	CI1	New projects distract me from the previous ones.	Duckworth and Quinn (2009)
	CI2	I have been obsessed with a certain idea for a short time but later lost interest.	
	CI3	I often set a goal but later choose to pursue a different one.	
	CI4	I have difficulty maintaining my focus on a project.	
Servant leadership	SL1	My leader can tell if something work-related is going wrong.	Liden et al. (2015)
	SL2	My leader makes my career development a priority.	
	SL3	I would seek help from my leader if I had a personal problem.	
	SL4	My leader emphasizes the importance of giving back to the community.	
	SL5	My leader puts my best interest ahead of his/her own.	
	SL6	My leader gives me the freedom to handle difficult situations in the way that I feel is the best.	
	SL7	My leader would not compromise ethical principles to achieve success.	
Business survival	BS1	The business maintains positive cash flow during the COVID-19 pandemic	Najib et al. (2021)
	BS2	The business retains employees during the COVID-19 pandemic.	
	BS3	The business operates continuously during the COVID-19 pandemic.	

(Cote & Burkley, 1987). Subsequently, the multivariate kurtosis value was assessed to check the normality of the data.

Then, multicollinearity was assessed as it could increase parameter variance estimates, produce incorrect parameter estimates and implausible magnitude, and prevent the numerical solution of a model (Belsley et al., 1980; Greene, 1993). SEM-PLS was employed in the data analysis involving

two steps. Firstly, the measurement model was examined to check the reliability and validity of the constructs. Secondly, the structural model was examined to assess the relationship between variables and to test the proposed hypotheses.

4. Results

4.1. Respondent's business and demographic profiles

The respondents mainly worked at small businesses running for 5–6 years (45.7%), followed by 3–4 years (38.1%). Most small businesses had 3–5 employees (62.5%), followed by 6–8 employees (27.4%). The businesses mainly run food and beverages businesses (47.7%), followed by clothing/apparel (30.5%). Their monthly revenue was mostly IDR 5–10 million (66.4%), followed by IDR 10–15 million (30.1%). The respondents were primarily women (54.2%) and aged between “35–40” years old (44.5%).

4.2. Sampling adequacy and common method bias

The Kaiser-Meyer-Olkin (KMO) assessment of sampling adequacy showed an adequate value of 0.812. Each individual's KMO exceeded the recommended value of 0.5. Bartlett's test of sphericity also showed a significant value ($p = 0.000$). Therefore, the data was suitable for factor analysis and could be further processed into a hypotheses assessment. Subsequently, Harman's one-factor test was employed to examine the CMB, where all the items were entered into unrotated PCA. The first component with the largest eigenvalue explains 29.66% of the variance, which did not exceed the recommended cutoff value of 50 percent for all variances. This result indicated that CMB was not an issue in this study.

4.3. Assessment of normality and multicollinearity

The data set were introduced to the assessment of normality and showed that the multivariate kurtosis value (Mardia's coefficient) was 3.56 ($p = 0.05$), which was outside the critical interval of +1.96 and -1.96. The multivariate normality assumption was not fulfilled. Nonetheless, SEM-PLS performs well with a non-normal dataset. Subsequently, the predictors were introduced to multicollinearity assessment and showed that all tolerance values exceeded the minimum recommended value of 0.2 (PE = 0.791; CI = 0.668; SL = 0.892, and BS = 0.749). Also, all indicators' variance inflation factors (VIF) were below the maximum cutoff value of 10 (PE = 1.37; CI = 1.89; SL = 2.12; and BS = 1.63). Therefore, multicollinearity was not an issue in this present study.

4.4. Measurement model assessment

Composite reliability (CR) and average variance extracted (AVE) evaluation were incorporated to verify the validity and reliability of the outer models. Hence, the structure of the latent variables and their indicators can be justified. Table 2 shows that all loading values were above the cutoff value of 0.5. Also, CR and AVE were above the recommended value of 0.6 and 0.5, respectively. Hence, convergent validity was assured. Furthermore, each indicator was strongly related and measured the same constructs.

Next, discriminant validity was assessed using Fornell and Larcker criterion, loadings and cross-loadings, and heterotrait-monotrait ratio (HTMT). Table 3 displays the Fornell and Larcker criterion and indicates that the square root of the AVE of each construct was higher than the inter-construct correlations. Hence, the items related more strongly to their respective constructs. Table 4 shows that the loadings and cross-loadings assessment also indicates that each indicator's loading is higher than their cross-loadings. Finally, Table 5 displays that the HTMT ratio was below the conservative threshold of 0.85, and the upper limit confidences were below 1. Therefore, discriminant validity was assured.

4.5. Structural model assessment

The regression revealed that PE positively influences BS ($\beta = 0.318, t = 2.18, p = 0.012, f^2 = 0.251$), while CI does not provide significant influence toward BS ($\beta = 0.072, t = 0.702, p = 0.289, f^2 = 0.0011$). SL also

Table 2. Convergent validity

Variables	Items	Loadings	Composite reliability (CR)	Average variance extracted (AVE)
PE	PE1	0.751	0.809	0.774
	PE2	0.717		
	PE3	0.622		
	PE4	0.798		
CI	CI1	0.755	0.822	0.74
	CI2	0.811		
	CI3	0.697		
	CI4	0.701		
SL	SL1	0.818	0.789	0.739
	SL2	0.77		
	SL3	0.696		
	SL4	0.647		
	SL5	0.854		
	SL6	0.701		
	SL7	0.782		
BS	BS1	0.698	0.761	0.766
	BS2	0.71		
	BS3	0.759		

Table 3. Fornell and Larcker criterion

Constructs	PE	CI	SL	BS
PE	<i>0.819</i>			
CI	0.359	<i>0.776</i>		
SL	0.477	0.409	<i>0.795</i>	
BS	0.294	0.387	0.468	<i>0.736</i>

Note: the square root of AVE is italicized.

positively influences the relationship between PE and BS ($\beta = 0.302$, $t = 2.25$, $p = 0.018$, $f^2 = 0.112$). However, SL does not significantly moderate the relationship between CI and BS ($\beta = 0.087$, $t = 0.809$, $p = 0.313$, $f^2 = 0.098$). Therefore, H1 and H3 were supported, while H2 and H4 were rejected. Table 6 displays the regression results, while Figure 2 displays the strength of relationships in the structural model.

The significant moderation effect of SL on the relationship between PE and BS was plotted in Figure 3. It can be observed that at high SL (+1 SD), the slope between PE and BS was steeper than at normal SL (mean) and low SL (-1 SD). This finding supported the notion that SL strengthens the positive relationship between PE and BS. Thus, when SME owners/managers demonstrate SL behavior, it enhances the magnitude of employees' persistent effort, which eventually helps SMEs to survive.

The assessment of the coefficient of determination (R^2) revealed that 30.1% variance in BS can be attributed collectively to independent variables ($R^2 = 0.301$). Based on the

Table 4. Loadings and cross-loadings

Constructs	Items	PE	CI	SL	BS
PE	PE1	0.751	0.389	0.414	0.115
	PE2	0.717	0.587	0.512	0.544
	PE3	0.622	0.389	0.523	0.477
	PE4	0.798	0.497	0.565	0.532
CI	CI1	0.323	0.818	0.523	0.409
	CI2	0.467	0.722	0.494	0.477
	CI3	0.488	0.757	0.515	0.339
	CI4	0.515	0.822	0.491	0.467
SL	SL1	0.394	0.444	0.689	0.218
	SL2	0.417	0.385	0.711	0.474
	SL3	0.511	0.478	0.809	0.389
	SL4	0.443	0.515	0.645	0.284
	SL5	0.391	0.431	0.823	0.403
	SL6	0.465	0.335	0.807	0.515
	SL7	0.285	0.275	0.743	0.328
BS	BS1	0.378	0.511	0.453	0.719
	BS2	0.329	0.493	0.259	0.769
	BS3	0.408	0.348	0.414	0.678

Table 5. Hmtt

Constructs	PE	CI	SL
CI	0.445 (0.373; 0.589)		
SL	0.45 (0.287;0.478)	0.576 (0.398;0.756)	
BS	0.439 (0.313; 0.397)	0.552 (0.412; 0.658)	0.832 (0.513;0.689)

Note: the HTMT ratio is italicized, the value in parenthesis represents HTMT CI inferences (2.5%:97.5%).

recommended cutoff value of 0.1, the model obtained a substantial R^2 for BS. The model also had an adequate predictive relevance (Q^2) of 0.267, which was above 0. Therefore, the model provided good predictive relevance. Next, the effect size (f^2) was assessed. According to Cohen (1988), the values of 0.35, 0.15, and 0.02 are the cutoff between large, medium, and small effect sizes. Therefore, PE had a medium effect size (0.251), while CI had a negligible effect size (0.011). In addition, the standardized root means square residual (SRMR) was 0.063, which was below the recommended cutoff value of 0.1, while the normed fit index (NFI) was 0.908, which was above the minimum recommended cutoff value of 0.9. Therefore, the overall model showed a good fit.

5. Discussion

The main interest of this present study was the combined contribution of grit characters and SL to entrepreneurial survival. Specifically, this current study aimed to investigate the role of a servant leader and employee's grit facets in the context of SME survival during the COVID-19 pandemic. The results showed positive relationships between grit, SL, and SMEs' survival ability during the COVID-19 pandemic. Of particular interest, PE positively influences BS, while SL strengthens the influence of PE toward BS. On the other hand, CI does not have a significant influence on BS. At the same time, even if CI strengthens the relationship between the two constructs, the predictive power is not significant.

Table 6. Regression results

Hypothesis	Relationship	Standard beta	t-values	p-values	f ²	R ²	Q ²	SMSR	NFI	Decision
H1	PE ---> BS	0.318	2.18	0.012*	0.25	0.3	0.27	0.063	0.91	Supported
H2	CI ---> BS	0.072	0.702	0.289**	0.01					Not supported
H3	SL*PE ---> BS	0.302	2.25	0.018*	0.11					Supported
H4	SL*CI ---> BS	0.087	0.809	0.313**	0.1					Not Supported

Note: *significant at p<0.05 (one-tailed), **not significant.

Figure 2. Relationship strengths on the structural model.

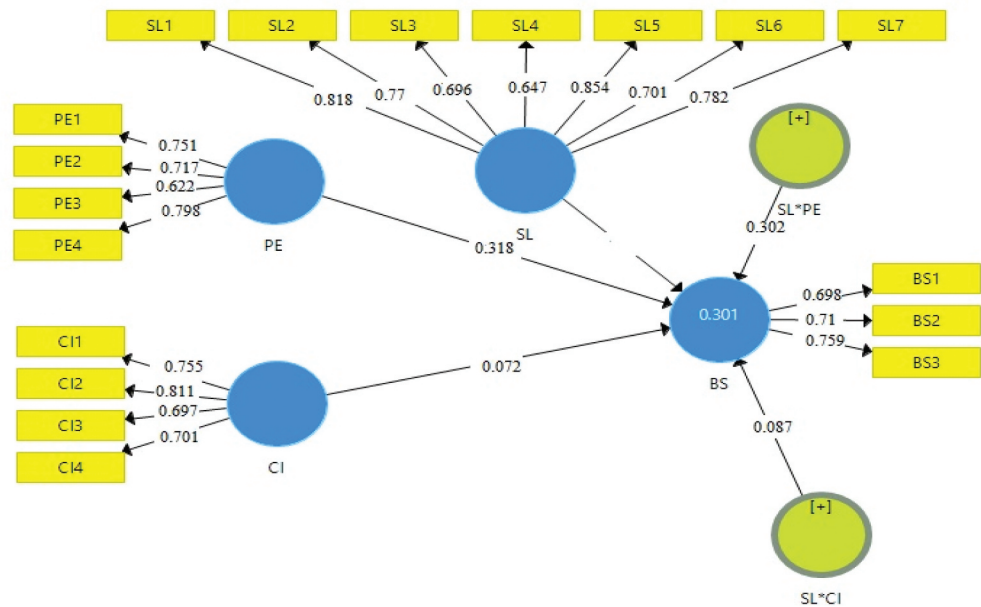
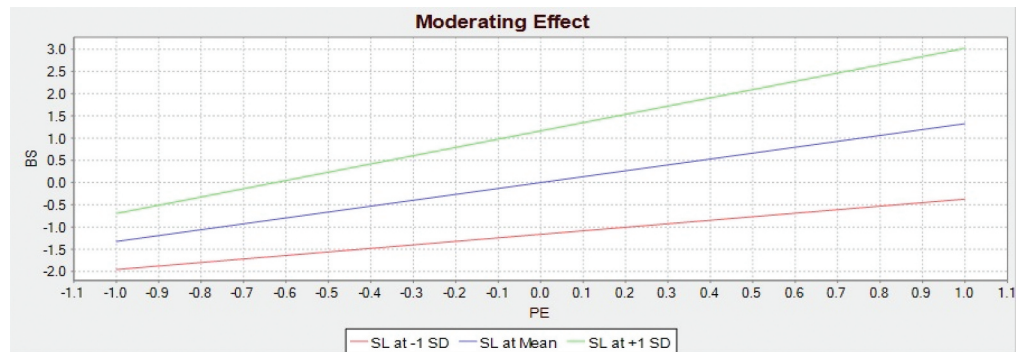


Figure 3. Moderation effect of SL on the relationship between PE and BS.



PE positively influenced BS; it confirmed the findings from Al Issa (2020), Salisu et al. (2020), Crede et al. (2017), and Chan (2016), which found that PE contributes significantly to entrepreneurial success, school, and life in general. Due to their ability to stay motivated over a long period, SME employees could overcome all the setbacks during the pandemic crisis (e.g., financial constraint, revenue decline, and market collapse). This ability to endure the consequences of the crisis, such as wages-cut, contributed to SMEs' ability to maintain adequate cash flow. As reflected by one indicator of this present study, maintaining hard work to achieve the targeted goal is essential. The respondents maintained their work attitude during the crisis, and eventually, it paid off as the SMEs survived and gradually recovered their initial business capacity.

However, it was found that CI did not significantly influence BS. The result contradicted Al Issa (2020), Masuyama et al. (2021), and Duckworth et al. (2007), which argued that CI contributes to BS. Culture might have an important influence on grit. People appreciate interpersonal harmony and shared objectives in a highly collectivist society such as Indonesia. Hence, espousing individual CI is not highly valued as the need to adjust the organizational demands is salient. Individuals in this culture are more likely to see themselves as embedded in a social group. Unlike people in an individualistic society (e.g., the USA and other western countries), which emphasizes personal autonomy and individual goals, a collectivist society drives SME employees to pursue group objectives. The respondents will likely surrender their personal interests (such as selling new

products for a higher commission) and stay focused on the organization's primary interest. These collective endeavors eventually strengthen the cumulative efforts to survive during the crisis.

Next, this present study found that managers with SL strengthened the positive influence of PE towards BS. It is in line with the argument from Chan (2016) that a servant leader encourages people to extend their efforts beyond their comfort zone. As argued by (Dierendonck, 2011), servant leaders prioritize the employee's interest while keeping the decisive authority in their hands. Therefore, SME owners prioritize the employees' interests by synergizing them with organizational objectives (i.e., business survival). Furthermore, SME owners encourage a supportive and demanding work environment, fostering the employees' perseverance for long-term goals. At the same time, they provide stewardship, appreciation, and emotional healing for the employees, which acts as a psychological buffer during stressful periods.

On the other hand, the findings suggest that SL did not significantly strengthen the relationship between CI and BS. This result corroborated the insignificant relationship between CI and BS. A collectivist society requires that an individual's interests vary over time depending on the expectations of other organization members (Hartmann et al., 2022). In this study context, each employee was expected to sacrifice their interest and pursue the organization's ultimate goals. Therefore, SME owners are likely to emphasize the importance of BS. Moreover, working relationship harmony was essential to withstand the crisis. Instead of accommodating each employee's aspiration, SME owners aim to create a collective aspiration and encourage them to work persistently toward the organizational objective of surviving the COVID-19 pandemic.

6. Conclusion

In conclusion, this present study proved the positive contributions of grit construct and SL towards SME business survival during the COVID-19 pandemic. Specifically, PE positively influenced BS, while CI did not. Furthermore, SL strengthened the positive influence of PE and SME survival. This study extended the nascent understanding of grit literature, specifically on the interplay between grit constructs, SL, and BS. While grit refers to an individual personality widely acknowledged as a critical factor required to succeed in business, the external influences from a servant leader could strengthen the impact of a gritty effort toward success. The role of a servant leader was critical in providing guidance, stewardship, and motivation for gritty people. Moreover, a servant leader aims to orchestrate the employees' efforts while aligning the organizations and their interests. Hence, the contributions of servant leaders and gritty people lead to a higher chance for survival and entrepreneurship success.

Practically, the results provide recommendations for entrepreneurs to strengthen their employee's perseverance, especially during challenging times. Meanwhile, entrepreneurs can also implement the servant leadership approach in their human resource management to bolster the employee's grit continuously. On the policy front, this study provides policy recommendations for the government to develop servant leadership and strengthen the grit personality among Indonesian SMEs. These programs could be a viable alternative for incentive or capital assistance. The grit characteristics could be nurtured among entrepreneurs during their struggle to achieve business success. Such continued self-development training and psychological counseling for entrepreneurs could help cultivate these characteristics. This psychological development was likely more permanent and long-term, fostering self-determining efforts among entrepreneurs and minimizing the dependency on government support.

7. Research limitations and direction for further studies

This present study has limitations in several areas. Firstly, the data are only drawn from SMEs within one province (i.e., West Java) due to the limited resources. Although this province has the largest number of SMEs, there were 34 provinces in Indonesia with their own culture and social value, which may require other types of leadership for entrepreneurial success. Therefore, further studies need to involve other respondents from other provinces to enhance the generalizability of

the findings. Secondly, this study did not distinguish SMEs based on product types. A more specific investigation based on the product types (such as low versus high involvement) products may reveal different results. For instance, SMEs selling low-involvement products such as fresh food and beverages may find it easier to survive during the COVID-19 pandemic by shifting to other products ordered through online media. Hence, CI may have a significant impact on their survival ability. Thirdly, this study employed a cross-sectional approach; as such, it did not consider changes in the behavioral aspect of SME employees and managers, which may vary during the COVID-19 pandemic. As the Indonesian government enacted varied levels of lockdown policies depending on the severity of the pandemic, SMEs were required to be more flexible during the survival periods. For instance, SME managers could be more authoritative during lockdown ease to capture as much revenue as possible and put aside their SL approach. Finally, as grit character is context-dependent (Wang et al.), further studies may incorporate other variables such as innovative capabilities, resiliency, or government incentives. Hence it will provide a broader understanding of what factors contribute to entrepreneurial survival and success.

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References

- Aboramadan, M., Dahleez, K., & Hamad, M. H. (2021). Servant leadership and academics outcomes in higher education: The role of job satisfaction. *International Journal of Organizational Analysis*, 29(3), 562–584. <https://doi.org/10.1108/IJOA-11-2019-1923>
- Albert, E., Petrie, T. A., & Moore, E. W. G. (2022). Achievement motivation and grit's perseverance of effort among collegiate athletes. *International*

- Journal of Sport & Exercise Psychology*, 1–16. doi: <https://doi.org/10.1080/1612197X.2022.2161100>
- Al Issa, H. E. (2020). When grit leads to success: The role of individual entrepreneurial orientation. *Business: Theory and Practice*, 21(2), 643–653. <https://doi.org/10.3846/btp.2020.12346>
- Barbuto, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group & Organization Management*, 31(3), 300–326. <https://doi.org/10.1177/1059601106287091>
- Belsley, D. A., Kuh, E., & Welsch, R. E. (1980). Regression diagnostics: Identifying influential data and sources of collinearity. Wiley.
- Blanco, J. M. M. (2021). What is behind grit? Developing stamina for your organization. *Development and Learning in Organizations*, 35(6), 11–13. <https://doi.org/10.1108/DLO-11-2020-0227>
- Brandstatter, V., & Bernecker, K. (2022). Persistence and disengagement in personal goal pursuit. *Annual Review of Psychology*, 73(1), 271–299. <https://doi.org/10.1146/annurev-psych-020821-110710>
- Canavesi, A., & Minelli, E. (2021). Servant leadership and employee engagement: A qualitative study. *Employee Responsibilities & Rights Journal*, 34(4), 413–435. <https://doi.org/10.1007/s10672-021-09389-9>
- Centre of Statistics Bureau. (2021). Indonesia in Numbers.
- Chadwick, I. C., & Raver, J. L. (2020). Psychological resilience and its downstream effects for business survival in nascent entrepreneurship. *Entrepreneurship Theory and Practice*, 44(2), 233–255. <https://doi.org/10.1177/1042258718801597>
- Chan, K. W. C. (2016). Servant leadership cultivates grit and growth mindset in learners. *Servant Leadership: Theory & Practice*, 3(2), 12–22.
- Christopoulou, M., Lakioti, A., Pezirkianidis, C., Karakasidou, E., & Stalikas, A. (2018). The role of grit in education: A systematic review. *Psychology*, 9(15), 2951–2971. <https://doi.org/10.4236/psych.2018.915171>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum Associates.
- Cote, J. A., & Burkley, M. R. (1987). Estimating trait, method, and error variance: generalizing across 70 construct validation studies. *Journal of Marketing Research*, 24(3), 315–318
- Crede, M., Tynan, M. C., & Harms, P. D. (2017). Much ado about grit: A meta-analytic synthesis of the grit literature. *Journal of Personality and Social Psychology*, 113(3), 492–511. <https://doi.org/10.1037/pssp0000102>

- Darmanto, S., Ekopriyono, A., Hikmah, & Ratnawati, A. T. (2023). Investigating the development of entrepreneurial behavior among nascent digital entrepreneurs. *Cogent Business & Management*, 10(2), 1–17. <https://doi.org/10.1080/23311975.2023.2247875>
- De Hoe, R., & Janssen, F. (2022). Re-creation after business failure: A conceptual model of the mediating role of psychological capital. *Frontiers in Psychology*, 13, 1–10. <https://doi.org/10.3389/fpsyg.2022.842590>
- Dierendonck, D. V. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 228–261. <https://doi.org/10.1177/0149206310380462>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the short grit scale (grit-S). *Journal of Personality Assessment*, 91(2), 168–174. <https://doi.org/10.1080/00223890802634290>
- Gimeno, J., Folta, T. B., Cooper, A. C., & Carolyn, Y. (1997). Survival of the fittest? entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42(4), 750–783. <https://doi.org/10.2307/2393656>
- Graham, J. W. (1991). Servant leadership in organizations: Inspirational and moral. *Leadership Quarterly*, 2(2), 105–119. [https://doi.org/10.1016/1048-9843\(91\)90025-W](https://doi.org/10.1016/1048-9843(91)90025-W)
- Greene, W. H. (1993). *Econometric analysis* (2nd ed.). MacMillan.
- Greenleaf, R. K. (1970). *The servant as leader*. The Greenleaf Center for Servant Leadership.
- Hartmann, S., Backmann, J., Newman, A., Kyle, M., Brykman, K. M., & Pidduck, R. J. (2022). Psychological resilience of entrepreneurs: A review and agenda for future research. *Journal of Small Business Management*, 60(5), 1041–1079
- Hayes, B. E. (1992). *Measuring customer satisfaction*. ASQC Quality Press.
- Hernandez, Y. G., Galvis, J. F. R., & Capacho, J. W. V. (2020). Business survival, a literary review of internal and external determinants. *Criteria Libre*, 18(32), 261–279. <https://doi.org/10.18041/1900-0642/criteriolibre.2020v18n32.7122>
- Hidi, S. & Renninger, K. A. (2006). The four-phase Model of interest development. *Educational Psychologist*, 41(2), 111–127. https://doi.org/10.1207/s15326985sep4102_4
- Hsieh, F. Y. & Liu, A. A. (1990). Review of the book Adequacy of sample size in health studies. In S. Lemeshow, D. W. Hosmer jr., J. Klar, & S. K. Lwanga (Eds.), *Statistics of Medicine* (Vol. 9, No. (11), pp. 1382–1382). <https://doi.org/10.1002/sim.4780091115>
- John, O. P. & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102–138). Guilford Press.
- Kalleberg, A. L., & Leicht, K. T. (1991). Gender and organizational performance: Determinants of small business survival and success. *Academy of Management Journal*, 34(1), 136–161. <https://doi.org/10.2307/256305>
- Kolagiannidis, S. (2020). Covid impact on small business. *International Journal of Social Science and Economics Invention*, 6(2), 387–391. <https://doi.org/10.23958/ijssei/vol06-i12/257>
- Lee, A., Lyubovnikova, J., Tian, A. W., & Knight, C. (2019). Servant leadership: A meta-analytic examination of incremental contribution, moderation, and mediation. *Journal of Occupational and Organizational Psychology*, 93(1), 1–44. <https://doi.org/10.1111/joop.12265>
- Liden, R. C., Panaccio, A., Meuser, J. D., Hu, J., & Wayne, S. J. (2014). Servant leadership: Antecedents, processes, and outcomes. In D. V. Day (Ed.), *The oxford handbook of leadership and organizations* (pp. 357–379). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199755615.013.018>
- Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26(2), 254–269. <https://doi.org/10.1016/j.leaqua.2014.12.002>
- Masuyama, A., Kubo, T., Sugawara, D., & Chisima, Y. (2021). Interest consistency can buffer the effect of COVID-19 fear on psychological distress. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-021-00580-5>
- Medina-Craven, M. N., Cooper, D., Penney, C., & Caldas, M. P. (2021). Family firm employees: Identification, stewardship practices and citizenship behaviors. *Journal of Family Business Management*, 11(4), 538–554
- Mooradian, T., Marzler, K., Uzelac, B., & Bauer, F. (2016). Perspiration and inspiration: Grit and innovativeness as antecedents of entrepreneurial success. *Journal of Economic Psychology*, 56, 232–243. <https://doi.org/10.1016/j.joep.2016.08.001>
- Muenks, K., Wigfield, A., Yang, J. S., & O'Neal, R. (2017). How true is grit? Assessing its relations to high school and college student's personality characteristics, self-regulation, engagement, and achievement. *Journal of Educational Psychology*, 109(5), 599–620. <https://doi.org/10.1037/edu0000153>
- Najib, M., Rahman, A. A. A., & Fahma, F. (2021). Business survival of small and medium-sized restaurants through a crisis: The role of government support and innovation. *Sustainability*, 13(19), 1–16. <https://doi.org/10.3390/su131910535>
- Nwokocha, V. C., Anyanwu, O. C., Madu, I. A., & Nwankwo, C. E. (2021). Covid-19 pandemic and small-scale industries in a local geographic space of Nigeria: An assessment of the impact of strategic interfirm alliance. *SAGE Open*, 11(2), 1–12. <https://doi.org/10.1177/21582440211022676>
- Ongena, Y. P., & Dijkstra, W. (2021). Advances in research on survey interview interaction. *International Journal of Social Research Methodology*, 24(2), 177–179. <https://doi.org/10.1080/13645579.2020.1824625>
- Perez, M. (2015). Obtaining academic success: Nurturing grit in students. *Journal of Interpersonal Relations, Intergroup Relations, and Identity*, 8, 56–63.
- Pillet, J. C., Carillo, K. D., Vitari, C., & Pigni, F. (2023). Improving scale adaptation practices in information system research: Development and validation of a cognitive validity assessment method. *Focus on Research Methods*, 33(4), 693–987. <https://doi.org/10.1111/isj.12428>
- Porter, M. E. (1976). Please note location of nearest exit: Exit barriers and planning. *California Management Review*, 19(Winter), 21–33
- Priyohadi, N. D., Suhariadi, F., Fajrianti, F., & Soedarmanto, S. (2019). Validity test for short grit scale (grit-S) on Indonesian millennials. *Journal of Educational, Health and Community Psychology*, 8(4), 594–618
- Salisu, I., Hashim, N., Mashi, M. S., & Aliyu, H. G. (2020). Perseverance of effort and consistency of interest for

- entrepreneurial career success: Does resilience matter? *Journal of Entrepreneurship in Emerging Economies*, 12(2), 279–304. <https://doi.org/10.1108/JEEE-02-2019-0025>
- Sharma, P., Salvato, C. & Reay, T. (2013). Temporal dimensions of family enterprise research. *Family Business Review*, 27(1), 10–19. <https://doi.org/10.1177/0894486513516058>
- Shute, V., & Ventura, M. (2013). Measuring and supporting learning in games stealth assessment. White paper for MIT series, published by the MacArthur Foundation. <http://myweb.fsu.edu/vshute/publications.html>
- Turner, K. (2022). Servant leadership to support wellbeing in higher education teaching. *Journal of Further and Higher Education*, 46(7), 947–958. <https://doi.org/10.1080/0309877X.2021.2023733>
- Van Doren, N., Tharp, J. A., Johnson, S. L., Staudenmaier, P. J., Anderson, C., & Freeman, M. A. (2019). Perseverance of effort is related to lower depressive symptoms via authentic pride and perceived power. *Personality and Individual Differences*, 127, 45–49
- Van Meerkerk, I., Kleinhans, R., & Molenveld, A. (2018). Exploring the durability of community enterprises: A qualitative comparative analysis. *Public Administration*, 96(4), 651–667. <https://doi.org/10.1111/padm.12523>
- van Zyl, L. E., Olckers, C., & van der Vaart, L. (Eds.). (2021). *Multidisciplinary perspectives on grit: Contemporary theories, assessments, applications and critiques*. Springer. doi:<https://doi.org/10.1007/978-3-030-57389-8>
- Villares, M. O. D. C., Refojo, V. M., & Seoane, F. J. F. (2020). Business survival and the influence of innovation on entrepreneurs in business incubators. *Sustainability*, 12(6197), 1–22. doi:[10.3390/su12156197](https://doi.org/10.3390/su12156197)
- Wang, X., & Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest*, 158(1), S67–S71. doi:<https://doi.org/10.1016/j.chest.2020.03.012>
- Zhao, H. S. E., Seibert Lumpkin, G. T., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381–404. <https://doi.org/10.1177/0149206309335187>
- Zheng, Y., Epitropaki, O., Graham, L., & Caveney, N. (2022). Ethical leadership and ethical voice: The mediating mechanisms of value internalization and integrity identity. *Journal of Management*, 48(4), 973–1002. <https://doi.org/10.1177/01492063211002611>