

# The Construct and Predictive Validity Testing of Indonesian Entrepreneurial Competence Inventory-Situational Judgment Test Model (Long Version)

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## Research

**Keywords:** Indonesian Entrepreneurial Competence Inventory, Situational Judgment Test, Construct Validity, Predictive Validity, Confirmatory Factor Analysis

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# Abstract

This research aimed to test the internal and external validity of the Indonesian Entrepreneurial Competence Inventory that was constructed based on situational judgment test (SJT) model. Spencer's entrepreneurial competence theory and interviews with entrepreneurs were employed to build the items. The internal construct validity was tested by applying confirmatory factor analysis (CFA), while the external construct validity was tested by implementing correlations with other tests that were theoretically correlate with entrepreneurial competency, namely the previous entrepreneurial competence (Likert-scale model) and risk behaviour. The predictive validity was analysed by using correlation testing with an instrument assessing balance scorecard measurement of entrepreneurial achievement. A sample of 149 entrepreneurs from industrial cities in Indonesia was recruited via convenience sampling. The CFA analyses showed that nine dimensions of the Indonesian Entrepreneurial Competences Inventory were valid. In the correlation testing with risk taking behaviour and business success, all of the dimensions were significantly valid, except the see and act on opportunity dimension. However, in the correlation with the previous entrepreneurial competence scale, the significant correlation was found only with commitment to work. In further analysis, the correlation between dimensions of the current inventory and dimensions of the previous scale showed that the significant correlations were found between competence of seeing opportunity and commitment to work, assertiveness, and persuasion. The impact to the future research and practice application were discussed.

# Background

The emphasis on human resource development in the second term government of the President of Indonesia 2020-2024 (Kominfo, 2017) is an important momentum that cannot be ignored. The government understands that it is time for Indonesia to develop a strategy to improve the competence of human resources (HR) in a more directed and sincere manner. Two of the potential human resources to be developed are entrepreneurship and aspiring entrepreneurs. Therefore, developing MSMEs is one of the government's strategic priorities to support attainment of the Industrial Revolution 4.0 (Tempo, 27 April 2018). MSMEs were chosen, because according to the Ministry of Industry, there are 70% of Indonesian work in MSMEs.

The support can be seen from the permission given to entrepreneurs to open e-business, developing infrastructure for technology development related to e-commerce and bank technology, as well as providing mentoring for innovation in e-business. The main objective of government support is to enhance the quality of MSMEs, so that they can achieve excellent performance. The determinants of the success or the failure of entrepreneur are defined from many dimensions including personal, organizational, and external factors. However, the fundamental aspect lies on individual vision, intention, and work that will turn business ideas into reality of success. The businessperson integrates financial and human resources to organize, produce, and develop companies through organizing their customers and workers (León, & Gorgievski, 2007). The prime performance of a business is a performance which is based on the presence of competence at work.

According to Shermon (2004), competence is the ability of an individual to display work performance effectively. In the field of entrepreneurship, Spencer & Spencer (1993 in Riyanti, Sandroto, Warmiyanti, 2016) described 13 entrepreneurial competencies. Meanwhile, Roblesa & Rodríguez (2015) defined entrepreneurial competence as the basic requirement for an entrepreneur. Entrepreneurial competence has been proven to make a real contribution to business success (Man & Lau, 2005).

According to León and Gorgievski (2007), the competencies will play an important role in the entrepreneurial process. The higher competency associates with higher ability in entrepreneurship. It was further explained that competence affects the ability of an entrepreneur to see opportunity, take it, and create projects to response to the opportunity. The ability to find and make the right project as a response to opportunity is influenced by how many and how good competencies they have. Although it is not only competence that determines the success of a business, people with high competence will do better or achieve several advantages over people who do not have that competence at all.

In line with the statement of Leon & Gorgievski (2007), entrepreneurship education and development should be based on competence. In order to find whether someone already has entrepreneurial competence, a measurement tool is needed. Entrepreneurial competence inventory is a tool that can identify the level of competence of prospective entrepreneurs and entrepreneurs. This measure of entrepreneurial competence can be a means of detecting whether a person has the skills needed to become an entrepreneur.

The need to develop a measurement tool for entrepreneurial competence in the Indonesian context is driven by the reality that the effectiveness of various entrepreneurship programs promoted by the government with the aim of reducing unemployment and economic deprivation due to poverty has not shown significant results. The number of entrepreneurs in Indonesia is only 3.3% of the total population of Indonesians. Meanwhile the percentage of open unemployment rate (TPT) of university graduates has risen from 5.34% to 6.22%. This data shows the need for a new job orientation, one of which is becoming an entrepreneur.

León & Gorgievski (2007) explained that the biggest determinant of business success or failure is personal characteristics (individual differences), since that the businesspersons determine all decision and action to maintain the sustainability of the company they developed. This measurement tool was intended to describe the entrepreneur's strengths and weakness in term of competencies.

We created 114 items of entrepreneurship competencies based on 13 dimensions of entrepreneurship described by Spencer and Spencer (1993 in Riyanti, Sandroto, Warmiyanti, 2016)) and interviews with entrepreneurs. The items were constructed based on Situational Judgment Test (SJT) model where the stimulus was a short description of an entrepreneur's experience containing conflict/problem during his/her business. The response to the problems were displayed in multiple choice form. The alternative of choices was derived from the solutions provided by successful entrepreneur experiences and the judgment of academic experts on entrepreneurship's (Suryani, Riyanti, Sandroto, submitted). Through internal validity examination by implementing homogeneity item analysis (corrected item-total

correlations) there were 64 items remains from the 114 items that were representing 13 dimensions of Spencer and Spencer's entrepreneur competencies. However, in that analysis there was a dimension namely use influencing others strategy that only has 1 item; therefore, we dropped this dimension. Finally, we have 63 items from 12 dimensions from Spencer and Spencer characteristics of entrepreneur.

A psychological instrument can be used when it is proven valid. The validity analyses include content validity, construct validity, and predictive validity. The content validity is conducted after the item were written. It involves experts to evaluate whether the items relevant with the construct and represent the domain behaviours. The construct validity can be attained by implementing the internal analysis namely corrected item-total correlation to identify the homogenous aspect of the items, or using a more advance statistic methods for example, confirmatory factor analysis to indicate the structure of the construct, and also by applying external validity analysis, namely correlate it with other constructs that theoretically associated with the construct we measured. The predictive validity is aiming at the predictive function of the instrument, whether it can be a predictor of a criteria (other psychological attribute) that theoretically correlated with our construct of analysis (Anastasi & Urbina, 1997), because psychological attributes have nomothetic characteristics which means they are correlate with one to another (Kerlinger & Lee, 2000).

The current study was intended to answer two research questions, was the Indonesian Entrepreneurial Competence Inventory valid in term of construct and predictive validity? We considered that the answer of this question was significant to support the development of entrepreneurship education programs.

## Literature Review

### Entrepreneurship competence

Competence is a standard (basic) characteristic of an individual that can predict a person's work behavior and performance. Fundamental character means a character that does not change in various conditions or situations and lasts a very long time (Spencer & Spencer in Riyanti, Sandroto, Warmiyanti, 2016). According to Chouhan and Srivastava (2014) competence is a collection of individual behaviors that can be observed and play an important role in achieving the desired work result where it is a combination of knowledge, skills, abilities, personal characteristics. and other individual factors that distinguish superior performance from average performance in certain specific situations (Prihadi, 2004). Rivai and Sagala (2013) describe competence as a characteristic. The individual basic skills associated with effective performance or superior competencies that are different from other average competencies. It can be concluded that competence is the basic characteristics (covering knowledge, abilities, and attitudes) that a person must have in order to do a job, it can distinguish superior work performance and predict a person's behavior in various situations.

Schumpeter (1965 in Eroglu & Pycak, 2011) defined "entrepreneurs as individuals who exploit market opportunity through technical and/or organizational innovation". Whi Schumpeter (1965) defined "entrepreneurs as individuals who exploit market opportunity through technical and/or organizational

innovation". Johnson (in Irene, 2017) defined an entrepreneur as someone who take responsibility and ownership in making things happen, that s/he is open and able to create novelty, who manage the risk attached to the process, and who has the persistence to see through some identified end-point, even when faced with obstacles and difficulties. According to Soegoto (2014), entrepreneurs are creative and innovative people who can establish, build, develop, advance and able to make their company superior. Other definitions characterized entrepreneur as individuals who are "very passionate about what they do and are willing to tak risks, so that their dreams can be trasformed into relaities (Shefsky, 2011), who sense, create and respond to change regarding a posible opportunity for profit, able to anticipate and build credible vision of their future business (Therin, 2007), who see everything as opportunity, that they can modify items that were initially "ordinary" to "something new" (Prasajarningsih, 2019).

Spencer & Spencer (in Riyanti, Sandroto, Warmiyanti, 2016) initially explained 20 entrepreneurial competencies, however, after conducting series of researches, they concluded 13 entrepreneurial competencies, namely (1) initiative, sees and act on opportunities, (2) persistence, (3) information seeking, (4) concern for high quality of work, (5) commitment to work hard, (6) efficiency, (7) systematic planning, (8) problem solving, (9) self-confidence, (10) persuasion, (11) use of (12) influence strategies, and (13) assertiveness.

Initiatives are actions to exceed what is needed or demanded by the work/environment and do something without waiting for instructions. Sees and act on opportunities are identified from the accuracy of seeing opportunities that are not always seen but can be found if they were examined carefully. Persistence describes a person's endurance when facing challenges and difficulties, and s/he decides to persevere and keep trying, even though facing failure after failure. Information seeking can be seen from the amount of additional effort spent to gather more information for work and decision making. An individual who concerns for the high quality of work shows high motivation to ensure the quality of work or products that are under his/her responsibility. Commitment to work hard is the drive and ability of a person to adjust his behaviours to the needs, priorities, and goals of the organization, to act in a way that supports the achievement of organizational goals. This commitment includes the act of making personal sacrifice or willing to do more to finish the job, taking full responsibility for completing the work for the customer, encouraging colleagues to complete the work, and showing concern to achieve customer satisfaction. Efficiency orientation is a degree of concern in individual's work so that s/he is motivated to work more efficiently. Systematic planning is shown by the ability to understand a situation or problem in holistic perspective and the ability to identify the main/underlying problems in complex situations. Problem-solving is the ability to understand the situation by resolving it into more detailed parts (factors) to achieve the goals. Self-confidence is a person's belief in one's own ability to complete a task/challenge/work. Persuasion is a person's ability to influence and convince others to act according to what is expected by the person. Use of influence strategies is an ability to use various strategies to influence others, understand to implement certain strategy for certain people. Assertiveness is a drive and willingness to act as a group leader, usually indicated in a position of formal authority.

## **Construct and criteria related to entrepreneurship**

## **Risk taking behaviour**

Risk is an inherent characteristic of all strategic decisions in that there is some degree of uncertainty associated with decision outcomes, and some outcomes are more desirable than others. As evidenced in a broad-based body of research, risk affects decision behaviours by influencing perceptions of the decision situation, evaluation of alternatives, choices made, and other decision-related actions taken in response to risk (Pablo, Sitkin, & Jemison, 1996, p 724). In entrepreneurial context, risk taking behaviour is inherent and a nature of its activities (Busenitz, 1999).

Risk propensity is defined as a collection of the general tendency of an individual whether he will take or avoid risks and influence decision makers in evaluating which risk are evaded or accepted (Sitkin & Pablo, 1992). Risk propensity acts as a device for decision makers to consider the risk-related information, influencing the use of information, which information are involved or neglected. Perception of risk is an individual assessment of the risks that exist in a situation. This assessment can be seen from the label used by the decision maker, the estimation of the extent to which the risk will be released or controlled, and the self-confidence in the estimate (Pablo, Sitkin, & Jemison, 1996).

Guo and Jiang (2020) stated that risk-taking in entrepreneurial context refers to a firm's willingness to engage in calculated business-related risks, which are typically characterised by making large resource commitments to entrepreneurial activities that involve a higher likelihood of high payoff and costly failure, embracing uncertainties and breaking away from the tried and true. Risk-taking has long been recognised as a typical trait of entrepreneurs. Wang and Poutziouris (2010) showed that risk-taking intensity correlates with business performance. It means that risk taking behaviour is relevant with business success in entrepreneurship.

## **Business success**

The traditional model of measuring success in any business organisation is often by seeing straightforwardly to the profit and loss statement (Saputro, Achman, Handayani, . 2016). Actually, the business success should be identified from many aspects (Zimmer & Scarborough, 2008). According to Machado (2013) and Soderberg, Kalagnanam, Norman, and Vaidyanathan (2011), the first performance evaluation models were based solely on financial measures. Over time, countless critics to those models appeared, causing the theory to currently give supremacy to performance evaluation models that simultaneously include financial and nonfinancial measures. The most adequate that simultaneously include financial and non-financial measures to measure business success is the Balanced Scorecard. Kaplan and Norton (1996 in Gumbus & Lussier, 2006; Giannopoulos et.al, 2013) measure business success from four perspectives, namely financial, customer, innovation process, and learning and growth perspective. Riyanti (in Andri, Renoulli, & Riyanti, 2014) recommends use of perspective of customer, internal processes, learning and growth and financial perspective. This research will use three aspects from this theory, namely financial aspects, innovation process aspects and customer aspects Kaplan dan Norton (Riyanti 2009 in Andri, Renoulli, Riyanti, 2014).

## **Construct validity**

Construct identification validity aims to see whether a test tool has fulfilled its function in measuring constructs or traits theoretically (Anastasi & Urbina, 1997). Cohen & Swerdlik (1999) mention several methods that can be used in testing construct validity that can help gather evidence that:

1. the test is homogeneous only measures one construct (internal consistency).
2. the test score increases or decreases with the development of mental function which is influenced by age (developmental changes).
3. the test score will change because of the experience between the pretest and posttest. The intervention carried out is a construct that the researcher wants to measure. (experiment intervention).
4. testing of test kits on two groups that have contrasting traits will result in significantly different test scores (contrasted group method).
5. the test score will be correlated with other test scores that theoretically measure the same construct (convergent validation).
6. test scores will have low or uncorrelated correlation with other test scores that theoretically measure different constructs (discriminant validation).
7. the subtest score on a series of tests has a loading factor that can describe a particular trait/construct (factor analysis).

In this study we will use confirmatory factor analysis and convergent validation methods by correlate our inventory with previous scale, namely self-assessment entrepreneurial competences with Likert-scale model and Risk Taking Behaviour based on Sitkin and Pablo theory (1992).

## **Predictive validity**

This validity analysis aims to see the effectiveness of the test in predicting individual performance in certain activities (criteria). Measurement of the predicted criteria that can be done at the same time as data collection for the test is referred to as concurrent validity or is postponed at certain time intervals, which is called predictive validity (Anastasi & Urbina, 1997). In certain situations, especially when the time interval for data collection criteria is considered too far, concurrent validity can be used as a substitute for predictive validation. If this is done, then this validity test is carried out using a sample group that already has criteria data when the test is carried out.

The criteria that are usually used in this test include academic performance, such as school report scores, student GPA, work performance in employee groups, ratings from superiors, diagnosis and prognosis of psychiatrists, training instructor ratings, etc. (Anastasi & Urbina, 1997). In this study we will use business success as the criteria to be predicted by our instrument.

## **Research Method**

## Participant

The participants (N = 149) were recruited via convenience sampling using paper & pen questionnaires as well as online questionnaire from Province of DKI Jakarta (63.76%), West Java (34.90%), Gorontalo (0.67%), and Riau (0.67%). Majority of participants were male (55.03%) and hold bachelor's degree (67.11%). They were entrepreneur in the field of food and beverages, fashion, car repair shop, transportation service, health products, electronic products, etc. They were relatively young with mean of age was 33 years old (SD = 10.88; Median = 30; Mode = 24). They were running a business in the category of Small and Medium Enterprises (UKM), have been doing business for at least 3 years, and with minimum profit Rp. 20,000,000, - per month.

## Instruments

### 1. *Indonesian Entrepreneurial Competence Inventory-Situational Judgment Test Model*

We created 114 items of entrepreneurial competencies through analysis of spencer & Spencer's theory of entrepreneurship competence dimensions and interviews with successful Indonesian entrepreneurs. At the initial analysis there were 63 items successful in item homogeneity testing. In each item, there is one description of a situation/problem that is experienced by entrepreneurs and followed by 4 answer choices, they are alternative solutions of the problem. An example of the question and choices are as follows: "*Ray felt that his noodle restaurant was less attractive to customers. He wants to do something for his restaurant to make it better and attract customers' attention. What should Ray do?*" A. Add a more varied menu and improve the quality of taste (score 1); B. Redesigning the restaurant to make it look more hygienic, good and affordable, and looking for a more strategic location even though this will require more funds (score 2), C. Promoting through social media accounts and posting noodle photos that look appetizing (score 3), D. Endorse to food bloggers, because the testimonials of these parties have an impact on increasing sales because they have their own followers (score 4).

### 2. *Construct validity:*

(a) the self-assessment measuring instrument for entrepreneurial competence was compiled by Riyanti (in Riyanti & Soewartono, 2018) based on the theory of Spencer & Spencer (1993) and from the theory of Chiou et al. (in Riyanti, Sandroto & Warmiyati, 2016). Initially, this measuring instrument consisted of 137 items, with 13 soft skill competencies and 5 hard skill competencies Chiou et. al. (in Riyanti, Sandroto & Warmiyanti, 2016). The results of confirmatory factor analysis showed 24 items forming 3 dimensions, namely the ability of business management, strategic thinking skills in Indonesia to manage business, and the ability to see opportunities. All dimensions are valid and reliable. An example of the items of this scale is "Use multiple approaches to solve problems" with seven alternative responses from "I feel very not competence" (score 1) until "I feel very competent (score 7).

(b) risk-taking behaviour scale consists of 35 items measuring 3 dimensions, namely decision making, courage to act, and able to take risks based on theory introduced by Sitkin and Pablo, (1992). An example

of this scale is “I used to take risky actions in the face of intense market competition” with alternative response from “Strongly disagree” (score 1) and “Strongly agree” (score 5).

*3. Predictive validity:* business success consists of 16 items measuring the achievement at current state compare to the condition when the business was initiated. The items were constructed based on Kaplan dan Norton (1996 in Gumbus & Lussier, 2006). An example of the items is: “How does your average number of customers compare to when your business was established?” The alternative response are decreased (score 0), the same (score 1), increased 1-25% (score 3), increased 26-50% (score 4), increased 51-75% (score 5), increased 76-100% (score 6), increased more than 100% (score 7).

## Results

### Construct validity

*Internal validity.* The Indonesian Entrepreneurial Competence Inventory was tested by applying confirmatory factor analysis. The result showed 9 dimensions with 43 items were valid (see Table 1) with acceptable goodness of fit.

### *External validity*

The external validity examination involved correlation testing with previously available test, namely self-assessment entrepreneurial competence (Likert-scale model) (Riyanti & Suwartono, 2018) and Risk-Taking Behaviour Scale based on Sitkin and Pablo theory (1992). The results were presented in Table 2. In correlation between dimensions of current inventory and previous scale, it was found that only dimension of commitment to work hard has significant correlation with 2 dimensions of previous test, namely ability to see opportunity ( $r = 0.32, p < 0.01$ ) and ability to think strategically ( $0.22, p < 0.01$ ) and with total competence ( $r = 0.22, p < 0.01$ ). Other dimension that was corelated with ability to see opportunity were dimension of assertive and persuasion.

The correlation between dimensions of current inventory and dimensions of risk-taking behaviour showed that almost all dimension correlated with risk of decision making, except dimension of efficiency oriented. In correlation with dimension of courage to act from dimension of risk-taking behaviour, the significant correlation were found with dimension of assertive ( $r = 0.19, p < 0.05$ ), commitment to work hard ( $r = 0.20, p < 0.05$ ), persuasion ( $r = 20, p < 0.05$ ), and systematic planning ( $0.22, p < 0.05$ ). In correlation with dimension of able to take risk and total score of risk-taking behaviour, only dimension see and act on opportunity that was hardly correlated.

### *Predictive validity*

The predictive validity was examined by implementing correlation testing between dimensions of current inventory with business success. The results revealed that all dimension of current inventory was correlated significantly with business success, except the dimension of see and act on opportunity (see Table 2).

## Discussion

This study was aiming at construct validity and predictive validity of the Indonesian Entrepreneurial Competencies inventory that were constructed with situational judgment test. The construct validity was examined in the context of internal and external validation by implementing CFA and correlation with other tests, namely previously entrepreneurial competencies that was constructed in Likert-scale model and risk-taking behaviour. The predictive validity was examined by applying correlation testing with business success. The results revealed that the current inventory was valid measuring 9 dimensions of entrepreneurial competencies with 43 items. The dimensions were Assertiveness, Commitment to Work Hard, Efficiency oriented, Initiative, Persistence, Persuasion, Problem Solving, See and Act on Opportunity, and Systematic Planning. The validity examination with Risk-taking Behaviour scale, showed that the current inventory was valid at the level of whole test and dimensions, except dimension of See and Act on Opportunity. The predictive validity revealed that the current inventory was valid predicting business success at the level of whole test and dimensions, except dimension of See and Act on Opportunity.

The hardly correlation between the current inventory and previous entrepreneurial competence, probably because the way the competences were measured. The current inventory was constructed in SJT model, on which involving cases of experience both in stimulus and responses, while the previous test was measuring the perception of participant to what extent they perceived that they are able to do list of entrepreneurship activities. The current inventory was considered more relevant with competency measurement, while the previous scale was more related to perception of competence.

This study also found that the dimension of see and act on opportunity was hardly related with other measurements. Probably this dimension was also containing another construct than the construct that was intended to be built. However, it was found that dimension of Commitment to Work Hard was correlated with the previous scale and its dimensions. Probably this dimension containing construct that were overlapping with this scale and dimensions.

The current study was providing evidence that the Indonesian Entrepreneurial Competence Inventory - SJT Model can be used to develop education program for entrepreneurs, since it was proven overlapping with risk-taking behaviour that is the core of entrepreneurial competence of entrepreneurship and predicting the business success of entrepreneurs.

## Declarations

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## **AUTHOR INFORMATION**

BPDR received her doctorate from University of Indonesia focusing on entrepreneurship. Her professorship in entrepreneurship was received in 2009 from Atma Jaya Catholic University of Indonesia. Her areas of expertise include, but are not limited to, psychometric and psychological assessment, professional development, and educational entrepreneurship.

## **ETHICS DECLARATION**

The participant was signing the form of Informed consent in the questionnaire by writing their initial in the form. The statement of the informed consent was "I declare that I am willing to participate in this research. I acknowledge that the data I provide will be kept confidentially and will only be used for the purposes of this research."

The authors declare that all of the authors have no competing interests.

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## **AUTHORS CONTRIBUTIONS**

Benedicta Prihatin Dwi Riyanti was writing the introduction, literature review, item writing preparation, discussion, and conclusion.

Angela Oktavia Suryani was writing the item writing, method, and data analysis.

Christine Winstinindah Sandroto was writing the literature review and data collection.

**Silverius Y. Soeharso was writing** literature review and data collection.

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# Tables

Table 1. Confirmatory Factor Analysis of The *Indonesian Entrepreneurial Competence Inventory-Situational Judgment Test Model*

Domain	$\chi^2$ (df)	p	CFI	TLI	GFI	RMSEA	$\lambda$ items
1. Assertive	0.94 (1)	0.33	1.00	1.00	1.00	0.00	A1 = 0.54 A2 = 0.35 A3 = 0.33 A4 = 0.24
2. Commitment to work hard	0.78 (1)	0.38	1.00	1.00	1.00	0.00	CTW1 = 0.77 CTW2 = 0.44 CTW3 = 0.72 CTW4 = 0.82
3. Efficiency oriented	7.79 (8)	0.44	1.00	1.00	0.98	0.00	EO1 = 0.30 EO2 = 0.44 EO3 = 0.45 EO4 = 0.48 EO5 = 0.60 EO6 = 0.56
4. Initiative	2.20 (2)	0.33	1.00	0.99	0.99	0.00	I1 = 0.43 I2 = 0.77 I3 = 0.64 I4 = 0.70
5. Persistence	10.36 (8)	0.24	0.98	0.97	0.98	0.04	PSTC1 = 0.67 PSTC2 = 0.43 PSTC3 = 0.45 PSTC4 = 0.37 PSTC5 = 0.83 PSTC6 = 0.51
6. Persuasion	3.39 (4)	0.50	1.00	1.00	0.99	0.00	PER1 = 0.31 PER2 = 0.44 PER3 = 0.71 PER4 = 0.32 PER5 = 0.37

7. Problem Solving	6.27 (7)	0.51	1.00	1.00	0.99	0.00	PS1 = 0.66 PS2 = 0.64 PS3 = 0.41 PS5 = 0.45 PS6 = 0.39
8. See and Act on Opportunity	1.78 (2)	0.41	1.00	1.00	0.99	0.00	SAO1 = 0.38 SAO2 = 0.86 SAO3 = 0.22
9. Systematic Planning	4.76 (5)	0.45	1.00	1.00	0.99	0.00	SP1 = 0.35 SP2 = 41 SP3 = 0.82 SP4 = 0.58 SP5 = 0.38

recommendation: p-value > 0.05; GFI, AGFI, TLI, dan CFI > 0.95; RMSEA < 0.08

**Table 2. Correlation coefficient between dimensions of entrepreneurial competences (current and previous scale), dimensions of risks, and business success**

Dimensions	1	2	3	4	5	6	7	8	9
Assertive	0.22**	0.02	0.16	0.14	0.37**	0.19*	0.35**	0.39**	0.25**
Commitment to Work Hard	0.32**	0.22**	0.15	0.22**	0.32**	0.20*	0.30**	0.35**	0.34**
Efficiency Oriented	-0.02	0.08	-0.11	-0.04	0.15	0.10	0.18*	0.19*	0.16*
Initiative	0.04	-0.03	-0.15	-0.09	0.21*	0.07	0.34**	0.29**	0.32**
Persistence	0.10	0.01	-0.04	0.00	0.29**	0.11	0.44**	0.38**	0.37**
Persuasion	0.25**	0.11	0.03	0.10	0.32**	0.20*	0.44**	0.43**	0.46**
Problem-solving	0.12	0.07	-0.09	-0.01	0.23**	0.09	0.36**	0.31**	0.37**
See and Act on Opportunity	0.02	0.06	0.03	0.04	0.19*	0.06	0.12	0.15	0.11
Systematic Planning	0.10	0.07	-0.10	-0.01	0.36**	0.22*	0.46**	0.46**	0.38**
Total the Indonesia Entrepreneurial Competence SJT Model	0.15	0.08	-0.04	0.04	0.35**	0.18*	0.45**	0.44**	0.41**

Note: 1. Ability to see opportunity; 2. Ability to think strategically; 3. Ability on business management; 4. Total Entrepreneurial Competence; 5. Risk Decision Making; 6. Courage to act; 7. Able to take risk; 8. Total Risk Taking behaviour; 9. Business Success. \*  $p < 0.05$ ; \*\*  $p < 0.01$ .