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# The Measurement Model of Social Capital, Risk Taking and Sustainability in SMEs in West Sumatra

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ABSTRACT

This study provides evidence of a measurement model (confirmatory factor analysis--CFA) of sustainability, social capital and risk taking. UKM in West Sumatra in 2023. The purpose of this research is to test the accuracy of the measurement model on the data that has been collected. To answer this research question using a structural equation model (SEM), with a sample of 250 SMEs. The resulting data analysis found that the hypothesized model is valid and significant. The sustainability indicator has a significant factor loading and is more than 0.3. With the highest loading standard on the sixth indicator of 0.876, and the lowest loading standard on the third indicator of 0.445. The social capital indicators have all significant factor loadings and are more than 0.3. The highest loading standard is the seventh indicator of 0.886 and the lowest is the fourth indicator of 0.401. Risk taking also has a factor loading of all significant indicators and more than 0.3. With the highest loading standard located on the first indicator of 0.930, and the lowest loading standard on the fifth indicator, namely 0.582.

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## INTRODUCTION

Structural Equation Modeling (SEM) Is a two-stage analysis method. Using CFA (Confirmatory Factor Analysis) is used to assess the validity before testing the structural model. The purpose of CFA is to analyze how well each indicator can explain its latent variables. This study has three latent variables as follows: sustainability , social capital, and risk taking .

To be able to test the relationships that exist in this study, it is necessary to have an analytical technique. The analysis technique used in this study is Structural Equation Modeling (SEM). SEM is a two stage method. Using CFA to validate the measurement model. According to Ghozali, (2013) if the score coefficient number of an indicator with a total of all indicators is greater than or equal to ≥ 0.3 then the instrument can be considered valid. If the CFA meets the validity of >0.3 then the structural model can be run. According to Suliyanto, (2011) reliability is a measure that shows the degree of sample in which

each indicator indicates a contract/common latent factor. The approach used is to assess the magnitude of the construct reliability and variance extracted from each variable.

## LITERATURE REVIEWS

**Sustainability**

According to Johnson & Schaltegger (2016) business continuity is a new concept that links sustainable development with business activities. Business continuity is a condition or condition of a business, in which there are ways to maintain, develop and protect resources and meet the needs that exist in a business. According to Handayani (2007) , the methods used are sourced from their own experiences and those of others, and are based on current economic conditions or circumstances in a business. Business continuity is a condition or condition of a business, in which there are ways to maintain, develop and protect resources and meet the needs that exist in a business.

**Social Capital**

Putnam (2000) states that social capital is the appearance of social organizations or beliefs, norms, and networks that can increase the efficiency of society by facilitating coordination and cooperation for various benefits. Social capital is an ability that arises from trust in a community (Fukuyama, 1995) . Eva Cox (1995) states that social capital is a series of processes of human relations that are supported by networks, norms and social trust that enable efficient and effective cooperation for profit. Social capital is one of the fundamental factors for the development of entrepreneurial behavior that leads to the promotion of human and financial resources, markets and technology (Rodrigo-Alarcón et al., 2018) .

**Risk Taking**

Risk taking is defined by Miller & Friesen (1978) as the degree to which firms and managers demonstrate a willingness to make bold and risky strategic decisions and invest resources with the possibility of costly failure. Risk taking is a fundamental component of decision making that research has found to drive performance and competitiveness (Greve, 2003; Sanders, 2007) . Taking the right level of risk is necessary for the company. According to Li et al., (2009) risk taking is an attitude that tends to favor high-risk projects, with high return opportunities as well.

## RESEARCH METHOD

This type of research is classified as quantitative research. This study uses primary data . According to Sugiyono (2017) primary data is a data source that directly provides data to data collectors. In this study the authors obtained data through observation and filling out questionnaires distributed to SMEs in West Sumatra. The sampling technique used in this study is convenience sampling. Convenience sampling is a sample determination method by choosing samples freely without any systematics. The sample in this study amounted to 250 samples. This study used SEM through confirmatory factor analysis (CFA) used to assess the validity or suitability of the model.

**Operational Definition and Variable Measurement**

The following is a table of operational definitions and variable measurements in this study:

**Table 1. Operational Definitions and Variable Measurements**

| No | Variable | definition _ | Indicators | Source |
|---|---|---|---|---|
| 1. | Sustainability | A new concept linking sustainable development with business activities. | 1. I agree that sustainability is important to my business<br>2. We have made our business continuity plan<br>3. Having a continuous manager/officer for our company is important<br>4. Our company treats employees fairly (such as involvement, appreciation, respect, participation in decision making)<br>5. My business has a capital circulation that runs smoothly<br>6. Maintain and maintain facilities and infrastructure as well as the quality of goods/services<br>7. Carry out ongoing promotions | Imran et al., 2019 and Zulpicha, E., Slamet, Y., & Wijaya, 2019 |
| 2. | Social Capital | Social Capital is a relational resource achieved by individuals through a network of social relations. | 1. Employees are willing to share information with each other<br>2. Employees in my business have integrity<br>3. My business has regular interactions with at least 20 business people<br>4. My business has had help from business people in the last three months<br>5. Work relationships are created based on trust through exchanging information and learning about others<br>6. Friendships develop from business relationships<br>7. Trust through relationships with relatives, friends and existing solidarity relationships such as community<br>8. Trust based on the reputation of others | Aidoo et al., 2020; Lyons, 2000; Pham & Talavera, 2018 |
| 3. | Risk Taking | Risk taking is a fundamental component of decision making that research has found to drive | 1. Have a courageous and aggressive attitude in dealing with situations in decision making involving uncertainty<br>2. The term "Risk Taking" is considered a positive attribute for people in my business | Aidoo et al., 2020; Li et al., 2009; Shan et al., 2016 |

| | | | |
|---|---|---|---|
| | performance and competitiveness. | 3. My business emphasizes exploration and experimentation<br>4. My business tends to favor high risk projects with a very high chance of being picked up<br>5. Due to the nature of the environment, bold and broad action is required to achieve the business goals | |

## RESULTS AND DISCUSSION

Discussion of the results in this study can be described as follows:

**Description of Respondents**

Based on the results of distributing the questionnaires that have been carried out, namely in SMEs in West Sumatra, the characteristics of the respondents who took part in this study can be grouped. Respondent characteristics are divided into two, namely characteristics based on demographic data and based on business data.

**Table 2 . Respondent Characteristics _ _**

| Data Classification | | frequency | |
|---|---|---|---|
| | | Fi | Percentage |
| Gender | Man | 100 | 40.00% |
| | Woman | 150 | 60.00% |
| age | 20-30 | 26 | 10.40% |
| | 31-40 | 57 | 22.80% |
| | 41-50 | 97 | 38.80% |
| | >50 | 70 | 28.00% |
| Level of education | SD | 5 | 2.00% |
| | JUNIOR HIGH SCHOOL | 17 | 6.80% |
| | SMA/SMK | 131 | 52.40% |
| | Diploma | 20 | 8.00% |
| | Bachelor | 72 | 28.80% |
| | Postgraduate | 5 | 2.00% |
| City | Padang | 209 | 83.60% |
| | Bukittinggi | 29 | 11.60% |
| | Pariaman | 12 | 4.80% |
| Status | Married | 224 | 89.60% |
| | Not married yet | 26 | 10.40% |

Based on the table it is known that female respondents are more dominant than male respondents, namely with a total of 150 respondents or 60% of the total 250 respondents, while male respondents are only 100 respondents or 40%. The data shows that SMEs in West Sumatra are more dominated by women.

In terms of age, the highest proportion was shown at the age of 41-50 years with a total of 97 respondents or 38.80%, followed by those aged more than 50 years with 70 respondents or 28.00%, then aged 31-40 years with a total of 57 respondents or 22.80%, and finally aged 20-30 as many as 26 respondents or 10.40%.

Based on the level of education, it was dominated by SMA/SMK with 131 respondents or 52.40% of the total respondents, followed by undergraduate with 72 respondents or 28.80%, diploma

with 20 respondents or 8.00%, junior high school with 17 respondents or 6, 80%, postgraduate as many as 5 respondents or 2.00%, and elementary education level as many as 5 respondents or 2.00%.

From the city sector, it can be seen from the table above that most of the respondents came from the city of Padang as many as 209 respondents or 83.60%, followed by the city of Bukittinggi as many as 29 respondents or 11.60%, and finally from the city of Pariaman as many as 12 respondents or 4.80%.
.

Based on status, it can be seen that most of the respondents were married as many as 224 respondents or 889.60%, and unmarried as many as 28 respondents or 10.40%.

**Table 3 . business characteristics**

| **Data Classification** | | frequency | |
|---|---|---|---|
| | | **Fi** | **Percentages** |
| **length of business** | <10 years | 153 | 61.20% |
| | 11-20 years | 63 | 25.20% |
| | 21-30 year | 21 | 8.40% |
| | > 30 years | 13 | 5.20% |
| **Number of employees** | <10 persons | 234 | 93.60% |
| | 11-20 person | 11 | 4.00% |
| | >21 persons | 5 | 2.00% |
| **Total assets** | < IDR 100,000,000 | 154 | 61.60% |
| | Rp. 100,000,000 - Rp. 200,000,000 | 37 | 14.80% |
| | Rp. 201,000,000 - Rp. 300,000,000 | 18 | 7.20% |
| | Rp. 301,000,000 - Rp. 400,000,000 | 5 | 2.00% |
| | Rp. 401,000,000 - Rp. 500,000,000 | 11 | 4.40% |
| | > IDR 500,000,000 | 25 | 10.00% |

In the table it can be seen the characteristics of respondents based on business data, with data on the length of time most businesses are shown in the range below 10 years, namely 153 SMEs or 61.20%, followed by 11-20 years with 63 SMEs or 25.20%, length of business 21- 30 years as many as 21 SMEs or 8.40%, and lastly with the least number of businesses with a length of more than 30 years as many as 13 SMEs or 5.20%.

From the sector, the number of employees is dominated by criteria below 10 people, namely 234 SMEs or 93.60%, followed by a range of 11-20 people, 11 SMEs or 4.00%, and the least, namely more than 20 people, 5 SMEs or 2 .00%.

Based on the number of assets, assets with an amount of < Rp. 100,000,000 dominate the most, namely 154 SMEs or 61.60%, followed by Rp. 101,000,000 - Rp. 200,000,000 as many as 37 SMEs or 14.80%, range > Rp. .500,000,000 for 25 SMEs or 10.00%, Rp.201,000,000 - Rp.300,000,000 for 18 SMEs or 7.20%, , Rp.401,000,000 – Rp.500,000,000 for 11 SMEs or 4 .40%, and the least characteristic is IDR 301,000,000 – IDR 400,000,000 by 5 or 2.00%.

## Structural Equation Modeling (SEM) Assumption Test

Outlier Test

The initial data for this study were 271 SMEs. Before being used for research, the data was cleaned first by using the outlier test. The outlier test is an observation condition of a data that has unique characteristics and looks very different from other data (Tileng, 2015) . The farther the data distance from the center point, the more likely the data is included in the outlier category.

Outlier test is detected using the Mahalanobis Distance. In this study, 20 questions were used, with this number, a significance level of p> 0.001 = 45.315 was obtained. Then all cases that have a value

above 45.315 will be considered outliers. In this study, there were 21 respondents who stated that there were outliers.

Normality test

After the outlier test was carried out, the data normality test was then carried out using the Kolmogrov-Smirnov Test. The purpose of this normality test is to find out whether the distribution of a data follows or approaches a normal distribution. At this stage the normal test for each variable is determined from the probability value which must have a value above 0.05 (Ghozali, 2016) .

From the normality test table the Kolmogrov-Smirnov results are at a significance level of 0.200. So based on the results of this normality test it can be stated that the data used for this study have been normally distributed, this is because the results of the significance value of the normality test for each variable are greater than 0.05 (0.200 > 0.05).

Multicollinearity Test

After the next normality test is carried out, namely the multicollinearity test, the multicollinearity test is a test to see the relationship between the independent variables (Gujarati, 2007) . The way to detect the occurrence of multicollinearity symptoms is by using the variance inflation factor (VIF) and the tolerance value. If the VIF value is less than 10 (VIF <10) and the tolerance value is greater than 0.1, it is concluded that the model does not have symptoms of multicollinearity.

From the multicollinearity test table it can be seen that all variables or indicators do not have symptoms of multicollinearity because the VIF value is less than 10 (VIF <10) and the tolerance value is greater than 0.1.

Heteroscedasticity Test

Heteroscedasticity assumption test is an assumption in regression where the residual variance is not the same for one observation to another. The way to detect the occurrence of heteroscedasticity is if there is a certain pattern, such as the dots that form a certain pattern that is regular (wavy, widens then narrows) then heteroscedasticity has occurred. If there is no clear pattern, and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity. From the image of the heteroscedasticity test, it can be seen that there is no clear pattern, and the points spread above and below the number 0 on the Y axis, so it can be concluded that there is no heteroscedasticity.

## Structural Equation Modeling Analysis

Confirmatory Factor Analysis (CFA) is defined as an analytical tool capable of testing theoretical constructs or hypotheses that cannot be measured, directly observed (Jöreskog, KG, 1993) . This technique can be used to estimate the research measurement model. CFA can confirm if the number of factors or constructs and the loading form of the variable indicators are in accordance with what is expected from the theory used. The validity of the measurement model is determined by the Goodness of Fit (GOF) and the construct validity of CFA. After the measurement model stage is proven valid, the next process is to analyze the relationship between the indicators and the constructs.

### Measurement Model/Confirmatroy Factor Analysis of Sustainability

CFA is carried out for each latent variable with the aim of knowing how precisely the variable can explain the existing latent variables. The following is the CFA of the sustainability variable.

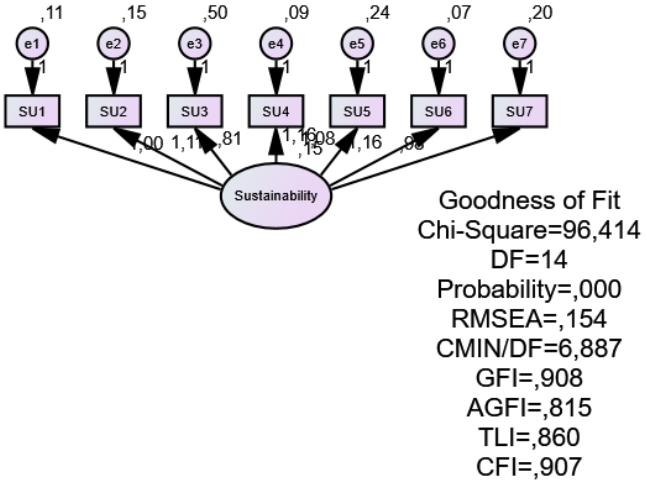


Figure 1. CFA Variable Sustainability

In Figure 1 it can be seen that the loading factor of all indicators is ≥ 0.30 and is significant. However, this model needs to be tried because it does not meet the GOF requirements so that the model is not fit with the results presented in Table 4.

Table 4. Goodness Of Fit Sustainability

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 96,414 | marginal |
| DF | - | 14 | - |
| probability | ≥0.05 | 0.000 | marginal |
| RMSEA | ≤0.08 | 0.154 | marginal |
| CMIN/DF | ≤2.00 | 6,887 | marginal |
| GFI | ≥0.90 | 0.908 | BetterFit |
| AGFI | ≥0.90 | 0.815 | marginal |
| TLI | ≥0.90 | 0.860 | marginal |
| CFI | ≥0.90 | 0.907 | Better Fitr |

Based on Table 4, it can be seen that the GOF criteria still show marginal because they still do not meet their respective cutoff values (probability value 0.00 <0.05, RMSEA value 0.166> 0.08, CMIN/DF value 7.737> 2, AGFI value 0.790 <0.90, and the TLI value is 0.836 <0.90. From the results of Table 12 it can be said that this measurement model is not fit. So it is necessary to modify the model to find a fit model.

According to Ghozali (2016) explained that improving a model can be done by paying attention to the value of modification indexes. The value of the modification index indicates a decrease in the Chi-Square value if a certain indicator error is correlated with errors in other indicators according to the recommendations for the modification index displayed by the AMOS software. So in this CFA Sustainability test, several model modifications were made to get a fit model as shown in Figure 2.

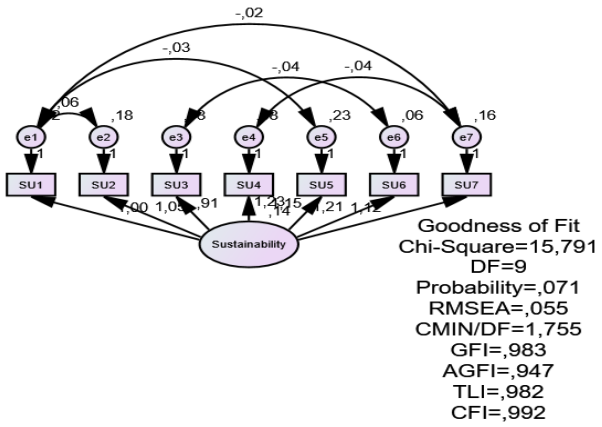


Figure 2. Output Modification Index of Sustainability Variable

Figure 2 shows that modifications to the CFA Sustainability model have been carried out by correlating the largest error values in order to reduce Chi-Square. The error values that are correlated are several indicators in the variables, namely e1 and e2; e1 and e5; e3 and e6; e4 and 37; e1 and e7. So that the CFA model test for the Sustainability variable has been carried out to get the appropriate GOF criteria, can be seen in Table 5.

Table 5. Goodness of Fit Variable Sustainability Modification

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 15,791 | BetterFit |
| DF | - | 9 | - |
| probability | ≥0.05 | 0.071 | BetterFit |
| RMSEA | ≤0.08 | 0.055 | BetterFit |
| CMIN/DF | ≤2.00 | 1,755 | BetterFit |
| GFI | ≥0.90 | 0.983 | BetterFit |
| AGFI | ≥0.90 | 0.947 | BetterFit |
| TLI | ≥0.90 | 0.982 | BetterFit |
| CFI | ≥0.90 | 0.992 | BetterFit |

Based on Table 5 it is known that for the GOF value all tests show better fit because they have fulfilled their respective cut off values, namely the Chi-Square value which is already smaller by 15.791, the DF value shows a positive 9, the probability value is 0.071> 0.05, the RMSEA value 0.055<0.08, CMIN/DF value 1.755<2, GFI value 0.983>0.90, AGFI value 0.947>0.90, TLI value 0.982>0.90, and CFI value 0.992>0.90.

For the next stage after obtaining the fit model, the next step is to look at the value of the standardized loading factor for all indicators that measure the Sustainability variable. The estimated value of all indicators can be seen in Table 6.

**Table 6. Standardized loading factor of Sustainability (SU )**

| Latent | Indicators | sl | SL2 | Measurement Error (1-SL2) | SE | CR | P |
|---|---|---|---|---|---|---|---|
| | SU1 | 0.738 | 0.545 | 0.455 | | | |
| | SU2 | 0.686 | 0.471 | 0.529 | 0.074 | 14,174 | 0.00 |
| | SU3 | 0.445 | 0.198 | 0.802 | 0.136 | 6,713 | 0.00 |
| Sustainability | SU4 | 0.856 | 0.733 | 0.267 | 0.093 | 13.175 | 0.00 |
| | SU5 | 0.668 | 0.446 | 0.554 | 0.121 | 9,496 | 0.00 |
| | SU6 | 0.876 | 0.767 | 0.233 | 0.09 | 13,488 | 0.00 |
| | SU7 | 0.723 | 0.523 | 0.477 | 0.109 | 10.256 | 0.00 |
| | $\Sigma$ | 4,992 | 3,682 | 3,318 | | | |
| | **Construct Reliability** | **0.883** | | | | | |
| | **Variance Extracted** | | **0.526** | | | | |

The processed results of the AMOS output data above can be seen that from the results of the measurement model the Performance variable can meet the value required for convergent validity and the indicators can also reflect their respective latent variables. All indicators have standardized loading (SL) > 0.30. All indicators are significant at the 3% level with CR > 1.96.

In the table it can also be seen that the construct reliability and variance extracted from the sustainability variable have a value of 0.883 and 0.526 respectively. This value meets the required value for construct reliability (0.883> 0.70) and variance extracted (0.526≥0.50), so that the Sustainability variable has good reliability and is able to explain indicators better and passes the discriminant validity requirements. Based on this discussion, it can be concluded that the CFA variable Sustainability has met convergent validity, discriminant validity, construct reliability and acceptability. fit of fulfilled GOF.

**Measurement Model/Confirmatroy Factor Analysis of Social Capital**

Confirmation Factor Analysis (CFA) for exogenous variables in this study is social capital. CFA processing results for the social capital variable can be seen in Figure 3.

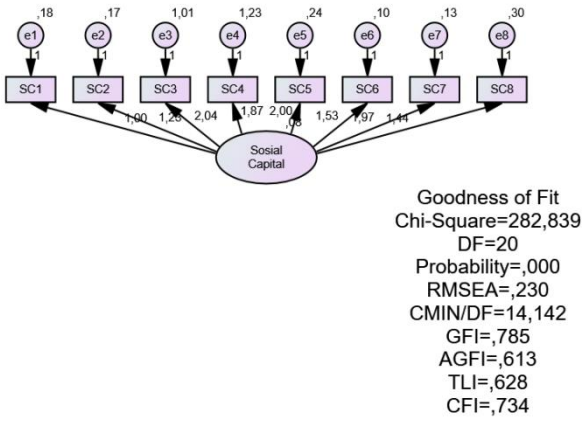


Figure 3. CFA Social Capital Variable

In Figure 3 it can be seen that the loading factor of all indicators ≥ 0.30 and is significant. However, this model needs to be modified because it does not meet the GOF requirements so that the model is not fit as shown in Table 7.

Table 7. Social Capital Variable Goodness of Fit

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 282,839 | marginal |
| DF | - | 20 | - |
| probability | ≥0.05 | 0.000 | marginal |
| RMSEA | ≤0.08 | 0.230 | marginal |
| CMIN/DF | ≤2.00 | 14,142 | marginal |
| GFI | ≥0.90 | 0.785 | marginal |
| AGFI | ≥0.90 | 0.613 | marginal |
| TLI | ≥0.90 | 0.628 | marginal |
| CFI | ≥0.90 | 0.734 | marginal |

Based on Table 7, it can be seen that some of the GOF criteria still show marginal because they still do not meet their respective cutoff values (Chi-Square value 282.839, probability value 0.00<0.05, RMSEA value 0.230> 0.08, CMIN/DF value 14.142> 2, GFI value 0.785 <0.90, AGFI value 0.613 <0.90, TLI value 0.628 <0.90, and CFI value 0.734 <0.90). From the results of Table 7. it can be said that this measurement model is not fit. So it is necessary to modify the model in order to find a fit model.

According to Ghozali (2016) explained that improving a model can be done by paying attention to the value of modification indexes. The value of the modification index indicates a decrease in the Chi-Square value if a certain indicator error is correlated with errors in other indicators according to the recommendations for the modification index displayed by the AMOS software. So in the Social Capital CFA test, several modifications to the model were carried out to obtain a fit model as follows:

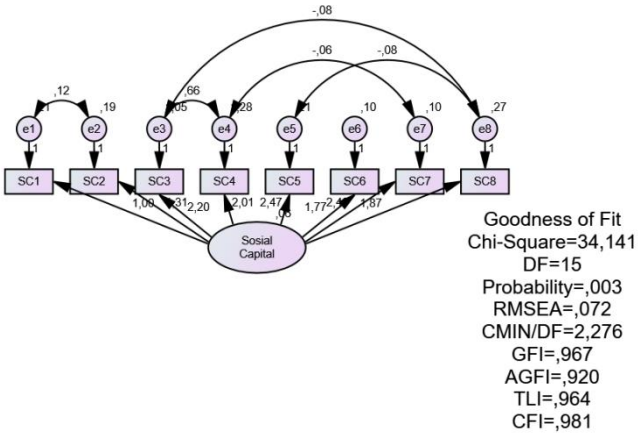


Figure 4. Output Modification Index Variable Social Capital

Figure 4 shows that a modification of the Social Capital CFA model has been carried out by correlating the largest error value in order to reduce Chi-Square. The error values that are correlated are several indicators in the variables, namely e1 and e2; e3 and e4; e5 and e8; e4 and e7; e3 and e8. So that a test of the Social Capital variable CFA model has been carried out to get the appropriate GOF criteria, can be seen in Table 8.

Table 8. Goodness of Fit Social Capital Modification

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 34,141 | BetterFit |
| DF | - | 15 | - |
| probability | ≥0.05 | 0.003 | marginal |
| RMSEA | ≤0.08 | 0.072 | BetterFit |
| CMIN/DF | ≤2.00 | 2,276 | marginal |
| GFI | ≥0.90 | 0.967 | BetterFit |
| AGFI | ≥0.90 | 0.920 | BetterFit |
| TLI | ≥0.90 | 0.964 | BetterFit |
| CFI | ≥0.90 | 0.981 | BetterFit |

Based on Table 8 it is known that for the GOF value all tests show a better fit because they have fulfilled their respective cut off values, namely the Chi-Square value of 34.141, the DF value shows a positive 15, the RMSEA value is 0.072 <0.08, the GFI value is 0.967> 0.90 , the AGFI value was 0.920>0.90, the TLI value was 0.964>0.90, and the CFI value was 0.81>0.90.

After the model is fit, then what can be seen is the value of the standardized loading factor for all indicators that measure the Social Capital variable. The estimated value of all indicators can be seen in Table 9.

**Table 9 . Standardized loading factor of Social Capital (SC)**

| Latent | Indicators | sl | $SL^2$ | Measurement Error $(1-SL^2)$ | SE | CR | P |
|---|---|---|---|---|---|---|---|
| Social Capital | SC1 | 0.474 | 0.225 | 0.775 | | | |
| | SC2 | 0.594 | 0.353 | 0.647 | 0.129 | 10.168 | 0.00 |
| | SC3 | 0.468 | 0.219 | 0.781 | 0.386 | 5,704 | 0.00 |
| | SC4 | 0.401 | 0.161 | 0.839 | 0.394 | 5,099 | 0.00 |
| | SC5 | 0.797 | 0.635 | 0.365 | 0.334 | 7,386 | 0.00 |
| | SC6 | 0.807 | 0.651 | 0.349 | 0.235 | 7,536 | 0.00 |
| | SC7 | 0.886 | 0.785 | 0.215 | 0.317 | 7,674 | 0.00 |
| | SC8 | 0.664 | 0.441 | 0.559 | 0.276 | 6,768 | 0.00 |
| | Σ | 5,091 | 3,470 | 4,530 | | | |
| | **Construct Reliability** | **0.851** | | | | | |
| | **Variance Extracted** | | **0.534** | | | | |

From the processing of the AMOS output data above, it can be seen that from the results of the measurement model the Social Capital variable can meet the value required for convergent validity and its indicators can also reflect their respective latent variables. All indicators have standardized loading (SL) > 0.30. All indicators are significant at the 3% level with CR > 1.96.

In the table it can also be seen that construct reliability and variance extracted from social capital variables have values of 0.851 and 0.534 respectively. This value meets the required value for construct reliability (0.851> 0.70) and variance extracted (0.534≥0.50), so that the Social Capital variable

has good reliability and is able to explain indicators better and passes the discriminant validity requirements.

**Measurement Model/Confirmatroy Factor Analysis of Risk Taking**

Confirmation Factor Analysis (CFA) for other exogenous variables in this study is risk taking. CFA processing results for risk taking variables can be seen in Figure 5.

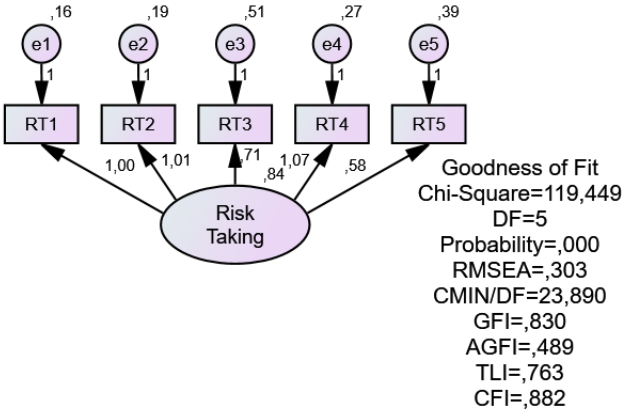


Figure 5. CFA Variable Risk Taking

In Figure 5 it can be seen that the loading factor of all indicators is ≥ 0.30 and is significant. However, this model needs to be modified because it does not meet the GOF requirements so that the model does not fit as shown in Table 10.

Table 10. Goodness of Fit Risk Taking

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 119,449 | marginal |
| DF | - | 5 | - |
| probability | ≥0.05 | 0.000 | marginal |
| RMSEA | ≤0.08 | 0.303 | marginal |
| CMIN/DF | ≤2.00 | 23,890 | marginal |
| GFI | ≥0.90 | 0.830 | marginal |
| AGFI | ≥0.90 | 0.489 | marginal |
| TLI | ≥0.90 | 0.763 | marginal |
| CFI | ≥0.90 | 0.882 | marginal |

Based on Table 10, it can be seen that some of the GOF criteria still show marginal because they still do not meet their respective cutoff values (Chi-Square value 119.449, probability value 0.00 <0.05, RMSEA value 0.303> 0.08, CMIN/DF value 23.890>2, GFI value 0.830<0.90, AGFI value 0.489<0.90, TLI value 0.763<0.90, and CFI value 0.882<0.90). From the results of Table 18, it can be said that this measurement model is not fit. So it is necessary to modify the model in order to find a fit model.

For these conditions, what needs to be done next is to improve a model by taking into account the value of modification indexes (Ghozali, 2016). The value of the modification index indicates a decrease in the Chi-Square value if a certain indicator error is correlated with errors in other indicators according to the recommendations for the modification index displayed by the AMOS software. So in the CFA Risk Taking test, several model modifications were made to obtain a fit model as follows:

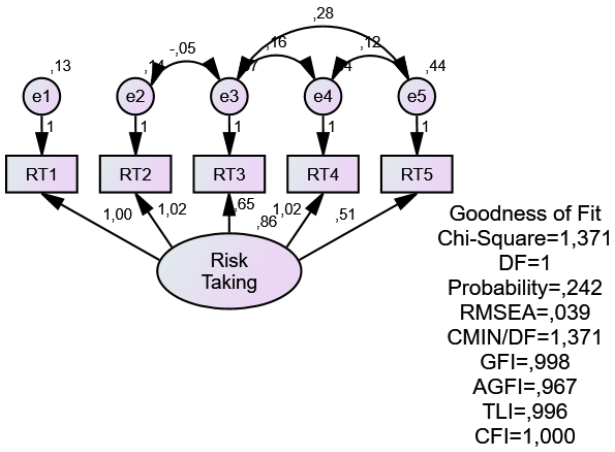


Figure 6. Output Modification Indeces Variable Risk Taking

Figure 6 shows that a modification of the Social Capital CFA model has been carried out by correlating the largest error value in order to reduce Chi-Square. The correlated error values are several indicators in the variables, namely e3 and e5; e3 and e4; e4 and 45; e2 and e3. So that the Risk Taking variable CFA model test has been carried out to get the appropriate GOF criteria, can be seen in Table 11.

Table 11. Goodness of Fit Risk Taking Modification

| Goodness of Fit Index | Cut-Off Value | Estimation Results | Evaluation |
|---|---|---|---|
| Chi-Square | Expected small | 1,371 | BetterFit |
| DF | - | 1 | - |
| probability | ≥0.05 | 0.242 | BetterFit |
| RMSEA | ≤0.08 | 0.039 | BetterFit |
| CMIN/DF | ≤2.00 | 1,371 | BetterFit |
| GFI | ≥0.90 | 0.998 | BetterFit |
| AGFI | ≥0.90 | 0.967 | BetterFit |
| TLI | ≥0.90 | 0.996 | BetterFit |
| CFI | ≥0.90 | 1,000 | BetterFit |

Based on Table 11 it is known that for the GOF value all tests show better fit because they have fulfilled their respective cut off values, namely the Chi-Square value of 1.371, the DF value shows positive 1, the probability value is 0.242> 0.05, the RMSEA value is 0.039 <0.08 , CMIN/DF value was 1.371<2, GFI value was 0.998>0.90, AGFI value was 0.967>0.90, TLI value was 0.996>0.90, and CFI value was 1.000>0.90.

After the model is fit, then what can be seen is the value of the standardized loading factor for all indicators that measure the Risk Taking variable. The estimated value of all indicators can be seen in Table 12.

**Table 12 . Standardized loading factor of Risk Taking (RT )**

| Latent | Indicators | sl | $SL^2$ | Measurement Error $(1-SL^2)$ | SE | CR | P |
|---|---|---|---|---|---|---|---|
| Risk Taking | RT1 | 0.930 | 0.865 | 0.135 | | | |
| | RT2 | 0.929 | 0.863 | 0.137 | 0.042 | 24,016 | 0.00 |
| | RT3 | 0.623 | 0.388 | 0.612 | 0.058 | 11,085 | 0.00 |
| | RT4 | 0.850 | 0.723 | 0.278 | 0.051 | 19,949 | 0.00 |
| | RT5 | 0.582 | 0.339 | 0.661 | 0.049 | 10.372 | 0.00 |
| | Σ | 3,914 | 3,177 | 1,823 | | | |
| | **Construct Reliability** | **0.894** | | | | | |
| | **Variance Extracted** | | **0.635** | | | | |

The processed results of the AMOS output data above can be seen that from the results of the measurement model the Entrepreneurial Orientation variable can meet the value required for convergent validity and the indicators can also reflect their respective latent variables. All indicators have standardized loading (SL) > 0.30. All indicators are significant at the 3% level with CR > 1.96.

In the table it can be seen that construct reliability and variance extracted from risk taking variables have values of 0.894 and 0.635 respectively. This value meets the required value for construct reliability (0.894> 0.70) and variance extracted (0.635≥0.50), so that the Risk Taking variable has good reliability and is able to explain indicators better and passes the discriminant validity requirements.

Based on this discussion, it can be concluded that the CFA variable Risk Taking has met convergent validity, discriminant validity, construct reliability and acceptability. fit of fulfilled GOF.

## CONCLUSION

This study aims to see the effect of Social Capital on Sustainability with Risk Taking as a mediating variable in SMEs in West Sumatra. With a population of 296,052 and a sample of 250 respondents. The measurement model hypothesized in this study is accepted, which means that the measurement model is in accordance with the data collected on SMEs in West Sumatra . All indicators are significant and more than 0.3 which shows that all of these indicators are valid .

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