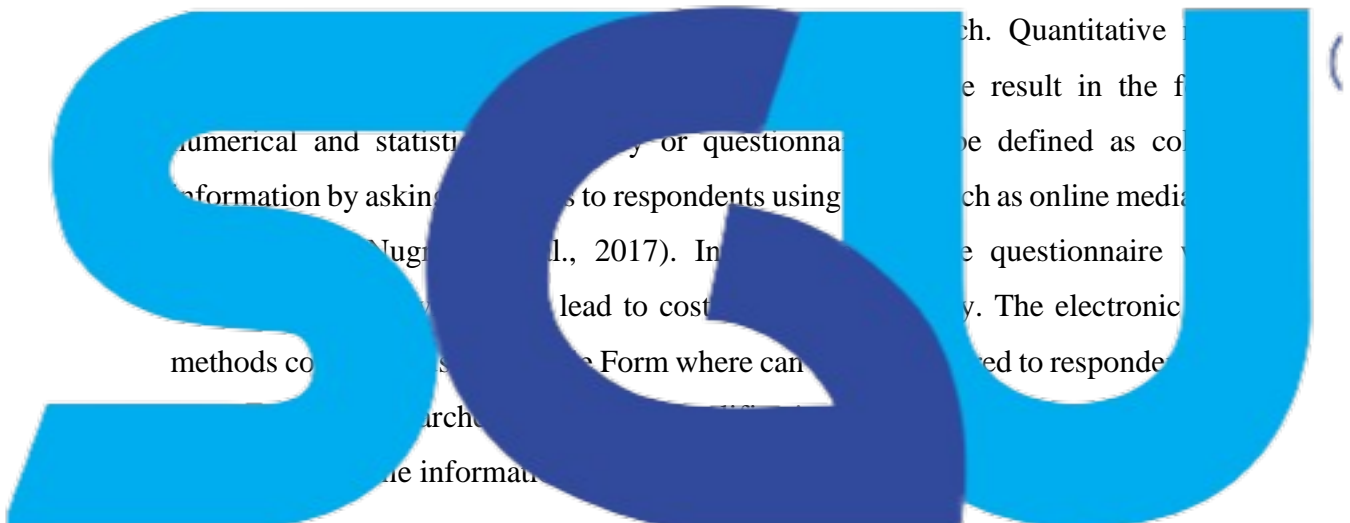## CHAPTER 3 – RESEARCH METHODS

3.1 Type of Study

The goal of this research is to identify which consumer based brand equity elements that are most impactful towards consumer purchase intention in the case of Lemonilo healthy instant noodles. This research uses a descriptive method which is the type of conclusive research that aims to do the testing on some relationship and the association.

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Qualitative research interpretive techniques aim to comprehend and explain the significance rather than the frequency of specific phenomena. These techniques include various methods such as individual in-depth interviews, group interviews, participant observation, video recording of participants, projective techniques, psychological testing, case studies, street ethnography, elite interviewing, document analysis, and the study of proxemics and kinesics (Malhotra, 2012). By using the qualitative method, the writer can determine the position of the Lemonilo healthy instant noodles brand in the market and also identify competing brands in the healthy instant noodle category available in the market. This study utilized the technique of individual depth interviews with 15 respondents conducted individually, with the aim of obtaining insights into the top brands in the healthy instant noodle category in the market.

3.1.1 Unit Analysis

Unit analysis is the whom or what that will be the main subject in the study. Unit analysis can be identified by individual, group, and organization as the type can be a subject, person, time or event. In the business field, one of the most commonly used unit analyses are individuals as the first level of unit analysis (Kumar, 2018). Individual as unit analysis is correlated with the individual behaviors, perception, attitude or opinion of each person.

In this study, the researchers will focus on the individual as the unit analysis. The individuals in this research are those who are consuming and ever purchased Lemonilo insight into the b tion and buying b that in the end might ful in the success of ss (Kumar, 2018).

S anning

3.2.1 Popu

this re nonilo healthy i . The population is chosen as this research aims to identify the consumer based brand equity to purchase decision of Lemonilo healthy instant noodles. Thus, the target respondents or samples are those among the population

3.2.2 Sampling Method

The sampling design can be determined using one of two sampling methods which are probability sampling or non-probability sampling. According to (Fauzi, 2017), Probability sampling or mostly known as 'random sampling,' is a type of sampling in which every item in the universe has an equal chance of being present in the sample. In probability sampling, the sample chosen will be random and without a certain process and the member from the population has the same equality to be chosen as the sample of the research. Probability sampling is categorized into numerous types which are

systematic random sampling, stratified types of sampling, cluster sampling, multi-stage sampling, and area sampling.

On the other hand, Non-probability sampling is defined as a sampling process that does not provide a basis for forming an opinion about the probability that objects in the universe will be included in the study sample or in another word, the sample that are collected is a non random sample but specified to be present in the sample. Researchers will look at five alternative sampling methods that take into account non-random designs. Quota sampling, Accidental sampling, Judgemental sampling or Purposive sampling, Expert sampling, Snowball sampling, and Modal instant sampling are some
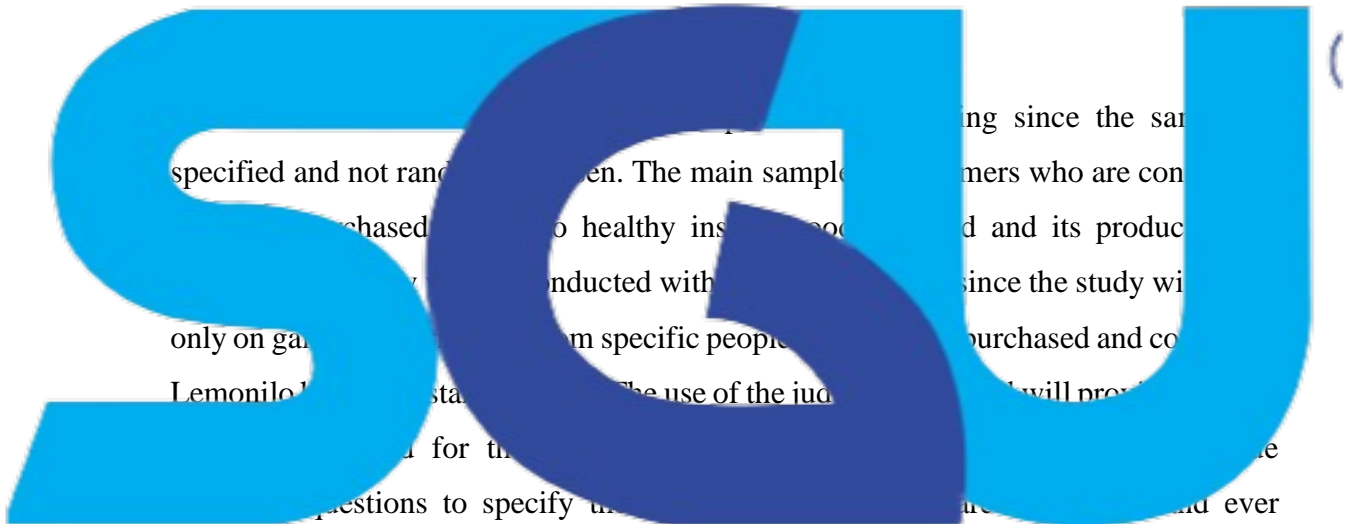
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purchased Lemonilo healthy instant noodle.

3.3 Sample Size

In this research, According to (Hair et al., 2019) to determine the number of sample is using the number of indicator multiplied by five to ten.

$$n = y \times 5 \ (minimum) \ or \ y \times 10 \ (maximum)$$
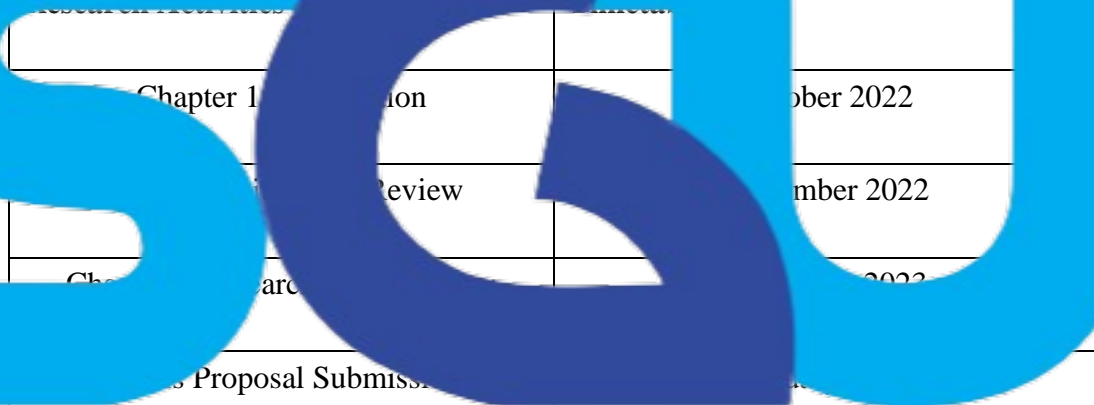
n = Total Respondent

y = Total Question

Based on the known value, the following calculation of sample size is:

$$n = 29 \text{ X } 7$$

$$n = 203$$

According to the number of samples above, the researchers will take 203 number of samples that will be used as the respondents. Researcher will spread the questionnaires in Jakarta and Tangerang area.

Several questions related to the research will be provided using the Likert Scale 1-5 on a questionnaire that will be distributed to the correspondents using Google Form

Research Activities	Timeline
Chapter 1 Introduction	...ber 2022
Chapter 2 Literature Review	...mber 2022
Chapter 3 Research	...2023
Thesis Proposal Submission	
Chapter 4 Result and Discussion	May 2023
Chapter 5 Conclusion and Recommendation	June 2023
Thesis Submission	June 2023

Table 3. Time frame of study

Source: Author's own table

3.5 Data Sources and Collection

3.5.1 Type of Data

The primary data for this research is the questionnaires that are given to the consumers of Lemonilo healthy instant noodles that already know the brand and products, ever purchase the product and consumed the product. The questionnaire will be distributed during the data collection process and contain the components of Consumer Based Brand Equity and health motivation that will impact consumer purchase decision of Lemonilo healthy instant noodles.

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3.5.2 Q

aire in this resea   ikert scale. The question can be a question regarding self-information, demographic, personal behavior, and the questions according to independent and dependent variables in this research. The questionnaire will be answered using Likert Scale to measure how respondents strongly agree or strongly disagree with the statement given in the questionnaires. The researcher used the scale from 1-5 to define the level of agreement and disagreement.

Scales	Indicators
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree

5	Strongly Agree

Table 4. Likert Scales

Source : Aris, 2016

The questionnaire that will be distributed to the respondents will be divided into three sections. The first section is the introduction which consists of a greeting and brief explanation about the questionnaire. The second section is the screening questions, followed by the third section is about respondents profiles that consist of age, gender, domicile, profession, monthly income . The last third will be the main survey section where the respondents need to answer several questions regarding dependent and

to accuracy the data collection method, the screening section is required to

right respondents that will give the best information for the research obj

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question be possibility of wro ts.

	Questions	
1	Do you know Lemonilo healthy instant noodles?	Yes / No
2	Have you ever purchased Lemonilo healthy instant noodles products?	Yes / No
3	Have you ever consumed Lemonilo healthy instant noodles?	Yes / No

Table 5. Screening Questions

3.5.3 Data Collection Method

This research will collect both primary and secondary data. A questionnaire is a set of multiple questions that are asked to previously chosen respondents in order to extract certain information. The questionnaire as primary data will be distributed online using Google Form to create online based questionnaires which the questions will relate to

dependent and independent variables in this research. Questionnaires serve four fundamental purposes which are gathering related data, creating data that is similar and can be analyzed, minimizing bias in formulation, and creating multiple questions that are appealing and varied for the respondent.

In addition, the secondary data used for this study will be gathered from existing research, journal, article and books in order to support the research findings and theory regarding dependent and independent variables.

3.6 Variable Operationalization

			S
		healthy instant noo ugh commercia ntoso & Ca Q nize Lemonilo t by looking	L
		Q5.I can easily recognize Lemonilo healthy instant noodle without any help or clue (Santoso & Cahyadi, 2014)	
	Brand Recall	Q1.I think about Lemonilo when it comes to healthy instant noodle brand (Santoso & Cahyadi, 2014)	
	Top of Mind	4.Lemonilo is the first healthy instant noodle brand that come	

		into my mind (Santoso & Cahyadi, 2014)	
Brand Association	Attributes	Q1.The price of Lemonilo healthy instant products suits with my preferences (Farid Shamsudin et al., 2020) Q3.I attract with the ingredients of Lemonilo healthy instant ___nt from other ___d (Farid Shamsudin ___ 20)	Likert
		Q5.I am aw___ consuming Le___stant noodle will g___ me (Farid Shamsudin ___	
	Att___	___op___ (Farid Shamsudin et al., 2020) Q4.I think Lemonilo healthy instant noodles is unique (Farid Shamsudin et al., n.d.)	
Perceived Quality	Reason to Buy	Q1.Lemonilo healthy instant noodles provide a detail product information on their products (Chieng, 2011)	Likert

		Q5.I prefer to choose a product with high quality for my body (Chieng, 2011)	
	Price Premium	Q3.I trust the quality of Lemonilo healthy instant noodles (Chieng, 2011)	
		Q4.Lemonilo's slightly higher costs defined their quality (H.-H.	
		noodles has a better pro___lity compared t___ roducts (___	
Brand L___	___nal	Q1.___loyal to Lemonilo ___ healthy	I
		Q4.I will choose Lemonilo healthy instant noodles in the future (H.-H. Liu & Wang, 2019)	
		Q5.I will recommend Lemonilo healthy instant noodles to others (H.-H. Liu & Wang, 2019)	
	Behavioral Loyalty	Q2.Lemonilo is my favorite healthy instant noodle brand	

		(H.-H. Liu & Wang, 2019)	
		Q3.I am willing to pay slightly higher costs to purchase Lemonilo healthy instant noodles (H.-H. Liu & Wang, 2019)	
Health Motivation		1.I observed the nutrition claim when I see the product in the market (Loebnitz & Grunert,	Likert
		2.I preferab... ose product that provid... claim (L... 018)	
		3.I prefera... healthy ...	
		4.I prefer to choose products that contain a benefit statement for my body (Loebnitz, Grunert, 2018)	
		5.I choose the product that suitable with my daily nutrition needs (Loebnitz & Grunert, 2018)	

| Purchase Decision | | 1. I purchase Lemonilo healthy instant noodles because they provides excellent information on their product (Badir & Andjarwati, 2020)

2. I purchase Lemonilo healthy instant noodles because i trust the brand (Badir & Andjarwati,

3. I purchas___lo healthy instant noo___use it is b___dir & Andj____

___with my preferences (Badir & Andjarwati, 2020) | Likert |
| --- | --- | --- | --- |

Table 6. Variable Operationalization

3.7 Data Processing Procedures

To reduce errors and identify potential complications, a preliminary review of the questionnaire is conducted (Sekaran & Bougie, 2016). This involves distributing the questionnaire to 40 participants. Adam (2018) outlines a four-step process for carrying out a pre-test, which includes data preparation, data screening, validity testing, and reliability testing.

3.7.1 Data Preparation

Data preparation in a research study involves the process of organizing, cleaning, transforming, and structuring raw data to make it suitable for analysis (zahra). It ensures that the data is accurate, complete, consistent, and in the desired format for the research objectives. Data will be gathered through questionnaires, which will be distributed via Google Forms. The choice of Google Forms is driven by its ability to reach respondents who are geographically distant and its convenient feature of providing a summary of respondents in an organized manner. The questionnaires will be structured into free sections, namely, introduction, respondent screening questions, respondent profile, and test phase, the ai to validity and rel ests using the latest v SPSS. If the te confirm the valid liability of the data rcher will proceed wi ting the question sar

3.7.2 Data

rs to issues that data (huebner). It involves conducting preliminary checks and assessments to ensure that the data is suitable for analysis and meets the necessary criteria for the research study. The first phase is utilizing SPSS software to examine and identify any missing data. This particular stage is undertaken with the aim of ensuring the reliability of the original data and meeting the requirements of basic assumption. Subsequently, the second step involves the utilization of IBM SPSS software to assess the accuracy of the data. The accuracy of the data is settled using theoretical range minimum and maximum scores ranging from 1 to 5. The third and final steps of the data screening process involve the identification of outliers. These outliers are visually represented by means of boxplots within IBM SPSS software (Hair et al.,2018). According to Hair et al. (2018), the meaning of outliers are observations on the distinguished combinations of characteristics that are differentiate from the rest of the answers

	N	Missing	Range	Minimum	Maximum
BA1	40	0	3	2	5
BA2	40	0	3	2	5
BA3	40	0	3	2	5
BA4	40	0	4	1	5
BA5	40	0	4	1	5
BAS1	40	0	4	1	5
BAS2	40	0	4	1	5
BAS3	40	0	3	2	5
BAS4	40	0	3	2	5
BAS5	40	0	4	1	5
PQ1	40	0	3	2	5
				2	5
				2	5
				1	5
PQ5		0	3	2	5
BL1		0	4	1	5
		0		1	5
		0		2	5
BL4		0		1	5
BL5		0	3		
	40				
	40				
HM3	40	0		2	5
HM4	40	0	3	2	5
HM5	40	0	3	2	5
PD1	40	0	4	1	5
PD2	40	0	3	2	5
PD3	40	0	3	2	5
PD4	40	0	3	2	5

Table 7. Missing Value Results

Source : SPSS output (2023)

The provided table displays the absence of missing values for both the independent variables (CBBE and health motivation) and the dependent variable (purchase decision). BA refers to brand awareness, BAS refers to brand association, and BL refers to brand loyalty, PQ refers to perceived quality and HM refers to health motivation. According to the table, there is no missing value for pre-test data. This indicates that 40

respondents answered all the questions and did not skip each question. Based on the table, it is evident that there are no missing values in the pre-test data. This implies that all 40 respondents have answered every question without skipping any questions.

3.7.3 Validity Test

The main function of the Validity test will be to determine the validity of the questionnaire. The validity also refers to the extent to which a measuring instrument's determination and accuracy in carrying out its measuring instrument function are accurate (Dewi, 2022). In other words, validity is one of the tests performed by the researcher to verify whether the measurement is precise and appropriate for the p the data to be me ugiyono, 2003). The Pearson R-Test, is a used to assess the a of data. The crite lidity by Sujarwen lows:

• I icates data is va

r-tai

valid, it indicates using appropriate tools. In this study, a significance level of 0.05 and an r-table value of 0.312 (calculated with a degree of freedom of 38, derived from a sample size of 40) were utilized.To determine the r-table value, Sujarweni (2015) uses the equation below:

$$Df = N - 2$$

Where:

Df = Degree of Freedom

N = Total Samples or Respondents

3.7.4 Reliability Test

Reliability tests are used to assess the internal consistency of test items, revealing how interconnected the test items or questions are. Therefore a reliability test must be performed to confirm that the measurement tools used for the research are exact, accurate, consistent, and have a condition of validity (Ainiyah et al., 2016)

A common interpretation of the coefficient is $\alpha < 0.5$ for low reliability, $0.5 < \alpha < 0.8$ for moderate (acceptable) reliability, and $\alpha > 0.8$ for high (good) reliability. A low alpha value may result from; a small number of test items or questions, heterogeneity of items which measure more than one concept, construct or knowledge area, and poorly

Cronba		Consistency
		ellent
		od
50 -		
0.50 - 0.60		
< 0.50		Unacceptable

Table 8. Cronbach Alpha Score

Source : Ghozali (2016)

3.8 Data Analysis Technique

Once the pre-test has been conducted and has confirmed the validity and reliability of the data, the next phase involves distributing the questionnaire to the target sample of 203 respondents. Upon collecting responses from the participants, the subsequent step is data analysis, which involves interpreting the processed data. Dudovskiy (2018) explained quantitative data analysis as raw data that has not been analyzed nor processed. This This study proceeds onto identifying the validity and reliability of the data by using PLSSEM(Partial Least Squares – Structural Equation Modeling) method

using the recent software version of SmartPLS and Microsoft Excel for post-test
analysis. Responses from survey research questions and participant demographic data
were analyzed using descriptive statistics.

3.8.1 Steps in Data Processing

The researcher employed the SmartPLS test, which utilizes Partial Least Squares (PLS),
as the statistical technique in this study. PLS is a multivariate statistical method that
allows for the comparison of multiple independent variables and multiple dependent
variables. It is a variant of structural equation modeling (SEM) that specifically
addresses challenges encountered in data analysis such as small sample sizes, missing
uations where the
ues are present, provide solution for mul ession analysis (A
& Jogiyanto, 2015). P se diagram models t hypotheses and
s str quation mod re . The path mod
his theory is u redict outcomes
systematica es developed by hods (Hair et a
The mod bo stimates for t e inn
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VE), Composite Relia nd r

There are several reasons that cause the use of PLS in a study including the superiority
of PLS in analyzing data. According to Abdillah and Hartono (2015) the advantages of
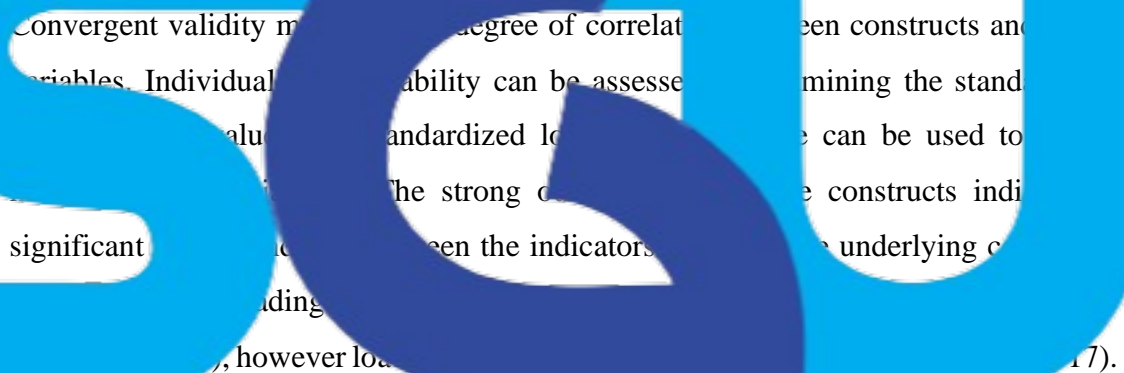PLS are:

1. Able to model many dependent and independent variables (group models).

2. The results remain strong even though there are abnormal and missing data.

3. Generate independent latent variables directly based on cross-products that involve
the dependent latent variable as a predictive power.

4. Can be used on reflective and formative constructs.

5. Can be used on small samples.

6. Does not require data with normal distribution.

7. Can be used on data with different types of scales, namely: nominal, ordinal, and continuous.

3.8.2 Outer model

This research focuses on outer model analysis in SmartPLS, a popular structural equation modeling (SEM) software, based on the insights provided by Hair et al. (2021). The model includes indicator reliability, composite reliability to determine internal consistency, convergent validity, and discriminant validity

Convergent validity m   degree of correlat   een constructs an
riables. Individual   ability can be assesse   mining the standa
alu   andardized lo   e can be used to
The strong   e constructs indi
significant   een the indicators   underlying c
ding
however lo   7).
The squared value of the loading factor is known as communalities, and it represents the percentage of constructs that can explain the variations in the indicator.

3.8.2.2 Validity test

In the validity test, convergent validity test and discriminant validity test are applied. The AVE (Average Variance Extracted) value represents the extent of variation or diversity captured by the manifest variables associated with a latent construct. In other words, a higher AVE value indicates a greater representation of the manifest variables within the latent construct (Purwanto & Sudargini, 2021). An AVE value of at least 0.5 indicates a reliable measure of convergent validity, implying that the latent variable can explain over half of the indicators' variance on average (Hair)

3.8.2.3 Reliability test

Creswell (2014) defines reliability as the degree of internal consistency and stability of scores across items, as well as consistency in test administration and scoring. Similarly, Sekaran (2011) also describes reliability as a measure of both consistency and stability.Stability refers to the characteristic of remaining constant over time, ensuring that the respondents will consistently be identified regardless of when the data is collected (Lameck, 2013). Consistency means that the measurements generate the same interpretation when assessed independently, considering the identical concept.

There are two measurements to assess the internal consistency or construct reliability which are Cronbach's Alpha and Composite Reliability (CR) scores. In structural [...] ore effective mea[...] does not assume[...] weighting for each in[...]ach's Alpha ten[...]erestimate the co[...] reliability compared[...]mposite Reliability ([...]air et al., 2017[...] Con[...] eliability (CR[...]ach's Alpha. Ac[...] values abo[...]ered highly satis[...] (Purwanto[...]

[...]ant vali[...]

To assess discriminant validity, it is necessary to examine the values in the cross loading table. Validity of an indicator is confirmed when it exhibits the highest loading factor value for the intended construct compared to its loading factor value for other constructs. Each indicator's cross loading value to its corresponding construct should be greater than 0.5 (Nasution et al., 2020).

3.8.3 PLS -SEM Structural Model or Inner model

The SmartPLS 4 software is utilized for conducting structural model analysis to examine the overall model and test the proposed hypotheses. The analysis involves two key steps. Initially, the R2 value is examined to assess the model's goodness-of-fit. This provides an indication of how well the model explains the observed data. The second step involves analyzing the coefficient values and p-values of the model's parameters. These tests aim to illustrate the relationships between the variables as hypothesized. By

analyzing these parameters, the researcher can determine the significance and strength
of the associations between the variables in the structural model.

3.8.3.1 Hypothesis testing

Evaluation of the structural model in PLS by looking at the R^2 value for the listed
dependent construct, as well as the path coefficient value or the t-values of each path
for the significance test between constructs in the structural model. The value of R^2 is
used to measure the level of variation in the changes of the independent variable to the
dependent variable.The R^2 value is typically within the range of 0 to 1. In marketing-
focused scholarly research, an R^2 value greater than 0.50 or 50% is considered valid.

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(Henseler et al., 2009)

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efficient or   dicated by the T-S

value, mus   r the two-tailed   Hair et al.,20

ed i

(Hair et al.,2   een

dependent and independent variables.