

The role of website quality, perceived value, and consumer satisfaction on repurchase intentions of Indonesian railway tickets

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ABSTRACT

Purpose — *This study aims to determine the role of website quality, perceived value, and consumer satisfaction on the repurchase intention of Indonesian railway tickets.*

Method — *This research employs a quantitative methodology to investigate the causal links between variables. This study's sample consisted of 100 consumers of Indonesian railway tickets in Bandung who were randomly selected through the distribution of questionnaires and subsequently analyzed using regression analysis with the assistance of the Smart PLS software.*

Result — *This study's findings reveal that three criteria, namely website quality, perceived value, and customer satisfaction, substantially impact the repurchase intentions of Indonesian rail ticket purchasers.*

Contribution — *This study has implications for businesses, which should present information through their websites and provide excellent customer service to boost perceived value. In addition, the interactions carried out in the provision of services must address all client concerns so that consumers are pleased with the services rendered.*

Keywords: *website quality, perceived value, consumer satisfaction, repurchase intention*



INTRODUCTION

The transportation industry is vital in assisting and supporting the country's economic growth. Many service industries, especially in transportation, compete to satisfy every customer. According to [Lukman et al. \(2021\)](#), maintaining consumers is much more difficult when compared to finding new customers. Therefore the concept of satisfaction and perceived value is one of the factors of concern to the company ([Dhingra, 2020](#); [Neza & Llazo, 2017](#)). Consumer satisfaction can be felt if the product or service is in line with expectations. Customers can be satisfied by comparing reality with customer expectations ([Ullah et al., 2020](#)). In other words, satisfaction can only be met if the performance produced by the company exceeds customer expectations. Various writers and researchers have emphasized the importance of customer satisfaction and dissatisfaction related to achieving company success and the emergence of failure in meeting customer expectations ([Mwangi & Wanjau, 2018](#); [Yoo, 2017](#)). [Qalati et al. \(2019\)](#) specifically explained that meeting customer expectations will provide customer satisfaction and develop customer loyalty, reducing customer loss or increasing retention rates. Service quality delivery is an essential factor to consider in building customer satisfaction and the relationship to be developed between the company and the customer ([Clifton et al., 2017](#)). [Kaur & Singh \(2017\)](#) states that when consumers are satisfied with a service, the intention to repurchase will increase.

In addition to customer satisfaction, several factors can increase consumer purchase intentions, like the perceived value of the product or service. [Hutagaol \(2019\)](#) mentioned perceived value as a trade-off between price and quality using the concept of value for money. Perceived value is an important factor that impacts consumer intentions to repurchase ([Konuk, 2019](#); [Widiandita & Ketut, 2020](#)). Perceived value means providing value to the customer for what he got at the expense of what he did to get the product or service. [Peng \(2019\)](#) stated that perceived value assesses the utility customers want from certain goods or services. These values can be the product, service, employee and image values. [Choi et al. \(2018\)](#) stated that perceived value arises when someone believes there is a value when buying the desired product. This perception is formed based on consumers' opinions, information, and the benefits customers feel after buying the product. Information can be easily accessed via the website ([Jauhari et al., 2019](#); [Suhendar, A & Johan, A, 2022](#)). However, consumers will be sceptical of information if a website does not have quality. The website is a collection of information in the form of text, scripts, images, and sounds that are dynamic and interrelated ([Ardi & Yulisetiari, 2018](#); [Giao, 2020](#)). A website has become necessary for people to find or disseminate information.

For consumers, especially millennials, websites are necessary to find products or services to buy. The information obtained through the website will make it easier for consumers to make decisions. Internet users are increasing daily, and they use the internet to find information about what they need and want to purchase. Thus, companies must be able to facilitate by presenting a quality website so that consumers feel comfortable and easy to access it. According to [Qalati \(2021\)](#), website quality is a tactic or measurement method based on the opinions of its users. [Kaya \(2019\)](#) states that website quality is defined as a measure of how well a website meets the needs of its users. [Tandon \(2020\)](#) stated that the quality of the website could be seen from the amount of contribution to the usability of its customers.

In Indonesia, public railroads are only operated by PT Kereta Api Indonesia (KAI). The company is entirely state-owned and reimburses the government for track entry fees. Since its significant reform during 2009-2014, PT KAI continues to mark the development of its business by providing accessible features. They provide accessibility to purchase train tickets through online applications, aside from selling them through different platforms such as Traveloka, Booking.com, Tiket.com, and others. Although PT KAI is the sole provider of railway transportation, the community in Indonesia are still faced with other alternatives to public transportation, such as bus, minibus, and aeroplanes. It is crucial and still significant for PT KAI to maintain its business continuity and ensure its consumers will continue using it as transportation.

Research conducted by [Huy \(2019\)](#) states that website quality can increase sales and the intensity of sales transactions. A website's quality must have certain features to provide convenience for its users, which is an important part of consumers to make repurchases. In addition, according to [Amin \(2021\)](#) the quality of the website can be seen in providing secure payment methods, convenience features, and quality of information. This is as stated by [Widagdo \(2021\)](#) that the quality of the website is based on the system, quality of information and interaction. [Molinillo \(2021\)](#) states that there are factors that need to be considered in designing so that a website can be of high quality if the context of its contents can be understood easily. The website has become a visual form of the products offered by the company to satisfy consumers. According to [Molinillo \(2021\)](#) there is a relationship between the quality of the website in increasing repurchase intentions.

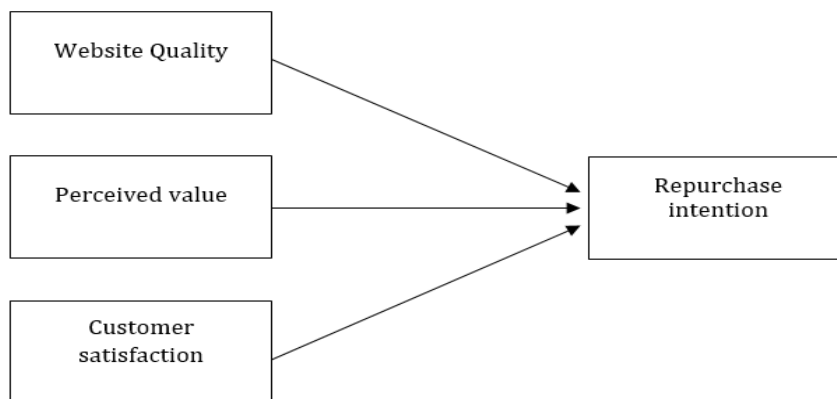
The research that mentions how the quality of the website itself can increase repurchase intentions in the service industry is still little explored, especially in PT KAI services. Therefore, this study aims to fill the existing research gaps on the limited research on the context of PT KAI consumers by examining the

influence of website quality, perceived value, and customer satisfaction on repurchase intention of Indonesian railway tickets.

METHOD

The research method used in this study is quantitative. Sekaran (2019) states that this quantitative approach is a study that examines the form of problems through phenomena and examines the causal relationship between variables. To examine the hypothesis in this study, data were collected from several PT KAI customers at the Garut Cibatuan local station or Cibatuan station, Bandung, West Java. The sample in this study is the population itself as many as 100 people selected incidentally. Then the questionnaire was designed to analyze the information collected regarding website quality, perceived value and customer satisfaction. Data collection in this study was carried out by distributing questionnaires and analyzed using a multiple regression approach using PLS.

Figure 1. Conceptual framework



RESULT AND DISCUSSION

Based on the processing results regarding the respondents' characteristics, the researchers found that based on gender, women were greater than men by 57%. Meanwhile, based on age, the researchers obtained that most respondents were 25 to 30 years old. Based on the intensity of PT KAI's services, most consumers often use it. And finally based on job characteristics, most respondents are civil servants.

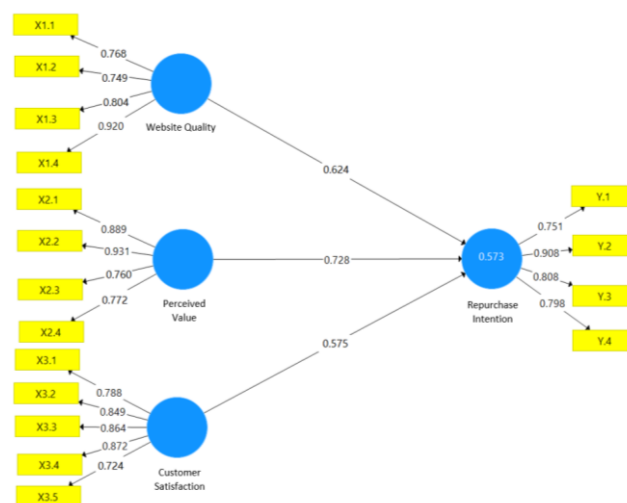
Table 1. Characteristics of respondents

Characteristics of respondents	Total	Percentage
Gender		
Male	43	43%
Female	57	57%
Age		
20 - 25 years old	15	15%
25 - 30 years old	19	19%
30 - 35 years old	14	14%
35 - 40 years old	11	11%
More than 40 years	41	41%
The intensity of using PT KAI's services		
Often	37	37%
Currently	31	31%
Very often	32	32%
Job		
Self-employed	31	31%
Private	17	17%
Civil servant	36	36%
Student	16	16%

Source: data processed (2023)

The research model test was conducted to see the suitability of the model built in the research. A good research model can describe the suitability of the relationship between variables in research. SmartPLS 3.0 has provided calculation results showing the criteria used to assess whether the model is appropriate. From the figure below, each value meets the ideal criteria, so it can be concluded that the overall research model is good and appropriate.

Figure 2. Output of PLS structural model



Source: data processed (2023)

Convergent validity and reliability

Three values must be considered at this stage: convergent validity, discriminant validity, and composite reliability. Convergent validity is the correlation between reflexive indicator scores and latent variable scores. In this study, the convergent validity requirement uses a minimum limit of 0.7 (Ghozali, 2014). Discriminant validity measures reflexive indicators based on cross-loading with their latent variables. Another method is to compare the square root of each construct's average extracted value (AVE) with the correlation between the other constructs in the model. Suppose the initial measurement values of the two methods are better than the values of the other constructs in the model. In that case, it can be concluded that the constructs have good discriminant validity values or vice versa. Therefore, it is recommended that the measurement value be greater than 0.50. Composite reliability, a block indicator that measures the internal consistency of construct indicators, shows a level that indicates general latency (unobserved). This construct is declared reliable if it has a composite reliability value above 0.70 and Cronbach's alpha above 0.70.

Convergent validity

Convergent validity test determines instrument items that can be used as indicators of latent variables. The results of this test are based on the values of the loading factors (outer loadings). The results of the convergent validity test for all items are > 0.70 as shown in the following table.

Table 2. Convergent validity

Variable	Indicator	Outer loadings	Information
Web quality	X1.1	0.768	Valid
	X1.2	0.749	Valid
	X1.3	0.804	Valid
	X1.4	0.920	Valid
Perceived value	X2.1	0.889	Valid
	X2.2	0.931	Valid
	X2.3	0.760	Valid
	X2.4	0.772	Valid
Customer satisfaction	X3.1	0.788	Valid
	X3.2	0.849	Valid
	X3.3	0.864	Valid
	X3.4	0.872	Valid
	X3.5	0.724	Valid
Repurchase intention	Y.1	0.751	Valid

	Y.2	0.908	Valid
	Y.3	0.808	Valid
	Y.4	0.798	Valid

Source: data processed (2023)

A validity test can also be carried out with a test method that compares the square root value of the average extracted variance (AVE) in each construct with the correlation between other constructs in the model.

Table 3. Validity test

Variables	Average Variance Extracted (AVE)
Web quality	0.661
Perceived value	0.708
Customer satisfaction	0.675
Repurchase intention	0.669

Source: data processed (2023)

Composite reliability and Cronbach's alpha

Composite reliability and Cronbach's alpha tests measure a construct's reliability level. A construct can be reliable if the Cronbach's alpha and composite reliability values show results greater than 0.70. From the results of the reliability test in the following table it can be concluded that all constructs have a level of reliability that meets the criteria.

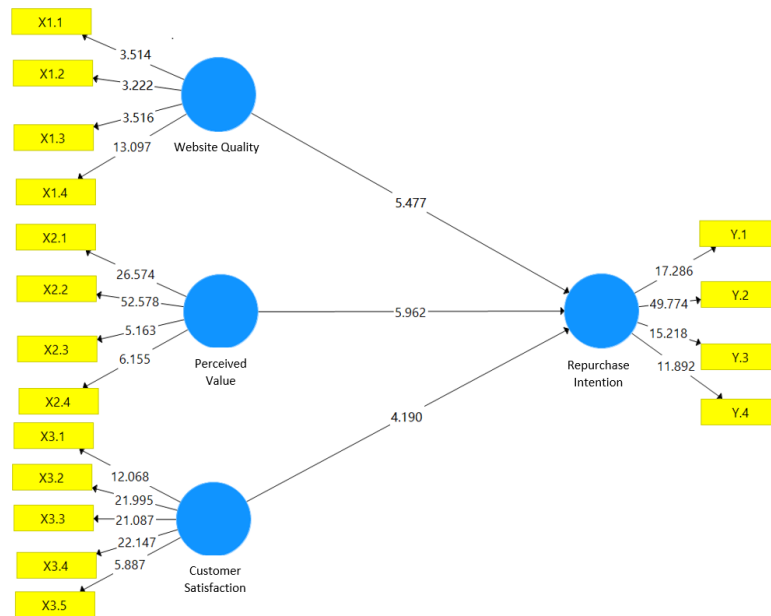
Table 4. Composite reliability test

Variable	Cronbach's alpha	Composite reliability
Web quality	0.815	0.886
Perceived value	0.795	0.906
Customer satisfaction	0.852	0.912
Repurchase intention	0.835	0.890

Source: data processed (2023)

Structural model testing (inner model)

The structural model in PLS was evaluated using R² for the dependent variable and the path coefficient for the independent variable was then assessed for significance based on the t-statistic value of each path. The structural model of this research can be seen in the following figure:

Figure 3. Output of PLS structural model

Source: data processed (2023)

Table 5. Coefficient test

Variable	R Square	Adjusted R Square
Repurchase intention (Y)	0.573	0.560

Source: data processed (2023)

The repurchase intention R Square value is 0.573. This result implies that the influence of website quality, perceived value, and customer happiness on repurchase intent is as high as 57.3%. In contrast, 42.7% is influenced by variables outside the scope of this study.

Goodness of fit

In the next stage, model evaluation will be done through goodness of fit. The Goodness of fit assessment is known from the Q-Square value. The Q-Square value has the same meaning as the coefficient of determination (R-Square) in the regression analysis, where the higher the Q-Square, the better the model can fit the data. The results of calculating the Q-Square values are as follows:

$$\begin{aligned}
 \text{Q-Square} &= 1 - [(1 - 0.573)] \\
 &= 1 - (0.427) \\
 &= 0.573
 \end{aligned}$$

The method presented above yields a Q-Square value of 0.573. This demonstrates that 57.3 percent of the variability in research data can be explained by the research model, while the remaining 42.7 percent is explained by elements outside the scope of this research model. On the basis of these findings, it can be claimed that the model in this study has a very high degree of fit.

Hypothesis testing

Table 6. Results of hypothesis test

Model causality	Original sample (O)	T Statistics	P value	Significance level
Web quality → repurchase intention	0.624	5.477	0.000	< 0.05
Perceived value → repurchase intention	0.728	5.962	0.000	< 0.05
Customer satisfaction → repurchase intention	0.575	4.190	0.000	< 0.05

Source: data processed (2023)

According to the preceding table, the t count value is 5.477 greater than the t table value of 1.9840, and the significance level is $0.000 < 0.05$. Consequently, website quality influences repurchase intent positively. The t count value of 5.962 is more than the t table value of 1.9840, with a significance level of $0.000 < 0.05$. Therefore, perceived intention influences repurchase intent positively. The t count value is 4.190, which is greater than the t table value of 1.9840, and the significance level is $0.000 < 0.05$. Therefore, the variable customer satisfaction has a positive effect on repurchase intent.

Discussion

Repurchase intention is a consumer behavior that gets a lot of attention for companies, especially in the service industry. By maintaining purchase intention, companies can prevent switching behavior. Furthermore, [Yoo \(2017\)](#) stated that repurchase intention becomes more important because it can retain customers. This study determines the effect of website quality variables, perceived value and customer satisfaction on repurchase intentions. The results in this study indicate that the website's quality significantly affects repurchase intentions.

These results also align with [Widagdo \(2021\)](#) research that the convenience and security of accessing a web can cause consumers to repurchase. Thus the role of website quality provides an important role for companies to influence repurchase intentions. Likewise, [Wilson \(2019\)](#) also states that the existence of a website will lead to repurchasing intentions.

Furthermore, this study also found that perceived value influences repurchase intention. Based on the results of the hypothesis testing, it can be stated that the perceived value variable influences repurchase intention. These results are also consistent with the research conducted by [Hutagaol \(2019\)](#) that when a customer feels the perceived value of a product or service, he will repurchase that product or service. [Kaur & Singh \(2017\)](#) state that perceived value influences consumer behavior, especially in making repurchases. This influence indicates that the higher the perceived value of a product or service, the higher the repurchase intention.

Then finally, this study found that customer satisfaction influences repurchase intentions. Based on the results of hypothesis testing, it can be stated that the variable Customer Satisfaction affects Repurchase Intention. These results are consistent with research conducted by [Lukman et al. \(2021\)](#) that the higher the level of consumer satisfaction with a product or service, the higher the consumer's intention to repurchase. According to [Dhingra \(2020\)](#), satisfaction is the level of one's feelings after comparing the perceived product or service performance with what is expected.

CONCLUSION

This study explores the factors influencing the intention to buy back at PT KAI Cibatu Station, Bandung, West Java. From the analysis and hypothesis testing results, this study proves that the variables of website quality, perceived value and customer satisfaction can influence repurchase intentions. This result shows that the higher the three variables, the purchase intention will increase. This research contributes to practice and theory for companies to increase repurchase. In addition, this research can also be a reference and expand the study of the literature on marketing management concerning consumer behavior and the factors that influence it.

Furthermore, this research also contributes to practice, especially for service providers to pay attention to the importance of providing quality services so that consumers feel perceived value and have satisfaction so that they can increase their intention to repurchase. This is expected to become knowledge for the company, making it easier to run its business. Then the quality of the website is

also very important to make it easier for consumers to access information about their needs.

This research is also not free from the existing limitations, namely the sample was selected in only one city and used web quality, perceived value and customer satisfaction variables. For further research, more samples can be used and carried out in different places and objects to ensure the study's generalizability. In addition, as this study only examines the direct influences of website quality, perceived value, and customer satisfaction to repurchase intention, it is necessary to examine the underlying mechanisms through a mediating or moderating variable to gain a deeper understanding of the research context.

REFERENCES

1. Amin, M. (2021). Determinants of online hotel booking intentions: website quality, social presence, affective commitment, and e-trust. *Journal of Hospitality Marketing and Management*, 30(7), 845–870. <https://doi.org/10.1080/19368623.2021.1899095>
2. Ardi, A. N. A., & Yulisetiari, D. (2018). *The Effect of Lazada Website Quality to Satisfaction and Consumer Loyalty*. repository.unej.ac.id. <https://repository.unej.ac.id/handle/123456789/89264>
3. Choi, C., Greenwell, T. C., & Lee, K. (2018). Effects of service quality, perceived value, and consumer satisfaction on behavioral intentions in virtual golf. In *Journal of Physical Education and Sport*. efsupit.ro. <https://www.efsupit.ro/images/stories/september2018/Art 216.pdf>
4. Clifton, J., Fernández-Gutiérrez, M., & ... (2017). Including vulnerable groups in financial services: insights from consumer satisfaction. *Journal of Economic* <https://www.tandfonline.com/doi/abs/10.1080/17487870.2017.1308866>
5. Dhingra, S. (2020). A study of relationship among service quality of E-Commerce websites, customer satisfaction, and purchase intention. *International Journal of E-Business Research*, 16(3), 42–59. <https://doi.org/10.4018/IJEER.2020070103>
6. Giao, H. (2020). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351–370. <https://doi.org/10.5267/j.uscm.2019.11.004>
7. Hutagaol, R. M. (2019). *The Mediating Role of Consumer Perceived Value in The Relationship Between Service Quality and Consumer Satisfaction A Case Study in PT Panin Asset* repository.ipmi.ac.id. <http://repository.ipmi.ac.id/358/>
8. Huy, L. Van. (2019). Customer trust and purchase intention: How do primary website service quality dimensions matter in the context of luxury hotels in Vietnam. *International Journal of E-Services and Mobile Applications*, 11(1), 1–23. <https://doi.org/10.4018/IJESMA.2019010101>
9. Jauhari, M. T., Kusumawati, A., & ... (2019). The impact of website quality on consumer satisfaction and purchase intention (study case of e-commerce Lazada Indonesia in Malang city).

10. Kaur, K., & Singh, A. I. (2017). Perceived service quality and consumer satisfaction: An empirical study from direct to home (DTH) TV industry. *Indian Journal of Marketing*.
11. Kaya, B. (2019). The Moderating Role of Website Familiarity in the Relationships Between e-Service Quality, e-Satisfaction and e-Loyalty. *Journal of Internet Commerce*, 18(4), 369–394. <https://doi.org/10.1080/15332861.2019.1668658>
12. Konuk, F. (2019). The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants. *Journal of Retailing and Consumer Services*, 50, 103–110. <https://doi.org/10.1016/j.jretconser.2019.05.005>
13. LUKMAN, L., SUJANTO, A. E., WALUYO, A., & ... (2021). Service Quality and Consumer Satisfaction: An Empirical Study in Indonesia.
14. Molinillo, S. (2021). Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use. *Journal of Retailing and Consumer Services*, 63. <https://doi.org/10.1016/j.jretconser.2020.102404>
15. Mwangi, A. W., & Wanjau, K. (2018). Influence of perceived service quality on consumer satisfaction amongst dairy milk processors in Kenya. *Journal of Research in Business and Social*.
16. Neza, V., & Llazo, E. (2017). The Influence of Consumer Satisfaction on Consumer Attitudes In The Albanian Insurance Industry–Case Study Tirana, Durrës. In *Interdisciplinary Journal of Research*.
17. Peng, L. (2019). Moderating effects of time pressure on the relationship between perceived value and purchase intention in social E-commerce sales promotion: Considering the impact of product involvement. *Information and Management*, 56(2), 317–328. <https://doi.org/10.1016/j.im.2018.11.007>
18. Qalati, S. A. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2020.1869363>
19. Qalati, S., Yuan, L., Iqbal, S., Hussain, R., & ... (2019). Impact of Price on Customer Satisfaction; mediating role of Consumer Buying Behaviour in Telecom Sector. researchgate.net.

20. Suhendar, A., Asmala, T., & Johan, A. (2022). The Effect of Digital Service Quality on Public Satisfaction through Perception of Ease of Use. *Journal of Applied Management and Business Administration*, 1(1), 11-20.
21. Tandon, A. (2020). Impact of EWOM, website quality, and product satisfaction on customer satisfaction and repurchase intention: moderating role of shipping and handling. *International Journal of Systems Assurance Engineering and Management*, 11, 349–356. <https://doi.org/10.1007/s13198-020-00954-3>
22. Ullah, R., Zaman, H. M. F., & Marri, M. Y. K. (2020). Relationship of Consumer Satisfaction and Brand Loyalty Through the Path of Attitude toward Brand. *AJSS*. <http://ojs.lgu.edu.pk/index.php/ajss/article/view/1092>
23. Widagdo, B. (2021). Hedonic Shopping Motivation and Impulse Buying: The Effect of Website Quality on Customer Satisfaction. *Journal of Asian Finance, Economics and Business*, 8(1), 395–405. <https://doi.org/10.13106/jafeb.2021.vol8.no1.395>
24. Widiandita, B. K., & Ketut, G. I. A. (2020). The effect of perceived brand leadership towards consumer satisfaction and repurchase intention on e-commerce website.
25. Wilson, N. (2019). The effect of website design quality and service quality on repurchase intention in the E-commerce industry: A cross-continental analysis. *Gadjah Mada International Journal of Business*, 21(2), 187–222. <https://doi.org/10.22146/gamaijb.33665>
26. Yoo, H. S. (2017). Mediation of Consumer Satisfaction in the Relationship between Outdoor Wear Purchase Decision-Making Process and Repurchase Intention. *Fashion & Textile Research Journal*.