

## Assessing consumer empowerment and influencing factors in Central Bangka Regency: a multidimensional approach

Muhammad Faisal Akbar\*; Devi Valeriani; Panggio Restu Wilujeng; Mustofa Tohari

Economics Study Program, Faculty of Economics, Universitas Bangka Belitung, Indonesia

*\*To whom correspondence should be addressed: email: Akbarf755@gmail.com*

DOI: 10.22437/ppd.v11i1.22074	Received: 23.11.2022	Revised: 27.04.2023	Accepted: 29.04.2023	Published: 30.04.2023
----------------------------------	-------------------------	------------------------	-------------------------	--------------------------

### Abstract

The rapid development of trade technology in Indonesia exposes consumers to potential exploitation during purchasing. This study examines consumer empowerment in Central Bangka Regency using primary data from 88 respondents across four districts. The Consumer Empowerment Index (CEI) value of 38.53, classified as "understand," indicates a fundamental grasp of rights and obligations and reveals room for growth in consumer empowerment. The analysis shows higher empowerment during the purchase phase, with informed decision-making and support for local businesses. However, a weakness emerges in the post-purchase phase, as consumers are less likely to voice experiences or criticize unsatisfactory products, potentially impacting product quality and customer satisfaction. Regression analysis reveals that only years of schooling and age significantly influence the CEI, while the location of residence, gender, and income group do not have significant effects. The model's low R-squared value suggests potential refinement through additional variables or research. These findings provide valuable insights for the government and stakeholders to enhance Central Bangka Regency's consumer empowerment. Focusing on increasing consumer awareness and engagement in the post-purchase phase through targeted educational campaigns, consumer rights workshops, and accessible complaint channels is essential. However, it is crucial to recognize that observed associations do not imply causation and further research is required to establish causal relationships and explore other factors contributing to consumer empowerment.

---

**Keywords:** *Asymmetric information, Consumer behavior, Consumer empowerment*

**JEL Classification:** D12, D18, D82,

### INTRODUCTION

The level of consumer activism in the marketplace has increased due to greater exposure and accessibility to information regarding global concerns (Au, 2019; Bhatia & Panneer, 2019; Zankovsky et al., 2021). The advancement of digital media has facilitated economic activities, providing a foundation for the global market to engage in seamless trading. This accessibility enables producers, consumers, and distributors to access more symmetrical information, resulting in optimal economic contracts that

benefit all parties involved (Aguirre et al., 2015; Hermalin et al., 2007; Wolfinbarger & Gilly, 2003; Kamil, 2007).

However, the heightened level of trade maneuvering also presents risks that both the government, as a regulator, and the public, as users, must monitor. Studying the readiness of consumers to engage in digital transactions in Indonesia is crucial, as digitization may increase information asymmetry between consumers and producers, negatively affecting consumers (Yang et al., 2021; Mckinsey, 2018). One study found that analyzing consumer behavior using e-commerce applications in Indonesia can provide insight into these issues (Suleman et al., 2013; Mckinsey.,2022; Wibowo et al., 2019).

To mitigate the risks associated with digital transactions, regulators must implement policies and regulations that ensure consumer protection. Additionally, consumers should be aware of their rights and responsibilities when conducting digital transactions, which can be achieved through the dissemination of information and awareness campaigns.

Consumer protection in digital markets is crucial to ensure businesses with greater knowledge, power, or resources do not exploit consumers. Implementing consumer protection laws and procedures can help establish trust in digital markets and give consumers the confidence to engage and transact (Ashworth & Free, 2006; Fong et al., 2014; Martin & Murphy, 2016; UNCDF Policy Accelerator, 2022).

Key issues include fairness, accountability, transparency, data privacy and security, product safety, redress, and dispute resolution mechanisms (UNCDF Policy Accelerator, n.d.). The OECD has established core characteristics of consumer protection for electronic commerce, encompassing fair and transparent business and advertising practices, information about businesses, goods and services, and transactions, as well as adequate dispute resolution and redress mechanisms, payment protection, privacy, and education (OECD, 2016). Consumer protection is essential for ensuring a fair trade climate, as the trade sector is vital for the national economy (Muris et al., 2016).

Consumers have become increasingly empowered to influence suppliers' behavior through their actions in the marketplace (Shaw et al., 2006). With the growth of business activities, it has become necessary for academics to supervise and review consumption activities to protect community interests, particularly those of consumers. According to the National Strategy on Consumer Protection in Indonesia, established by Presidential Decree Number 50 of 2017, the Ministry of Trade has identified indicators of empowered consumers aimed at promoting consumer protection and interests in the marketplace. These indicators include optimal decision-making ability, identifying the best price and quality, understanding preferences and options, asserting rights, recognizing rights violations, and seeking compensation (ASEAN Consumer, 2017).

The government plays a central role in defining trade rules to protect consumers (Muris et al., 2016). Additionally, the media can raise awareness of consumer rights, and academic institutions can provide research on consumer behavior and protection (Shaw et al., 2006). When consumers avoid information, it is assumed that they are aware they are doing so, as indicated by terms used to study the phenomenon—strategic, willful, or deliberate ignorance (Ehrich & Irwin, 2005; Golman et al., 2017; Hertwig & Engel, 2016). However, some scholars suggest that nonconscious (Sweeny et al., 2010) or implicit (Howell et al., 2016) processes can drive information avoidance. Consequently, estimating information avoidance by explicitly asking consumers

whether they want such information, as typically done, may provide a lower bound for a more common behavior (Woolley & Risen, 2021).

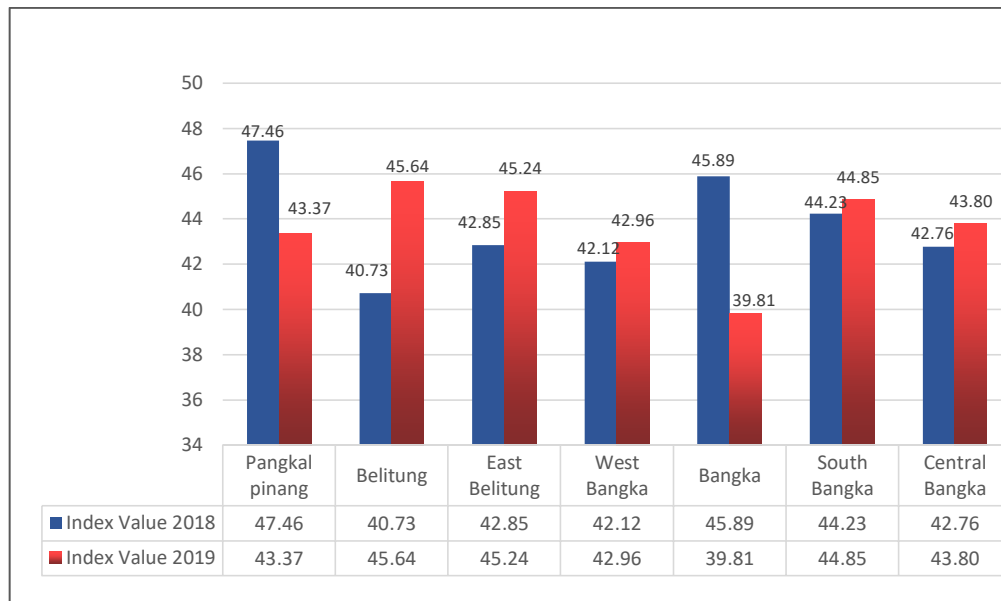
When examining the concept of information avoidance, it is often assumed that consumers consciously choose to ignore specific details, as demonstrated by terms such as strategic, willful, or deliberate ignorance (Ehrich & Irwin, 2005; Golman et al., 2017; Hertwig & Engel, 2016). However, some researchers propose that this avoidance can also stem from nonconscious or implicit processes (Howell et al., 2016). Consequently, assessing information avoidance by directly asking consumers if they desire certain information, as is commonly done, may only capture the minimum extent of this behavior.

Based on the idea that consumers may avoid information without acknowledging it, it is suggested that more individuals will likely dodge information when they can justify their decisions without admitting their avoidance (Kivetz & Yuhuang, 2006; Okada, 2005; Philip E; Tetlock & Richard, 1989; Philip E Tetlock & Jae I. Kim, 1987). We know that consumers look for justifications for their choices and prefer easily explainable decisions, but it remains unclear what constitutes an effective justification and how it influences avoidance (Slovic, 1975). To gain a deeper understanding of the mechanisms behind information avoidance, we turn to research on motivated reasoning and attributional ambiguity, which shows that people use "cover" to interpret situations and engage in desired behavior flexibly (Kunda, 1990; Snyder et al., 1979). We define decisions that offer "cover" as those where consumers can attribute their choice to another relevant environmental factor, such as a different product attribute, rather than the true reason behind their decision. The cover provides consumers with an alternative explanation for their choices.

The consumer protection system in Indonesia has been regulated by UUPK number 8 of 1999, concerning consumers, business actors, the government, the Non-Governmental Consumer Protection Agency (LPKSM), the Consumer Dispute Resolution Agency (BPSK), and the National Consumer Protection Agency (BPKN). In its implementation, the government formulates policies or regulations as the party responsible for implementing and supervising consumer protection according to the sector. However, sometimes when an incident occurs, and the business actor restores their rights, it does not receive a positive response. Business actors often do not understand their rights and obligations as business actors; sometimes, they exploit the weaknesses that exist in consumers and focus on temporary profits (Safari & Simanjuntak 2020).

Currently, the Bangka Belitung Islands Province consumers have entered the "capable" classification in the consumer empowerment index conducted by the Industry and Trade Office of the Bangka Belitung Islands Province. This can be seen in Figure 1.

The results of the 2019 Consumer Empowerment Index Survey, in general, did not experience significant changes when compared to the 2018 Consumer Empowerment Index, which was 43.9 in 2018 and 43.34 in 2019. This study analyzes consumer empowerment in Central Bangka Regency in the era of economic digitization. The Empowerment Index is prepared by formulating a questionnaire that captures the insight needed to buy an item. Seventy individuals who have met the requirements to become adult consumers will be surveyed within the community. The sampling process begins with determining the criteria for someone considered a rational consumer who can make their own choices (Gujarati, 2004).



Source: Department of Industry and Trade Bangka Belitung Islands Province

**Figure 1.** District consumer empowerment index

It is known that three-phase dimensions must be explored to understand how well-informed and empowered a consumer is. The three phases include the Pre-Purchase, Purchase, and Post-Purchase phases. The pre-purchase phase is a dimension that describes the search for information and knowledge of applicable rules. In contrast, the purchase phase includes the selection of goods and services and purchasing behavior, and the post-purchase phase includes the tendency to talk and submit complaints. Several phases in this study were adapted to the format of the consumer empowerment index conducted by the Industry and Trade Office. Still, several specifications were made to deepen the social behavior aspect of the people in Central Bangka Regency so that a qualitative study would be conducted to understand consumer behavior sociologically.

Metehan & Zengin (2011) illustrate that demographic characteristics and education level positively influence complaint behavior in Turkish society. The various ethnicities/cultures of the Turkish demographic affect consumers in continuing their complaints when they are dissatisfied. The higher level of education also affects consumers to struggle to make complaints. Thøgersen et al. (2003) state that attitudes and personality strongly influence complaint behavior. Prasetyo et al. (2016) state that the behavior of complaining is divided into four groups, namely private, voicers, Dissatisfied customers, and activists.

Meanwhile, according to Iyiola & Ibidunni (2013), negative consumer emotions encourage consumers to carry out negative word-of-mouth complaints. In their research, Blodgett et al. (2015) show that attitude and the level of product importance affect complaint behavior. Subsequent research, according to Putra & Giantari, (2014), found the influence of attitude and gender on complaint behavior. Women are considered more likely to complain than men when experiencing post-purchase dissatisfaction.

In addition to demographic characteristics and attitudes, communication channels also play a role in complaint behavior. Park et al. (2007) shows that the anonymity of the communication channel positively affects consumers' willingness to complain. Moreover, consumers choose communication channels that can solve their problems

(Mendoza et al., 2018). Furthermore, social media has become a popular channel for consumers to voice their complaints publicly (Schivinski & Dabrowski, 2014). However, not all complaints are voiced. Carleton et al. (2007) indicate that fearing negative consequences like retaliation can prevent consumers from complaining.

Additionally, consumers may stay silent if they perceive the issue as minor or do not believe their complaint will be addressed (Vos et al., 2008). Therefore, understanding the factors influencing complaint behavior is crucial for businesses to manage customer complaints and maintain customer satisfaction effectively. As such, research on complaint behavior has important implications for businesses and policymakers alike.

One of the novelties of this research is its focus on the specific context of consumer empowerment and complaint behavior in Central Bangka Regency in the era of economic digitization. By exploring the effects of demographic characteristics, education levels, attitudes, personality, and communication channels on complaint behavior in this region, the study aims to provide a unique and comprehensive understanding of the factors influencing consumer empowerment and compliant behavior in the Indonesian digital market. Furthermore, this research integrates qualitative and quantitative methods to obtain a deeper sociological insight into consumer behavior, considering the diverse cultural and ethnic backgrounds of the community. As a result, the findings can contribute to developing more targeted and effective consumer protection policies and strategies, ultimately enhancing consumer welfare and ensuring a fair trade climate in Indonesia's rapidly evolving digital economy.

The results of this study are expected to be used as material for monitoring and evaluating how well consumers know about their rights and obligations in carrying out consumption activities. The results of monitoring and evaluation through surveys are expected to provide a real picture of the actual conditions in the market so that the government can properly determine what steps can be taken next to achieve consumer welfare at large.

## METHODS

This study aimed to assess consumer empowerment in Central Bangka Regency, focusing on the influences of various demographic factors. Primary data were collected from a survey involving 88 respondents distributed across four regional districts. The survey investigated the pre-purchase, purchase, and post-purchase phases of consumer understanding.

A quantitative research method was employed, utilizing Stata 13 and Orange statistical software for data processing. The research emphasizes theory testing by measuring the Consumer Empowerment Index (CEI) variables using numbers and analyzing data through statistical procedures.

The CEI compilation method was systematically arranged to produce data on consumer empowerment in Central Bangka in 2022. Respondents were individuals aged 17 to 60 years, with income/married status, and capable of making independent decisions. The selection of respondents considered the population density of each sub-district.

The regression analysis model is as follows:

$$CEI_i = \alpha + \beta_1 LOC_i + \beta_2 SCH_i + \beta_3 GDR_i + \beta_4 AGE_i + \beta_5 INC_i + \varepsilon_i \dots \dots \dots (1)$$

where:

CEI<sub>i</sub>: Consumer Empowerment Index for individual i

LOC<sub>i</sub>: Location of residence of individual i (e.g., rural or urban)

SCH<sub>i</sub>: Number of years of schooling completed by individual i

GDR<sub>i</sub>: Gender of individual i (e.g., male or female)

AGE<sub>i</sub>: Age of individual i

INC<sub>i</sub>: Income group of individual i (e.g., low, middle, or high)

By estimating the coefficients in this model, we can quantify the effect of each independent variable on the CEI and assess how much variation in the CEI is explained by these variables. This analysis can provide valuable insights into the determinants of consumer empowerment, informing policies and interventions aimed at improving consumer empowerment levels among individuals in the sample.

## RESULTS AND DISCUSSION

### Respondent characteristic

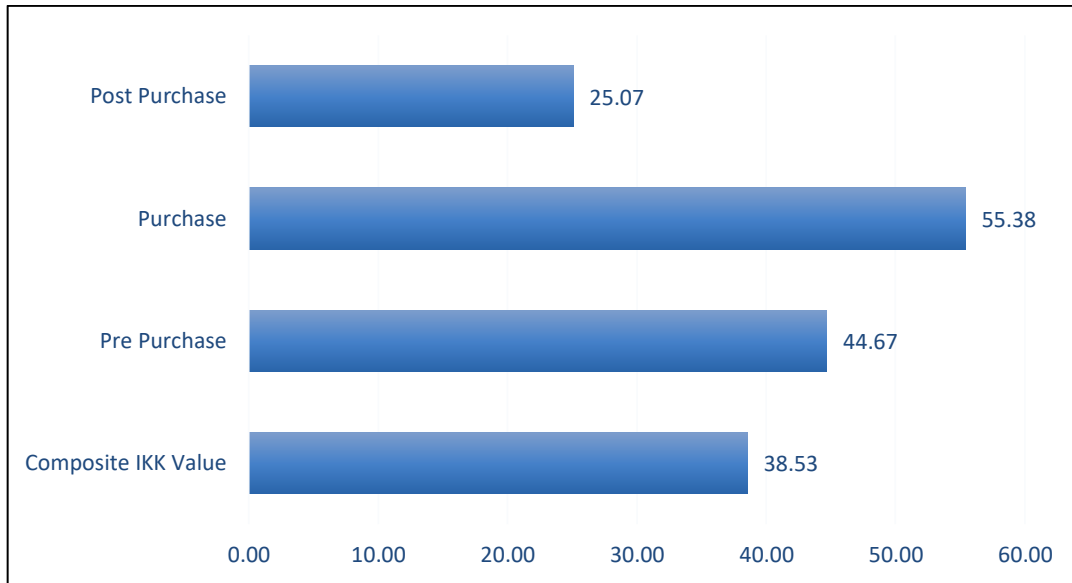
Table 1 provides descriptive statistics for five variables in a dataset consisting of 88 observations in Bangka Tengah. The variables are income group, age, gender, years of education, and rural/urban residence.

**Table 1.** The statistical description of respondent

Variable	Obs	Mean	Std. Dev.	Min	Max
Income Group	88	1.875	0.841625	0	4
Age	88	38.45455	13.66168	17	70
Gender	88	0.363636	0.483802	0	1
Years Of Education	88	9.829545	2.913392	6	16
Rural/Urban	88	0.159091	0.367857	0	1

The descriptive statistics presented indicate the characteristics and demographics of the individuals in the dataset from Bangka Tengah. The mean income group value of 1.875 and standard deviation of 0.841625 suggest that the dataset consists of individuals with moderate to high-income levels. The mean age of 38.45455 and standard deviation of 13.66168 indicate that the dataset includes individuals with a diverse age range from 17 to 70 years. Moreover, the gender variable shows more males than females in the dataset, with a mean value of 0.363636 and a standard deviation of 0.483802. The years of education variable has a mean value of 9.829545 and a standard deviation of 2.913392, indicating a varied range of education levels. Some individuals have as little as six years of education. In comparison, others have up to 16 years. Lastly, the rural/urban variable has a mean value of 0.159091 and a standard deviation of 0.367857, suggesting that more individuals in the dataset reside in rural areas than urban areas in Bangka Tengah.

These descriptive statistics offer a basic understanding of the dataset's characteristics and demographics from Bangka Tengah, which can inform further analysis and exploration of relationships between variables. The study uses three general dimensions, namely pre-purchase, purchase, and post-purchase, with each dimension further described by seven questions to capture the respondents' insights needed for purchasing items. These seven question sections comprise information search, knowledge of consumer protection laws and institutions, product selection, product preference, buying behavior, the propensity to talk, and complaint behavior. To obtain a more detailed picture, refer to Figure 2.



**Figure 2.** Dimensions of the average consumer empowerment index

Figure 2 illustrates the realization of the Consumer Empowerment Index (CEI) by dimension in Central Bangka Regency. As mentioned, consumers go through three dimensions when purchasing a product or service: pre-purchase, purchase, and post-purchase. The results reveal that the highest realization of the CEI value in the region is in the purchase dimension, accounting for 55.4 percent of the maximum value. Further examination indicates that the people of Central Bangka Regency excel in selecting and preferring local goods. However, the pre-purchase and post-purchase dimensions only reached 44.7 percent and 25.1 percent, respectively, suggesting that the community struggles to articulate their dissatisfaction with the service provided by producers. To delve deeper into each dimension of empowerment, policymakers and stakeholders must analyze the results to identify the strengths and weaknesses of consumer empowerment in the region and design targeted interventions to address them.

The Consumer Empowerment Index (CEI) survey results in Central Bangka Regency provide valuable insights into consumer behavior throughout the pre-purchase, purchase, and post-purchase phases. Further analysis of these dimensions can assist policymakers and stakeholders in better understanding the strengths and weaknesses of consumer empowerment in the area, allowing for targeted interventions to address any issues that may arise.

1. Pre-purchase (44.7): The relatively low CEI score in the pre-purchase dimension suggests that consumers in Central Bangka Regency may lack the necessary knowledge or skills to make informed decisions before purchasing goods or services. This could be due to a lack of awareness about product features, available alternatives, or market prices. The low score highlights the need for consumer education and awareness campaigns to ensure consumers can make well-informed decisions before purchasing goods or services. Possible interventions could include: a) Providing access to reliable and user-friendly information sources, such as consumer guides or product comparison websites; b) Organizing consumer education workshops or seminars on various topics, such as understanding product labels or comparing prices; c) Collaborating with local media and community organizations to disseminate consumer-related information and raise public awareness.

2. Purchase (55.4): The highest CEI realization in the purchase dimension indicates that consumers in Central Bangka Regency are relatively skilled at selecting goods and services and strongly prefer buying local products. This suggests that local consumers can make choices that benefit the regional economy and support local businesses. However, there is room for improvement, as the CEI has not reached its maximum value. Strategies to further enhance consumer empowerment in the purchase dimension may include: a) Encouraging local businesses to provide transparent information about their products and services, enabling consumers to make more informed choices; b) Promoting the benefits of buying local goods, such as supporting local economies, reducing environmental impacts, and preserving cultural heritage; c) Implementing initiatives to improve the quality and variety of locally-produced goods, ensuring that consumers can access high-quality products at competitive prices.
3. Post-purchase (25.1): The low CEI realization in the post-purchase dimension (25.1) indicates that consumers in Central Bangka Regency may not effectively express their dissatisfaction with products or services and seek redress when necessary. This could be due to limited knowledge of their rights as consumers or the absence of accessible mechanisms to lodge complaints or seek compensation. Addressing this gap requires interventions that empower consumers to voice their concerns and seek remedies, such as: a) Establishing accessible and efficient consumer complaint and redress mechanisms, such as consumer helplines, online complaint platforms, or consumer protection agencies; b) Conducting public awareness campaigns to inform consumers about their rights and responsibilities and available avenues for redress; c) Encouraging businesses to adopt transparent and responsive customer service practices to create an environment where consumers feel confident expressing their concerns and seeking assistance.

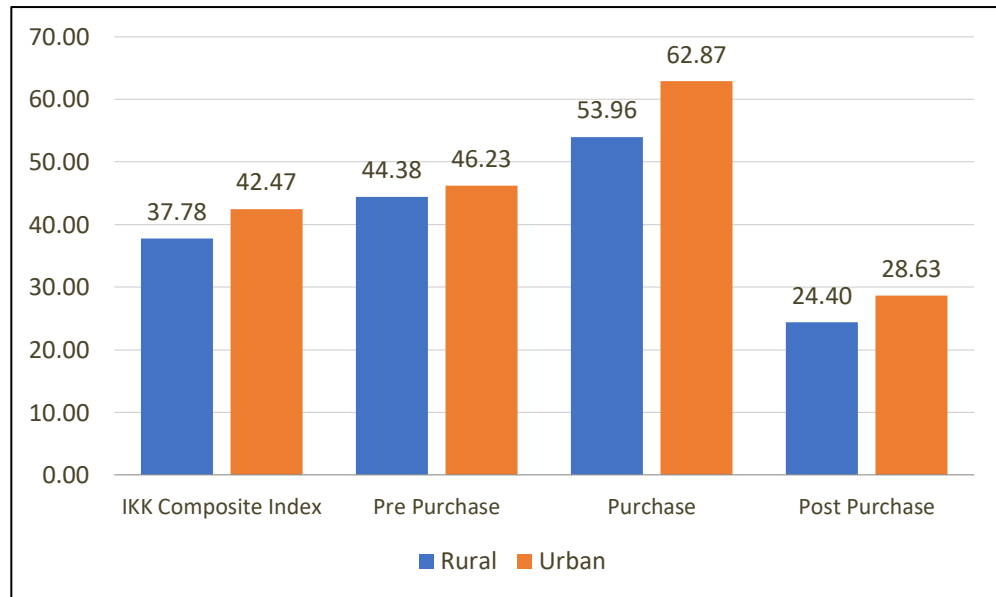
The analysis of the CEI in Central Bangka Regency based on demographic structures such as the location of residence, income level, and education level provides valuable insights into consumer empowerment trends in different groups. By examining these variables, policymakers and stakeholders can identify groups requiring specific interventions to improve consumer empowerment. For instance, the analysis may reveal that individuals in rural areas have lower CEI realizations than those in urban areas, indicating a need for targeted education and awareness campaigns in rural communities. Similarly, individuals with lower incomes or education levels may require more accessible, user-friendly information sources to make well-informed decisions.

Moreover, examining the CEI based on demographic structures can also help policymakers and stakeholders evaluate the effectiveness of existing policies and interventions. For example, suppose the CEI realization is higher among individuals with higher incomes. In that case, it may indicate that current policies and interventions are not adequately addressing the needs of low-income consumers. In this case, policymakers may need to reassess existing policies and implement new initiatives to improve consumer empowerment among low-income individuals.

Overall, analyzing the CEI based on demographic structures provides a more nuanced understanding of consumer empowerment trends in Central Bangka Regency and can guide targeted interventions and policies to enhance consumer welfare in the region.



Figure 3 illustrates the differences in the average Consumer Presence Index value based on respondents' residence, distinguishing between villages and cities. The results reveal that urban residents have a higher average index value (42.47) than rural residents (37.78), indicating that urban consumers are generally more empowered than their rural counterparts. Several factors could contribute to this discrepancy, including better infrastructure, greater awareness of consumer rights and obligations, and accessibility to various goods and services in urban areas. Notably, urban consumers exhibit more conscientious behavior during purchase by ensuring product safety and health implications.

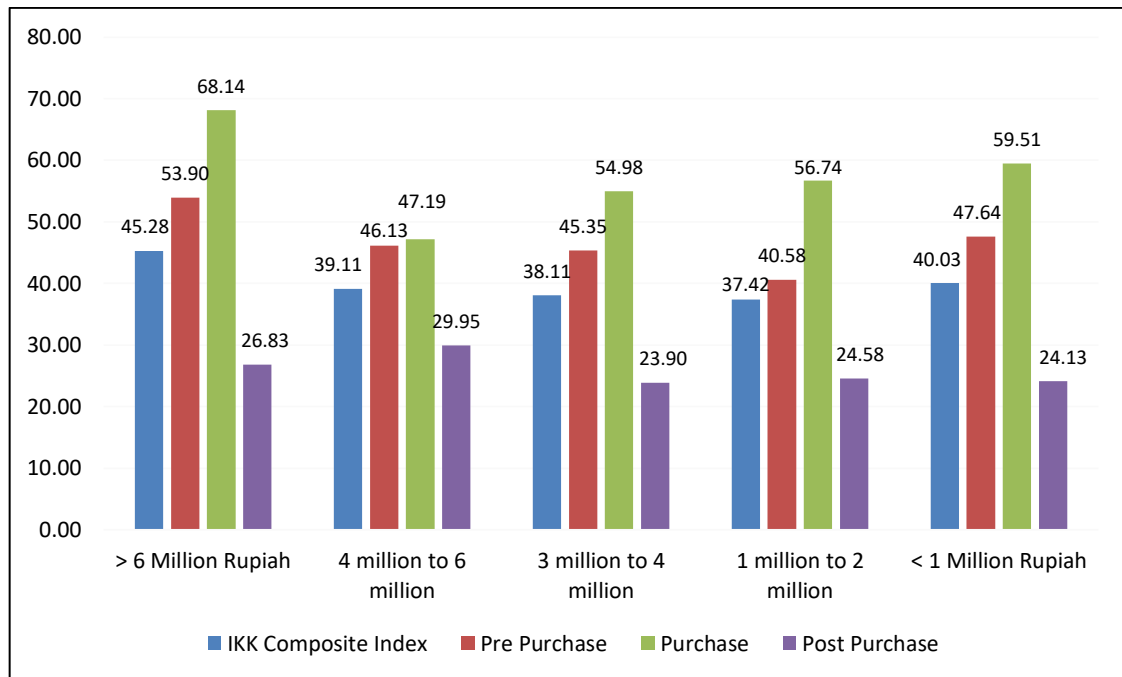


**Figure 3.** Rural/urban consumer empowerment index

To address the gap in consumer empowerment between rural and urban areas, policymakers and stakeholders can consider implementing the following strategies: 1) Enhance consumer education in rural areas to improve consumer rights and obligations awareness, focusing on product safety and health implications; 2) Invest in rural infrastructure, including transportation and communication systems, to facilitate access to diverse products and services; 3) Encourage local government and non-government organizations to conduct outreach programs in rural areas, promoting consumer empowerment and providing resources to make informed decisions.

By implementing these strategies, the gap in consumer empowerment between rural and urban consumers can be reduced, ensuring that both groups can confidently exercise their rights and responsibilities in the marketplace.

Figure 4 illustrates the differences in the average Consumer Empowerment Index value based on respondents' income level. The results show that respondents with an income of less than 1 million have a relatively high average index value across all dimensions, with a particularly high value in the purchase dimension (59.51 percent). This suggests that lower-income consumers in Central Bangka Regency are relatively empowered and prioritize purchasing products that meet their needs and support the local economy. However, there is room for improvement in addressing product defects and ensuring consumers can assert their rights effectively.



**Figure 4.** Consumer empowerment index by income group

To enhance consumer empowerment among lower-income groups, policymakers and stakeholders can consider implementing strategies such as: 1) Expanding consumer education programs and raising awareness about consumer rights and mechanisms for addressing product defects; 2) Encouraging businesses to adopt transparent and responsive customer service practices and return and refund policies that cater to lower-income consumers; 3) Establishing accessible and efficient consumer complaint and redress mechanisms that are accessible to all income levels.

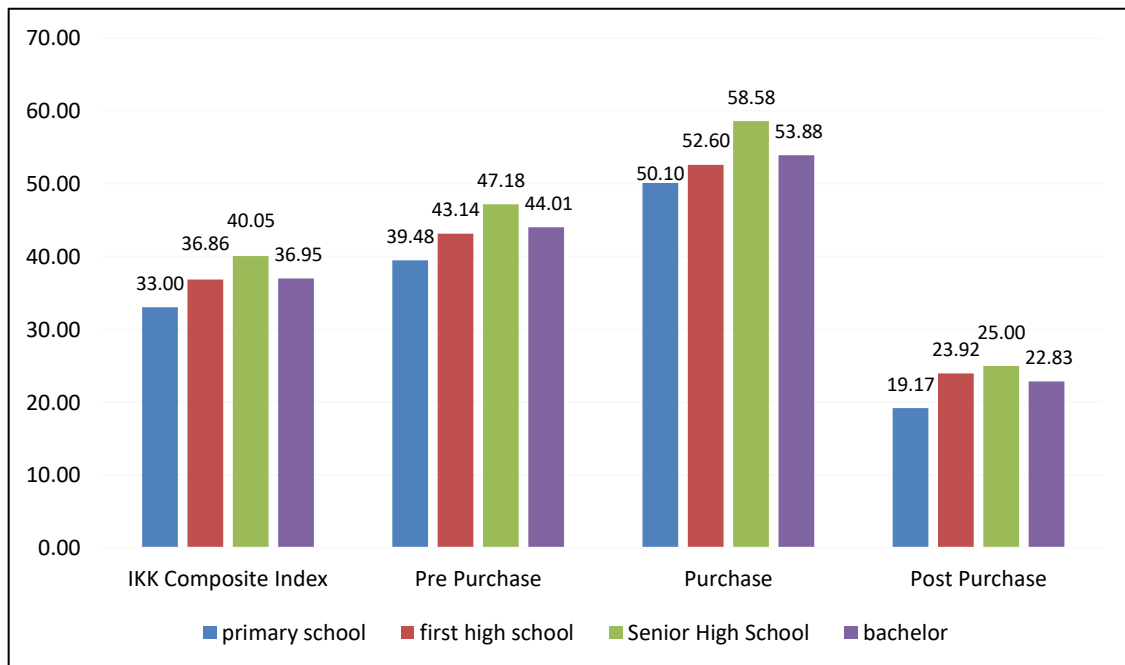
By focusing on these strategies, policymakers and stakeholders can work to create a more informed and empowered consumer base, contributing to a more robust and equitable digital economy in Central Bangka Regency.

#### **Consumer empowerment index by education level**

The results presented in Figure 5 indicate that respondents with higher education levels tend to have higher Consumer Empowerment Index (CEI) values across all dimensions compared to those with lower education levels. Specifically, respondents with education levels of 13-16 years exhibit the highest average index value (51.68), followed by those with education levels of 10-12 years (47.93), 7-9 years (41.96), and 0-6 years (36.59). This trend suggests that higher education levels can contribute to greater awareness of consumer rights and obligations, better access to information and resources, and greater confidence in expressing complaints and seeking redress. However, it is worth noting that even respondents with lower education levels show relatively high CEI values, indicating that efforts to empower consumers of all education levels can be effective.

To further enhance consumer empowerment among all education groups, policymakers and stakeholders can consider: 1) Expanding consumer education programs targeting individuals with lower education levels, focusing on key consumer protection laws, product safety, and redress mechanisms; 2) Encouraging businesses to provide more accessible and transparent product information, particularly for those with

lower education levels; 3) Facilitating access to consumer complaint and redress mechanisms, particularly for those with lower education levels who may not be aware of their options. By addressing these issues, policymakers and stakeholders can work towards creating a more empowered and informed consumer base, ultimately contributing to a more robust and equitable digital economy in Central Bangka Regency.



**Figure 5.** Consumer empowerment index by education group

Figure 5 illustrates the average consumer empowerment index based on education, which is relatively high. Respondents with a high school education have a higher average index value than other graduates. However, the result may not be statistically stable due to unequal sample sizes across education categories. As shown in the previous pie chart analysis, only six respondents have an undergraduate education.

From an educational standpoint, consumers have better access to goods and services. They demonstrate good skills in selecting and referencing products during the purchasing process. Moreover, they exhibit positive purchasing behavior and a preference for domestic products. However, despite being aware of applicable laws and regulations, consumers hesitate to express their criticisms, complaints, and suggestions to producers.

Increasing awareness of consumer rights and available mechanisms for lodging complaints and seeking redress is necessary to improve consumer empowerment. Policymakers can work towards providing accessible and efficient consumer complaint and redress mechanisms, conducting public awareness campaigns, and encouraging businesses to adopt transparent and responsive customer service practices.

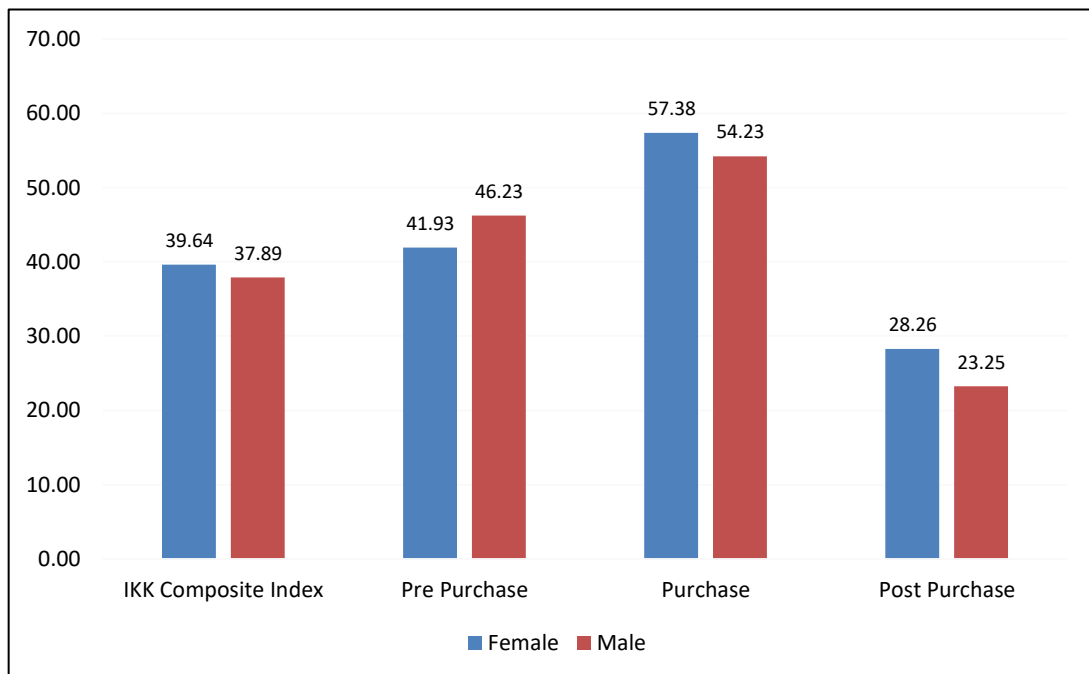
### **Consumer empowerment index by gender**

The gender structure is also an indicator in determining consumer presence. Initially, the proportion of men and women selected as respondents for the consumer empowerment index is analyzed. Figure 6 illustrates the differences in consumer empowerment index values between male and female consumers in Central Bangka

Regency. Although the overall difference is insignificant, it is statistically significant and warrants further analysis.

Female consumers exhibit a slightly higher total empowerment index value (39.64) than male consumers (37.89), suggesting that women are generally more empowered in making purchasing decisions and navigating the marketplace. This trend is not observed in the pre-purchase phase, where male consumers have a higher empowerment index (46.23) than female consumers (41.93). This suggests that men are more proactive in seeking product information, understanding applicable laws, and being aware of consumer protection institutions before purchasing.

In contrast, female consumers outperform male consumers during the purchase (57.38 vs. 54.23) and post-purchase phases (28.26 vs. 23.25), suggesting that women are more attentive to product selection and have a broader range of references when considering goods and services. Additionally, female consumers are more likely to share their experiences with others and better utilize their rights and obligations to express criticism and complaints about their products



**Figure 6.** Consumer empowerment index by gender

Female consumers exhibit a slightly higher total empowerment index value (39.64) than male consumers (37.89), suggesting that women are generally more empowered in making purchasing decisions and navigating the marketplace. This trend is not observed in the pre-purchase phase, where male consumers have a higher empowerment index (46.23) than female consumers (41.93). This suggests that men are more proactive in seeking product information, understanding applicable laws, and being aware of consumer protection institutions before purchasing.

In contrast, female consumers outperform male consumers during the purchase (57.38 vs. 54.23) and post-purchase phases (28.26 vs. 23.25), suggesting that women are more attentive to product selection and have a broader range of references when considering goods and services. Additionally, female consumers are more likely to

share their experiences with others and better utilize their rights and obligations to express criticism and complaints about their products.

These findings suggest that gender-specific strategies may be beneficial in addressing consumer empowerment gaps. For instance, policymakers and businesses could encourage men to be more engaged during the purchase and post-purchase phases by promoting the importance of product selection and sharing experiences. Meanwhile, women's pre-purchase empowerment could be strengthened by enhancing their access to information about products, consumer rights, and protection institutions. Targeted educational campaigns and workshops could also be developed to focus on male and female consumers' unique needs and preferences to improve their overall consumer empowerment.

By adopting a gender-sensitive approach to consumer empowerment, policymakers and businesses can better address the unique needs and preferences of both male and female consumers, ultimately leading to a more empowered and informed consumer base in Central Bangka Regency.

**Factors influencing consumer empowerment**

Estimates of the factors that influence consumer empowerment in Central Bangka Regency are given in Table 2. The R-squared model of 0.1320 indicates that the included predictors can account for approximately 13.2% of the variation in the Consumer Empowerment Index. The adjusted R-squared value of 0.0791 considers the number of predictors in the model and provides a more conservative estimate of the model's explanatory power. The overall F-statistic of 22.49, with an associated p-value of 0.0374, demonstrates that the model is statistically significant at a 5% significance level.

**Table 2.** Consumer empowerment model

Predictor	Coefficient	Std. Error	t-value	p-value	95% CI Lower	95% CI Upper
LOC	3.0918	3.9872	0.78	0.44	-4.8399	11.023
SCH	1.6396	0.586	2.8	0.006	0.47377	2.8055
AGE	0.3397	0.122	2.78	0.007	0.0968	0.5826
GDR	1.0973	2.9548	0.37	0.711	-4.7808	6.9755
INC	0.7109	1.5033	0.47	0.638	-2.2796	3.7016
Intercept	7.1851	9.4168	0.76	0.448	-11.547	25.918
R-squared		0.1320				
Adjusted R-squared		0.0791				
F-statistics		22.49				
Prob(F-statistic)		0.0374				

The analysis indicates that the location of residence (LOC), either rural or urban, does not significantly influence the Consumer Empowerment Index (CEI). With a coefficient of 3.091842 and a p-value of 0.440, the impact of this factor is not substantiated by the data. In contrast, years of schooling (SCH) emerge as a significant predictor of the CEI. The analysis reveals a positive relationship between educational attainment and CEI, with a coefficient of 1.639663 and a p-value of 0.006. This result highlights the importance of education in fostering consumer empowerment.

The analysis demonstrates that gender (GDR) is not a significant determinant of the CEI. With a coefficient of 1.097329 and a p-value of 0.711, this finding suggests that both male and female consumers exhibit similar levels of empowerment.

The relationship between age and the CEI is statistically significant, as indicated by a coefficient of 0.3397792 and a p-value of 0.007. The positive coefficient suggests consumer empowerment increases with age, potentially due to accumulated experience and knowledge.

The income group variable (INC) does not exhibit a statistically significant effect on the CEI, as evidenced by a coefficient of 0.7109892 and a p-value of 0.638. This finding indicates that consumer empowerment is not primarily driven by individuals' financial resources within the studied population.

The research has found a positive and significant correlation between years of schooling and the Consumer Empowerment Index, indicating that consumers with higher education levels are more empowered in the digital market. This is likely because higher education leads to better decision-making, critical thinking, and problem-solving skills, which are crucial for navigating the complexities of digital markets. Furthermore, educated consumers are more likely to be aware of their rights, proficient in using digital tools, and better equipped to seek redress if their rights are violated. Therefore, policymakers should prioritize investing in education to enhance consumer empowerment and promote fair trade practices in the digital economy.

Similarly, the research has found a positive and significant correlation between age and the Consumer Empowerment Index, suggesting that older consumers in Central Bangka Regency are more empowered. This finding may be due to older individuals' greater life experience, which may give them more exposure to different market situations and a better understanding of their rights and responsibilities. As a result, older consumers may be more capable of making informed decisions and protecting themselves in digital markets.

These studies have examined various aspects of consumer empowerment, including the impact of consumer empowerment and its self-assessment on consumers' information search behavior and life satisfaction (Nam, 2021), as well as the complexities of consumer empowerment in the modern consumption environment (Martin, 2021). Another study analyzed the profile of consumer empowerment and the influence of demographic characteristics, socio-economic status affect consumer empowerment in rural and urban areas (Simanjuntak & Mubarokah, 2020). These studies provide valuable insights into the factors that influence consumer empowerment and can inform policy and business strategies to promote consumer rights and fair trade practices.

The study found that location of residence (rural or urban), gender, and income group did not significantly impact the Consumer Empowerment Index. This implies that consumer empowerment in Central Bangka Regency is more influenced by education and experience than demographic factors. This insight can help policymakers and stakeholders focus on improving education and raising awareness about consumer rights and responsibilities to enhance consumer empowerment in the region. In conclusion, the findings of this study underscore the importance of education and experience in fostering consumer empowerment in Central Bangka Regency. To further promote consumer welfare and fair trade practices in the digital economy, policymakers and stakeholders should invest in educational initiatives and raise public awareness about consumer rights. Also, fostering a lifelong learning culture will enable consumers to navigate the rapidly evolving digital landscape with confidence and competence.

Nam (2021) investigated the influence of consumer empowerment and its self-assessment on consumers' information search behavior and life satisfaction within the South Korean context. Simanjuntak and Mubarokah (2020) investigated the impact of consumer education and lifestyle on the Consumer Empowerment Index in rural and urban areas of Indonesia. They found significant disparities in consumer education, fulfilled lifestyle, believer lifestyle, and the Consumer Empowerment Index between these regions, with urban areas consistently outperforming rural areas. These findings emphasize the importance of education and experience in determining consumer empowerment across different countries and cultures. A study conducted by Song and Sun (2020) in China supports these conclusions. It revealed that education level, income, and online shopping experience significantly positively affected consumer empowerment, whereas gender and age did not.

In the modern consumption environment, Han and Broniarczyk (2022) examined the complexities of consumer empowerment across four domains: consumer choice, access to marketplace information, consumer voice, and consumer experience. The authors discuss how evolving marketplace offerings, technologies, communication platforms, and consumption trends can benefit and harm consumer empowerment. The impact depends on specific conditions and contexts, including sharing economy, consumer co-creation, product customization, artificial intelligence, augmented reality, virtual reality, user-generated content, social media, online word of mouth, and multitasking. These studies highlight the importance of understanding the multifaceted nature of consumer empowerment, its determinants, and the dynamic interplay of factors that shape it in various consumption environments.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

Investigating the Consumer Empowerment Index (CEI) in Central Bangka Regency offers valuable insights into the region's consumer behavior. The study identifies key trends and potential areas for improvement by examining the index in relation to demographic factors such as income group, education, gender, and area of residence. The CEI value of 38.53, classified as "understand," suggests that Central Bangka consumers possess a fundamental grasp of their rights and obligations, but there remains room for growth in consumer empowerment.

The analysis reveals that consumers in Central Bangka exhibit higher empowerment during the purchase phase, demonstrating informed decision-making and support for local businesses. However, a notable weakness emerges in the post-purchase phase, with consumers less likely to voice their experiences or criticize unsatisfactory products. This lack of feedback may impede product quality and customer satisfaction. Consequently, stakeholders should focus on enhancing consumer awareness and engagement in the post-purchase phase through targeted educational campaigns, consumer rights workshops, and accessible complaint channels, ultimately bolstering the local economy.

The regression analysis reveals that only years of schooling and age significantly impact the CEI. At the same time, the location of residence, gender, and income group do not exhibit significant effects. However, the model's low R-squared value indicates the potential for refining its explanatory power through additional variables or research.

Although the study provides valuable insights, it is important to recognize that the observed associations do not imply causation.

### **Recommendations**

In light of the research findings that underscore the relatively low consumer empowerment in Central Bangka Regency, several recommendations can be proposed to bolster consumer empowerment, promoting a more robust market system and improved regulatory environment:

1. Consumer education initiatives should be developed and implemented to raise awareness about consumer rights, responsibilities, and best practices, utilizing various channels such as schools, community centers, local media, and social media platforms. Capacity-building efforts can focus on organizing workshops and training programs for local consumer protection organizations, empowering them to advocate for consumer rights and support informed decision-making effectively.
2. Collaboration between local government, businesses, and consumer protection organizations is crucial for developing and enforcing consumer-friendly regulations and policies. Accessible complaint mechanisms, including online portals, mobile applications, and toll-free helplines, should be established to facilitate consumer reporting and feedback. Businesses should be encouraged to enhance transparency by providing clear information on pricing, quality, and terms and conditions, enabling consumers to make informed decisions and fostering a competitive market environment.
3. Support for local businesses adopting consumer-friendly practices is essential for building consumer trust and cultivating a culture of consumer empowerment.

A key limitation of this study lies in its relatively small sample size, potentially restricting the generalizability of findings to other populations. Additionally, the cross-sectional design only captures data at a single point, preventing examining changes in the Consumer Empowerment Index over time or establishing causal relationships. Furthermore, the model does not encompass all potential factors contributing to consumer empowerment, as variables such as trust in institutions, cultural norms, and psychological factors were not considered. Lastly, the reliance on self-reported data may introduce bias or measurement errors. These limitations necessitate a cautious interpretation of the findings and highlight the importance of future research employing larger, more diverse samples and comprehensive measurement approaches.

Further research is required to establish causal relationships and explore other factors contributing to consumer empowerment. Besides that, future research should delve deeper into the factors influencing consumer empowerment in Central Bangka Regency, examining the potential impact of socioeconomic factors, cultural norms, and market dynamics on consumer behavior and decision-making processes.

### **ACKNOWLEDGMENT**

The authors would like to thank the faculty and students in the Faculty of Economics, University of Bangka Belitung, for their invaluable support throughout this study. Special thanks go to Hani Hendrawan, Hamzah, and Ivan Lindra for their assistance in conducting the surveys and collecting data, significantly contributing to the study's success. The authors also appreciate the involvement and collaboration of LPPM UBB in this research project.



## REFERENCES

- Aguirre, E., Mahr, D., Grewal, D., de Ruyter, K., & Wetzels, M. (2015). Unraveling the Personalization Paradox: The Effect of Information Collection and Trust-Building Strategies on Online Advertisement Effectiveness. *Journal of Retailing*, 91(1), 34–49. <https://doi.org/https://doi.org/10.1016/j.jretai.2014.09.005>
- Ashworth, L., & Free, C. (2006). Marketing Dataveillance and Digital Privacy: Using Theories of Justice to Understand Consumers' Online Privacy Concerns. *Journal of Business Ethics*, 67(2), 107–123. <https://doi.org/10.1007/s10551-006-9007-7>
- Atkinson, A., & Messy, F.-A. (2012). *Measuring Financial Literacy*. 15. <https://doi.org/https://doi.org/https://doi.org/10.1787/5k9csfs90fr4-en>
- Au, A. (2019). The embodiment of social capital at individual and communal levels. *International Journal of Sociology and Social Policy*, 39(9/10), 812–830. <https://doi.org/10.1108/IJSSP-04-2019-0078>
- Bhatia, S., & Panneer, S. (2019). Globalization and Its Impact on Business Education in Emerging Economies: A Case of India. *South Asian Journal of Human Resource Management*, 6, 278–291.
- Blodgett, J. G., Bakir, A., Saklani, A., & Bachheti, M. (2015). Customer Complaint Behavior: an Examination of Cultural Vs. Situational Factors. *Journal of Consumer Satisfaction/Dissatisfaction & Complaining Behavior*, 28, 61–74.
- Carleton, R. N., Collimore, K. C., & Asmundson, G. J. G. (2007). Social anxiety and fear of negative evaluation: construct validity of the BFNE-II. *Journal of Anxiety Disorders*, 21(1), 131–141. <https://doi.org/10.1016/j.janxdis.2006.03.010>
- Ehrich, K. R., & Irwin, J. R. (2005). Willful Ignorance in the Request for Product Attribute Information. *Journal of Marketing Research*, 43(3), 266–277. <https://doi.org/https://doi.org/10.1509/jmkr.2005.42.3.266>
- Fong, N. M., Fang, Z., & Luo, X. (2014). Geo-Conquesting: Competitive Locational Targeting of Mobile Promotions. *Journal of Marketing Research*, 52, 726–735.
- Golman, R., Hagmann, D., & Loewenstein, G. (2017). Information avoidance. *Journal of Economic Literature*, 55(1), 96–135. <https://doi.org/10.1257/jel.20151245>
- Gujarati, D. (2004). *Essentials of Econometrics*. Erlangga.
- Hair, J F, Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate Data Analysis*. Pearson Education Limited. <https://books.google.co.id/books?id=VvXZnQEACAAJ>
- Hair, Joseph F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate Data Analysis Always learning* (7th ed.). Pearson Education Limited.
- Han, J. J., & Broniarczyk, S. M. (2022). The complexities of consumer empowerment in the modern consumption environment. *Current Opinion in Psychology*, 46, 101333. <https://doi.org/https://doi.org/10.1016/j.copsyc.2022.101333>
- Hermalin, B. E., Katz, A. W., & Craswell, R. (2007). The law & economics of contracts. *The Handbook of Law and Economics*, 1(1), 1–143.
- Hertwig, R., & Engel, C. (2016). Homo Ignorans: Deliberately Choosing Not to Know. *Perspect Psychol Sci*, 11(3), 359–372. <https://doi.org/10.1177/1745691616635594>
- Howell, J. L., Ratliff, K. A., & Shepperd, J. A. (2016). Automatic Attitudes and Health Information Avoidance. *Health Psychology*, 35(8), 816–823. <https://doi.org/10.1037/hea0000330>
- Iyiola, O. O., & Ibidunni, O. S. (2013). The Relationship between Complaints, Emotion, Anger, and Subsequent Behavior of Customers. *IOSR Journal Of Humanities And*

- Social Science*, 17(6), 34–41. <https://doi.org/10.9790/0837-1763441>
- Kivetz, R., & Yuhuang, Z. (2006). Determinants of Justification and Self-Control. *Journal of Experimental Psychology: General*, 134(4), 572–87.
- Kunda, Z. (1990). The Case for Motivated Reasoning. *Psychological Bulletin*, 108(3), 480–98.
- Lusardi, A., & Olivia S, M. (2013). *The Economic Importance of Financial Literacy: Theory and Evidence*. National Bureau of Economic Research. <https://doi.org/10.3386/w18952>
- Martin, K., & Murphy, P. (2016). The Role of Data Privacy in Marketing. *Journal of the Academy of Marketing Science*, 45. <https://doi.org/10.1007/s11747-016-0495-4>
- Martin, C. (2021). Welcome To The Age Of Customer Empowerment. Forbes Agency Council. <https://www.forbes.com/sites/forbesagencycouncil/2021/11/04/welcome-to-the-age-of-customer-empowerment/>
- McKinsey & Company. (2022.). The digital archipelago: How online commerce is driving Indonesia’s economic development. Retrieved from <https://www.mckinsey.com/featured-insights/asia-pacific/the-digital-archipelago-how-online-commerce-is-driving-indonesias-economic-development>
- McKinsey & Company. (2018, August 28). The digital archipelago: How online commerce is driving Indonesia's economic development. Retrieved from <https://www.mckinsey.com/featured-insights/asia-pacific/the-digital-archipelago-how-online-commerce-is-driving-indonesias-economic-development>
- Mendoza, J. S., Pody, B. C., Lee, S., Kim, M., & McDonough, I. M. (2018). The effect of cellphones on attention and learning: The influences of time, distraction, and nomophobia. *Computers in Human Behavior*, 86, 52–60. <https://doi.org/https://doi.org/10.1016/j.chb.2018.04.027>
- Metehan, T., & Zengin, A. Y. (2011). Demographic characteristics and complaint behavior: An empirical study concerning Turkish customers. *International Journal of Business and Social Science*, 2(9), 42–48.
- Muris, T. J., Sanger, W. W., & McCarey, M. C. (2016). *The Consumer Protection Mission: Guiding Principles And Future Direction*.
- National Strategy on Consumer Protection. (2017). Presidential Decree Number 50 of 2017. Retrieved from <https://www.aseanconsumer.org/selectcountry=Indonesia>
- Nam, S. J. (2021). Consumer empowerment and self-assessment of empowerment. *PLoS ONE*, 16(11 November), 1–14. <https://doi.org/10.1371/journal.pone.0259971>
- Okada, E. M. (2005). Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 42(1), 43–53.
- Park, D.-H., Lee, J., & Han, I. (2007). The Effect of On-Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11(4), 125–148. <https://doi.org/10.2753/JEC1086-4415110405>
- Prasetyo, A., Hartoyo, H., & Tinaprila, N. (2016). Behavior Analysis of Consumer Complaint. *Indonesian Journal of Business and Entrepreneurship*, February, 101–111. <https://doi.org/10.17358/ijbe.2.2.101>
- Putra, N., & Giantari, I. (2014). Pengaruh Sikap Mengeluh Dan Jenis Kelamin Terhadap Perilaku Komplain Di Fakultas Ekonomi Dan Bisnis Universitas Udayana

- Denpasar. *E-Jurnal Manajemen Universitas Udayana*, 3(9), 2471–2488.
- Safari A, Simanjuntak M. 2020. Perlindungan Konsumen: Suatu Pengantar. Di dalam: Safari A, Dalimunthe ARL, Anggraini AT, Parman A, Muslim E, Simanjuntak M. *Unboxing Perlindungan Konsumen*. Bogor : IPB Press. hlm 1-24
- Schivinski, B., & Dabrowski, D. (2014). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 22. <https://doi.org/10.1080/13527266.2013.871323>
- Shaw, D., Newholm, T., & Dickinson, R. (2006). Consumption as Voting: An Exploration of Consumer Empowerment. *European Journal of Marketing*, 40, 1049–1067. <https://doi.org/10.1108/03090560610681005>
- Simanjuntak, M., & Mubarakah, U. (2020). Independent Journal Of Management & Production (Ijm&P) Investigating How Consumer Education And Lifestyle Influence The Consumer Empowerment: Case In Rural And Urban Areas, Indonesia. *Independent Journal of Management & Production*, 12, 1232–1249. <https://doi.org/10.14807/ijmp.v12i5.1395>
- Slovic, P. (1975). Choice between Equally Valued Alternatives. *Journal of Experimental Psychology: Human Perception and Performance*, 1(3), 280–7.
- Snyder, M. L., Robert E, K., Angelo Strenta, & Steven, Jm. (1979). Avoidance of the Handicapped: An Attributional Analysis. *Journal of Personality and Social Psychology*, 37(12), 2297–306.
- Song, S., & Sun, Q. (2020). Online Consumption and Income Efficiency: Evidence from China. *The Chinese Economy*, 53(6), 465–476. <https://doi.org/10.1080/10971475.2020.1792068>
- SULEMAN, D., Zuniarti, I., & SABIL. (2013). Consumer Decisions toward Fashion Product Shopping in Indonesia: The effects of Attitude, Perception of Ease of Use, Usefulness, and Trust. *Management Dynamics in the Knowledge Economy*, 7, 133–146. <https://doi.org/10.25019/MDKE/7.2.01>
- Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information Avoidance: Who, What, When, and Why. *Review of General Psychology*, 14(4), 340–353. <https://doi.org/https://doi.org/10.1037/a00212>
- Tetlock, Philip E., & Richard, B. (1989). Accountability: A Social Magnifier of the Dilution Effect. *Journal of Personality and Social Psychology*, 57(3), 388–398.
- Tetlock, Philip E, & Jae I. Kim. (1987). Accountability and Judgment Processes in a Personality Prediction Task. *Journal of Personality and Social Psychology*, 52(4), 700–9.
- Thøgersen, J., Juhl, H. J., & Poulsen, C. S. (2003). Complaining: A function of attitude, personality, and situation. *Wiley Periodicals, Inc.*, 6(8), 760–777. <https://doi.org/https://doi.org/10.1002/mar.20298>
- UNCDF Policy Accelerator. (N.D.). The Role Of Consumer Protection In The Digital Economy. Retrieved From <https://Policyaccelerator.Uncdf.Org/Policy-Tools/Brief-Consumer-Protection-Digital-Economy>
- Vos, J. F. J., Huitema, G. B., & de Lange-Ros, E. (2008). How organisations can learn from complaints. *The TQM Journal*, 20(1), 8–17. <https://doi.org/10.1108/09544780810842866>
- Wibowo, W., Santosa, P. I., & Sunarto, B. (2019). Analysis of Consumer Behavior in Using E-commerce Applications in Indonesia. IOP Conference
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and

- predicting etail quality. *Journal of Retailing*, 79(3), 183–198. [https://doi.org/https://doi.org/10.1016/S0022-4359\(03\)00034-4](https://doi.org/https://doi.org/10.1016/S0022-4359(03)00034-4)
- Woolley, K., & Risen, J. L. (2021). Hiding from the Truth: When and How Cover Enables Information Avoidance. *Journal of Consumer Research*, 47(5), 675–697. <https://doi.org/10.1093/jcr/ucaa030>
- Yang, M., Al Mamun, A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability (Switzerland)*, 13(2), 1–18. <https://doi.org/10.3390/su13020831>
- Zankovsky, S., Bezbakh, V., Inshakova, A., & Rusakova, E. P. (2021). Social consequences of economic globalization: experience of developed and developing countries and perspectives of optimization. *International Journal of Sociology and Social Policy*, 41(1–2), 211–223. <https://doi.org/10.1108/IJSSP-03-2020-0068>



© 2023 by the authors. Licensee JPPD, Indonesia. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).