

# MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Terakreditasi SINTA Peringkat 2 SK: 148/M/KPT/2020

MATRIK  
MATRIK  
MATRIK

**Corporate Resilience During the Covid-19 Pandemic: the Role of ESG Performance and Financial Flexibility**

Pande Putu Khrisna Ariyudha, Rofikoh Rokhim

**Reciprocal Relationship between Subjective Well-Being, Social Media Engagement and Compulsive Behavior**

Derriawan, Hendryadi, Suryani, Laili Savitri Noor, Amelia Okrivina

**Factors that Influence Shared E-Scooter Usage Intentions on University Campus**

Waranpong Boonsiritomachai, Ploy Sud-On

**Brand Anticipation in an Era of Uncertainty: Understanding Consumer Behaviour towards Companies' Future Anticipation Efforts**

Andriya Risdwiyanto, Filasti Rahma, Loso Judijanto, Arif Saefudin

**Investigating the Impact of Event Experience on Satisfaction and Behavioural Intention of Music Event Audiences**

Trihadi Pudiawan Erhan, Cendera Rizky Anugrah Bangun

**Segmentation Analysis of Staycationers in Jakarta**

Shinta Wardhani, Agung Suryawan Wirantha, I Gusti Ayu Oka Suryawardani

**Factors that Influence Electric Vehicle Purchase Intention: an Evidence from Indonesia**

Emiliana Indri Eryolanda, Alim Gunandi Sukanto, Indah Taesari, Andry Mahyudi, Ariyadi Yudo Purnomo, Istijanto

Diterbitkan oleh: Universitas Udayana

|                                                                    |              |            |                  |                           |                   |
|--------------------------------------------------------------------|--------------|------------|------------------|---------------------------|-------------------|
| MATRIK: JURNAL MANAJEMEN,<br>STRATEGI BISNIS, DAN<br>KEWIRAUSAHAAN | Volume<br>18 | Nomor<br>1 | Halaman<br>1-103 | Denpasar<br>Februari 2024 | ISSN<br>1978-2853 |
|--------------------------------------------------------------------|--------------|------------|------------------|---------------------------|-------------------|



Published since 2007 by Udayana University

## EDITORIAL TEAM

### Editor in Chief

1. **Ni Putu Santi Suryantini**, Faculty of Economics and Business, Udayana University, Indonesia

### Managing Editor

1. **Ni Putu Ayu Darmayanti**, Faculty of Economics and Business, Udayana University, Indonesia
2. **I Gusti Ayu Tara Laksemyasa Ditha**, Faculty of Economics and Business, Udayana University, Indonesia

### Editorial Board Members

1. **Evan Lau**, University Malaysia Sarawak, Malaysia
2. **Ardi Gunardi**, Pasundan Bandung University, Indonesia
3. **Manorajan Sahoo**, School of Humanities Kalinga Institute of Industrial Technology (KIIT) Deemed To Be University Bhubaneswar, India
4. **Ni Nyoman Kerti Yasa**, Udayana University, Indonesia
5. **I Wayan Edi Arsawan**, Bali State Polytechnic, Indonesia
6. **A Sakir**, Syah Kuala University, Indonesia
7. **Ni Luh Putu Wiagustini**, Udayana University, Indonesia
8. **I Gusti Bagus Wiksuana**, Udayana University, Indonesia
9. **I Wayan Gede Supartha**, Udayana University, Indonesia
10. **I Gede Bayu Rahanatha**, Udayana University, Indonesia
11. **Muh Sabir M**, Ichsan Gorontalo University, Indonesia
12. **Zakky Zamrudi**, University of Islamic Kalimantan Muhammad Arsyad Al Banjari, Indonesia

### Editorial Assistant

1. **Putu Dian Pradnyasari**, Faculty of Economics and Business, Udayana University, Indonesia
2. **Martinus Albertian Sare Rupa**, Faculty of Economics and Business, Udayana University, Indonesia
3. **Audri Aurelia**, Faculty of Economics and Business, Udayana University, Indonesia
4. **Ni Putu Risky Suantari**, Faculty of Economics and Business, Udayana University, Indonesia

### EDITORIAL ADDRESS

BJ Building Lv. III, Faculty of Economics and Business, Udayana University

Jl. PB Sudirman, Denpasar

Tel. 0361-224133, Fax. 0361-241929

e-mail: [matrik.fe@unud.ac.id](mailto:matrik.fe@unud.ac.id)

Instructions for writing articles are on the inside of the back cover



## TABLE OF CONTENTS

**Corporate Resilience During the Covid-19 Pandemic: the Role of ESG Performance and Financial Flexibility**

Pande Putu Khrisna Ariyudha, Rofikoh Rokhim \_\_\_\_\_ 1-15

**Reciprocal Relationship between Subjective Well-Being, Social Media Engagement and Compulsive Buying Behavior**

Derriawan, Hendryadi, Suryani, Laili Savitri Noor, Amelia Okrivina \_\_\_\_\_ 16-32

**Factors that Influence Shared E-Scooter Usage Intentions on University Campus**

Waranpong Boonsiritomachai, Ploy-Sud-On \_\_\_\_\_ 33-44

**Brand Anticipation in an Era of Uncertainty: Understanding Consumer Behaviour towards Companies' Future Anticipation Efforts**

Andriya Risdwiyanto, Filasti Rahma, Loso Judianto, Arif Saefudin \_\_\_\_\_ 45-55

**Investigating the Impact of Event Experience on Satisfaction and Behavioural Intention of Music Event Audiences**

Trihadi Pudiawan Erhan, Cendera Rizky Anugrah Bangun \_\_\_\_\_ 56-70

**Segmentation Analysis of Staycationers in Jakarta**

Shinta Wardhani, Agung Suryawan Wiranatha, I Gusti Ayu Oka Suryawardani \_\_\_\_\_ 71-86

**Factors that Influence Electric Vehicle Purchase Intention: an Evidence from Indonesia**

Emiliana Indri Eryolanda, Alim Gunadi Sukanto, Indah Teasari, Andry Mahyudi, Ariyadi Yudo Purnomo, Istijanto \_\_\_\_\_ 87-103



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 1-15



### Corporate Resilience During the COVID-19 Pandemic: the Role of ESG Performance and Financial Flexibility

Pande Putu Khrisna Ariyudha<sup>1)</sup>, Rofikoh Rokhim<sup>2)</sup>

<sup>1,2</sup>Universitas Indonesia

Email: ariyudhakhrisna@gmail.com



SINTA 2

DOI : <https://doi.org/10.24843/MATRIK:JMBK.2024.v18.i01.p01>

#### ABSTRACT

Stocks of substantial ESG firms have been claimed to perform better during crisis periods and consequently serve as an "equity vaccine" for investors. This study explores ESG ratings and financial flexibility's impact on stock performance. We test these hypotheses in the ASEAN-5 setting by assessing the relation between ESG and financial flexibility to stock price resilience in terms of time to recover during 2020 and 2021. The method used in this study is a cross-sectional data regression analysis. In a sample of 142 stocks from 5 countries consisting of Indonesia, Malaysia, Thailand, Philippines, and Singapore, we found that firms with higher ESG ratings had a better stock market performance. They tend to recover faster to achieve their lowest price in 2019. We also discovered that having more cash and liquid assets before COVID-19 doesn't make a company better at dealing with the impacts of the pandemic compared to other companies.

**Keywords:** ASEAN-5; corporate resilience; COVID-19; ESG; financial flexibility

#### INTRODUCTION

During the COVID-19 pandemic, there were widespread claims that Environmental, Social, and Governance (ESG) performance protected socially responsible companies from extreme drop compared to similar companies with low ESG performance. Morningstar, Inc. even claims ESG as an "equity vaccine" against the market sell-off caused by the COVID-19 pandemic (Andrew Willis, 2020). Broadstock et al. (2020) studied companies listed on the CSI300 index and found that companies with high ESG scores performed higher than those with low ESG. Companies with high ESG can mitigate financial risks during times of crisis. These results are also supported by research from (Gianfrate et al., 2021), which found that companies with high ESG values in North America have high resilience during crises. A high ESG indicates a good relationship with stakeholders, and stakeholders are willing to help the company during periods of crisis. Albuquerque et al. (2020) proved that companies with high CSR investments could reduce the company's risk exposure to systematic risk. Mousa, Saleem, and Sági (2022) argue that companies that adopt sustainable finance or have good ESG performance are proven to have higher resilience and lower risk during periods of crisis. El

Khoury et al. (2022) argue that investors often use ESG to evaluate investment choices, and it is a significant measure of corporate risk management.

On the other hand, research related to the influence of ESG components on company stock performance still reveals an empirical gap, characterized by inconsistencies in the conclusions drawn from previous studies conducted in both developed and developing country settings. Bae et al. (2021) conducted research on 1,750 companies in the United States and found insufficient evidence to support the notion that CSR influenced stock returns during crash periods. Furthermore, this research demonstrates that pre-crisis CSR measures did not effectively protect shareholders during the pandemic crisis. (Alharire and Alalwani, 2021) investigated the Stockholm Stock Index OMXS30 during the first and second quarters of 2020, revealing that high ESG values did not have a significant impact on abnormal risk-adjusted returns during these periods. Additionally, Gianfrate et al. (2021) conducted a study of 6,000 stocks in 45 countries and concluded that there was no strong evidence suggesting that companies with high ESG scores exhibited better stock performance during the first quarter of 2020. The debate surrounding whether companies with high ESG performance can achieve stock performance resistant to crisis risks remains ongoing and regionally specific. Researchers then found it urgent to test whether ESG performance values were truly a factor in stock price resilience during the COVID-19 pandemic, especially within the ASEAN-5 regional scope because there had been no similar research with a sample of ASEAN-5 countries. Researchers hope that the findings of this research can be a consideration for companies in the ASEAN-5 region in managing their ESG investments.

Demers et al. (2021) conducted a similar study. They found strong evidence that ESG is not an "equity vaccine" for United States companies against falling stock prices during a crisis, during the research period of the explosion of COVID-19 cases, namely in the first quarter of 2020 and the full year ending December 31, 2020. Meanwhile, liquidity and leverage, financial performance, value chain management, intangible assets developed internally, and equity risk can clearly explain stock returns during the COVID-19 pandemic. The study from (Cardillo et al., 2022) revealed that companies with superior Environmental, Social, and Governance (ESG) ratings exhibited stronger performance compared to companies with inferior ESG ratings following the public disclosure of national COVID-19 case and mortality figures by public authorities. In line with this research, Syafrullah and Muharam (2017) found that environmental performance has a positive but insignificant impact, while social performance and corporate governance have a significant positive impact on abnormal company returns. These results are also following the legitimacy theory and stakeholder theory. H1: ESG performance positively affects corporate resilience during the COVID-19 pandemic.

As the global impact of the COVID-19 crisis started to emerge, CEOs and CFOs initially focused on ensuring the survival of their companies. Their immediate response was centered on preserving cash and allocating resources to sustain operations. During exceptional circumstances, having additional cash can play a pivotal role in preventing a company from experiencing bankruptcy. (Grube et al., 2020). Firms' cash reserves decrease their dependence

on external financing demands during the COVID-19 pandemic (Xia et al., 2022a). Fahlenbrach, Ragheth, and Stulz (2021) studied all U.S. companies listed on the stock exchange and found that companies with high financial flexibility experienced a decrease in stock prices of 26% or 9.7% lower than companies with low financial flexibility. This difference continues until the stock price rebound. Cardillo, Bendinelli, and Torluccio (2022) also document that high cash holding and asset liquidity in the pre-COVID-19 period helped companies keep performing and absorb COVID-19 externalities better than others.

Companies with high financial flexibility can go through periods of crisis and take advantage of investment opportunities (Alipour et al., 2015). Companies with high financial flexibility generally performed better during the post-Lehman stock market drop in 2008-2009 (Fahlenbrach et al., 2021). Alharire and Alalwani (2021) found that companies with high financial flexibility positively and significantly affect abnormal risk-adjusted returns. By using CAPM and regression model, the authors examine three periods which are "Incubation (Thursday, January 2 through Friday, January 17), Outbreak (Monday, January 20 through Friday, February 21), and Fever (Monday, February 24 through Friday, March 20)".

H2: Financial flexibility positively affects corporate resilience during the COVID-19 pandemic.

The COVID-19 pandemic represents an exogenous shock that harms the capital market (Xu, 2021). Similar events still have the potential to occur in the future. These conditions prompted the authors to examine the significant characteristics of companies that produce the most resilience during times of crisis (Gianfrate et al., 2021) so that investors can choose the most resilient stocks when similar conditions recur.

## **METHOD**

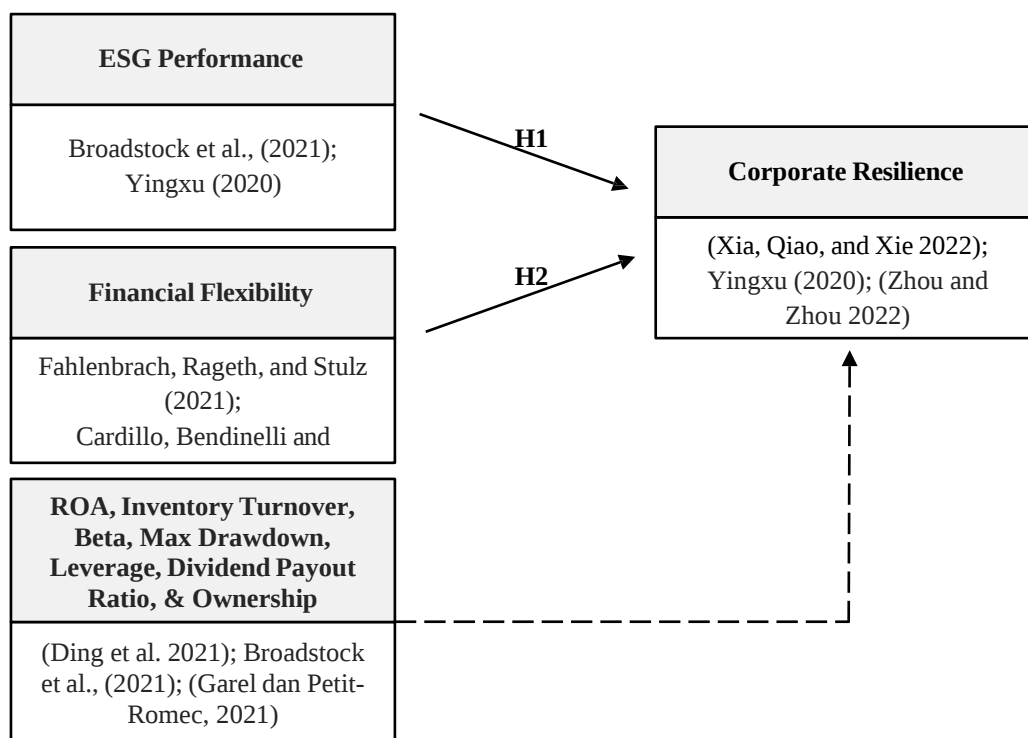
The unit of analysis in this study consists of companies listed on the stock exchanges of ASEAN-5 countries, including the Indonesia Stock Exchange, the Malaysia Stock Exchange, the Singapore Stock Exchange, The Stock Exchange of Thailand, and The Philippines Stock Exchange from 2019 to 2021. This period was chosen because it represents the period of the COVID-19 pandemic all over ASEAN. As an association of countries, ASEAN has a shared vision and blueprint regarding politics-security, economy, and socio-culture, so they have similar economic conditions. This condition is evidenced by the same period of collapse in the Indonesian, Malaysian, Philippine, Singaporean, and Thai stock exchanges, namely around March 2020. The sampling approach employed in this study utilizes the purposive sampling method, which involves selecting participants based on specific criteria set by the researcher.

This study falls under the category of quantitative research. The initial phase of data analysis in this study involved the utilization of descriptive statistics. Descriptive statistics were employed to compute various summary measures such as the mean, median, minimum, maximum, and standard deviation for each proxy variable. Subsequently, the study proceeded to conduct inferential analysis in order to test the formulated hypotheses. Multiple linear regression analysis was employed as the inferential analysis technique to test the hypothesis in this study. The classical assumption must be tested in linear regression with the Ordinary Least Squared (OLS) approach, including the normality, autocorrelation, heteroscedasticity, and

multicollinearity tests. Consequently, the EVIEWS 9 program will be employed to assist in the data analysis process for this research.

The data owned has the characteristics of cross-section data. This study uses two variables of interest: ESG performance and financial flexibility, in the proxy of quick ratio. This study also applied seven control variables: beta, max drawdown, ROA, inventory turnover, debt-to-equity ratio, dividend payout ratio, and strategic owner. Data for all independent, dependent, and control variables were obtained from Thomson Reuters – Eikon. Thomson Reuters – Eikon is a platform for financial scholars and professionals, commonly used as a financial market database, financial market analysis tool, and securities trading software.

Based on signaling theory, companies can use ESG performance as a positive signal to stakeholders and can be associated with low uncertainty, especially during periods of crisis (Mounir and Ali, 2022). Ding et al. (2021) found that companies with high ESG scores were less affected by the negative impacts generated by the pandemic and tended to be more resilient during the COVID-19 crisis. Engelhardt, Ekkenga, & Posch (2021) found that high ESG scores can be associated with lower stock price volatility during the pandemic. (Pisani and Russo, 2021) also found that mutual funds with high ESG scores were more resilient during the COVID-19 pandemic because they had a lower level of risk.



**Figure. 1 Research Model**

The pandemic has had an impact on the board of directors, managers, shareholders, customers, suppliers, and employees. Companies should view the era of disruption as an opportunity to adapt business models that are no longer relevant to these stakeholders. To face challenges and welcome these opportunities, companies must have flexibility, especially financial flexibility. To be able to adapt, the company must have idle resources from the

previous period that can be utilized for business process transitions. Among all companies that experience a decline in earnings, a smaller share price decline will occur in companies with higher financial flexibility. The difference in price reduction reached 26% of the average price reduction for all companies in North America (Fahlenbrach et al., 2021)

A study model has been formulated to illustrate the impact, whether positive, negative, or statistically insignificant, as depicted in Figure 1.

The subsequent equation represents the mathematical formulation employed in this study:

$$RSLNC_t = \alpha_0 + \beta_1 ESG_{it-1} + \beta_2 QUICK_{it-1} + \beta_3 BETA_{it} + \beta_4 MAX\_DRAWDOWN_{it} + \beta_5 ROA_{it} + \beta_6 INVENTORY\_TO_{it-1} + \beta_7 DEBT\_TO\_EQUITY_{it-1} + \beta_8 DIVIDEND_{it-1} + \beta_9 STRATEGIC\_OWNER_{it-1} + e_{it} \dots\dots\dots (1)$$

Definitions for each variable, including their precise calculations and references, are provided in Table 1 below:

**Table 1. Variable Measurement**

| Variable Code                               | Variable Name         | Description and Formula                                                                                                                         | References                                         |
|---------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Dependent Variable                          |                       |                                                                                                                                                 |                                                    |
| RSLNC                                       | Corporate Resilience  | Time to recovery in days from the company's share price starting from the drawdown date in March 2020 until it reached its lowest price in 2019 | (Xia, Qiao, and Xie, 2022)                         |
| Independent Variable (Variable of Interest) |                       |                                                                                                                                                 |                                                    |
| ESG                                         | ESG Performance       | ESG performance scores are available in the Thomson Reuters Eikon database.                                                                     | (Broadstock et al., 2020);                         |
| QUICK                                       | Quick Ratio           | $\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$                                                                   | (Oad Rajput et al., 2019)                          |
| Independent Variable (Control Variable)     |                       |                                                                                                                                                 |                                                    |
| BETA                                        | Stock Beta            | Beta compares the volatility of a stock against the volatility of the broader market, typically measured by a reference market index.           | (Engelhardt et al., 2021)                          |
| MAX_DRADOWN                                 | Max Drawdown          | The decrease from the highest point in 2019 to the bottom during the crisis period (March 2020)                                                 | (Yingxu, 2020)                                     |
| ROA                                         | Return on Assets      | $\frac{\text{Net Income}}{\text{Average Total Assets}}$                                                                                         | (Gianfrate et al., 2021)                           |
| INVENTORY_TO                                | Inventory Turnover    | $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$                                                                                    | (Gianfrate et al., 2021)                           |
| DEBT_TO_EQUITY                              | Debt to Equity Ratio  | $\frac{\text{Total Liabilities}}{\text{Total Equity}}$                                                                                          | (Cardillo et al., 2022)                            |
| DIVIDEND                                    | Dividend Payout Ratio | $\frac{\text{Annual Dividends Per Share}}{\text{Earnings Per Share}}$                                                                           | (Gianfrate et al., 2021)                           |
| STRATEGIC_OWNER                             | Strategic Ownership   | The number of shares owned by strategic investors compared to the total number of shares outstanding.                                           | (Garel dan Petit-Romec, 2021), (Ding et al., 2021) |

Source: Data processed, 2023

## RESULT AND DISCUSSION

**Table 2. Sample Selection Scheme**

| Description                                                                                                                                                                                                                                                                                                      | Number of Observation |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Companies in the Association of Southeast Asian Nations (ASEAN) 5 region listed by Thomson Reuters                                                                                                                                                                                                               | 3699                  |
| Companies in the ASEAN-5 region in the Thomson Reuters database have ESG performance value data for 2019                                                                                                                                                                                                         | 322                   |
| Companies in the ASEAN-5 region in the Thomson Reuters database that have complete variable data (2019 ESG performance values, 2019 Quick Ratio, 2020 Stock Beta, 2020 Max Drawdown, 2020 ROA, 2019 Inventory Turnover, 2019 Debt to Equity Ratio 2019, 2019 Dividend Payout Ratio, and 2019 Strategic Ownership | 215                   |
| Companies that do not pass the criteria in purposive sampling                                                                                                                                                                                                                                                    | (36)                  |
| Outlier Data from 1 Dependent Variable, 2 Independent Variables, and 6 Control Variables                                                                                                                                                                                                                         | (37)                  |
| <b>Number of Observations</b>                                                                                                                                                                                                                                                                                    | <b>142</b>            |

Source: Data processed, 2023

The purposive sampling criterias were, 1) the lowest share price in 2019 is higher than the lowest share price in 2020 (drawdown point), 2) did not experience an upward trend during 2020 - 2021. The upward trend shows that stock price movements are not in line with market movements which experienced a decline from January to March 2022 and then slowly reversed toward a positive trend, and 3) did not experience a downward trend during 2020 - 2021. The downward trend indicates that the COVID-19 pandemic did not purely influence the downward movement in the stock price.

Only 322 out of 3699 companies have an ESG score or 8.7% of the company database in the ASEAN-5 region provided by Thomson Reuters. Thus, 142 companies meet the criteria. Refer to Chart 1, and we can conclude that from the 142 companies, the most significant proportion were companies in Thailand, namely as much as 27%, followed by Malaysia, as much as 21%, Singapore at 20%, Indonesia at 18%, and the least was the Philippines as much as 14%.

**Table 3. Descriptive Statistical Test Result**

| Variable              | Mean     | Standard Deviation | Maximum Value | Minimum Value |
|-----------------------|----------|--------------------|---------------|---------------|
| Time to Recovery      | 148.9577 | 137.9776           | 648           | 2             |
| ESG                   | 54.71207 | 17.01004           | 88.96250      | 10.26805      |
| Quick Ratio           | 1.261858 | 0.973473           | 5.807330      | 0.092760      |
| Beta                  | 1.158580 | 0.546809           | 3.130370      | 0.216291      |
| Max Drawdown          | 0.243451 | 0.171166           | 0.572391      | -0.469675     |
| Return on Assets      | 0.043788 | 0.067795           | 0.344300      | -0.156600     |
| Inventory Turnover    | 25.92787 | 87.60669           | 822.7498      | 0.175164      |
| Debt to Equity Ratio  | 0.857801 | 1.166420           | 12.52387      | 0.000577      |
| Dividend Payout Ratio | 0.585208 | 0.653294           | 4.715114      | 0.936469      |
| Strategic Ownership   | 0.541216 | 0.219522           | 0.936469      | 0.003380      |

Source: Data processed, 2023

Based on the results of descriptive statistics, it is known that companies in Indonesia, Malaysia, Singapore, Thailand, and the Philippines need an average time of 148.9577 days to

recover to their lowest value in 2019 from the lowest point in the 2020 period, with the standard value deviation of 137.9776 days. The standard deviation value, which almost equals the mean value, illustrates that the data distribution is quite varied. The average recovery time is much faster than the time needed by the market indices in the five countries to recover to their lowest point in 2019.



**Figure 2. Time to Recovery Calculation Simulation**

Source: reuters.com accessed on June 4, 2023

The time-to-recovery calculation simulation in this research utilizes price charts from PT Aneka Tambang Tbk. The company's shares reached their lowest point in the period preceding the pandemic, specifically in 2019, at IDR 675, corresponding to the company's share price on May 17, 2019, as indicated in point 1 in Figure 3.2. Subsequently, the company experienced a drawdown during the COVID-19 pandemic, causing the share price to plummet to its lowest level in 2020, amounting to IDR 357.18, precisely on March 24, 2020 (drawdown date), as illustrated in point 2 in Figure 3.2. The share price then rebounded to IDR 679.74 on July 21, 2020 (recovery date), as denoted in point 3 in Figure 3.2. This marked the first instance post drawdown date that the share price surpassed the lowest 2019 price. Consequently, the share prices were deemed to have recovered during the period between March 24, 2020, and July 21, 2020, spanning 119 days.

ESG performance scores help investors, stakeholders, and society, in general, to understand how companies manage risks and opportunities related to ESG issues. The average ESG value is 54.71207, with a standard deviation of 17.01004. Based on the ESG value description table from Refinitiv, the ESG disclosures of companies in the ASEAN-5 region generally fall within the value range of >50,75, which means that the ESG performance of companies in the ASEAN-5 region is relatively reasonable and has been able to disclose material ESG data to the public. The maximum value of ESG performance is owned by Minor International PCL, which is 88.96250. Minor International PCL is a global company in the hospitality, restaurant, food brand, and retail sectors. Minor International recovered longer than the average company in the ASEAN-5 region, with a 2019 ESG score within 442 days from the 2020 drawdown point. The minimum value of ESG performance is owned by Alliance Global Group Inc, which is 10.26805. Alliance Global Group Inc. (AGI) is a conglomerate company based in the Philippines. The company was founded in 1993 and operates in various sectors, including property, hospitality, retail, food and beverage, and infrastructure. Alliance Global

Group Inc. recovered longer than the average company in the ASEAN-5 region, with a 2019 ESG score within 387 days from the 2020 drawdown point.

The quick ratio is a financial ratio that measures a company's ability to meet its short-term obligations using liquid assets that are most quickly converted into cash. This ratio considers current assets that can be converted into cash immediately, such as cash, cash equivalents, and trade receivables. The average quick ratio of companies in the ASEAN-5 region is 1.261858, with a standard deviation of 0.973473. The maximum value of the quick ratio as a proxy for financial flexibility is owned by Genting Singapore Ltd, which is 5.80733. Genting Singapore Limited is a Singapore-based company that develops and operates integrated resorts. Genting Singapore Ltd recovered longer than the average company in the ASEAN-5 region, with a 2019 ESG score within 250 days from the 2020 drawdown point. Supalai PCL has a minimum quick ratio value of 0.09334. Supalai PCL is a property company engaged in property development and investment in Thailand. Supalai PCL also recovered longer than the average company in the ASEAN-5 region, with a 2019 ESG value within 259 days from the 2020 drawdown point.

Max drawdown is a ratio that measures how deep the stock price falls during the drawdown period (December 31, 2019, to March 15, 2020). The deeper the stock price falls, the more difficult it should be for the stock to rise to reach its lowest price in 2019. The average Max Drawdown of companies in the ASEAN-5 region with an ESG score for 2019 is 0.243451 with a standard deviation of 0.171166. This value reflects that, on average, company shares in the ASEAN-5 region experienced a significant decrease of 24.34% during the drawdown period. PT Waskita Karya Tbk owns the maximum beta value, 57.24%. The minimum max drawdown value is owned by XP Power Limited, which experienced an increase in the share price of 46.97% during the drawdown period. XP Power Limited is a global company that designs, manufactures, and markets advanced electrical power solutions.

The return on assets (ROA) ratio is one of the financial indicators used to assess a company's profitability in utilizing its resources. The average ROA of ASEAN-5 companies with an ESG value in 2020 is 4.3%, with a standard deviation of 6.77%. The highest ROA in 2020 was owned by P.T. Unilever Indonesia Tbk, which was 34.43%. P.T. Unilever Indonesia Tbk is a public company engaged in consumer goods and household products. The lowest ROA in 2020 was owned by P.T. Matahari Department Store Tbk, which was -15.66%. Matahari Department Store is a retail chain operating in Indonesia. Matahari Department Store is one of Indonesia's most prominent retailers that offers various products such as clothing, shoes, accessories, household appliances, cosmetics, and other items.

Inventory turnover is a financial ratio used to measure how efficiently a company manages its inventory. The inventory turnover ratio shows how quickly a company can turn inventory into sales. The average inventory turnover of companies with an ESG value for 2019 in the ASEAN-5 region is 25.92787 times with a standard deviation of 87.60669 times. The highest inventory turnover in 2019 was owned by Singapore Post Ltd, namely 822.7498 times. Singapore Post Ltd (SingPost) is a logistics and delivery company based in Singapore. The company with the lowest inventory turnover in 2019 is Bukit Sembawang Estates Ltd, which is 0.175164 times. Bukit Sembawang Estates Ltd is a real estate company based in Singapore.

The debt-to-equity ratio is a financial ratio that assesses the proportion of debt and equity a company uses to fund its operations and investments. This ratio provides an overview of the company's capital structure and the level of associated financial risk. The average debt-to-equity ratio of companies in the ASEAN-5 region with an ESG value in 2019 is 0.857801,

with a standard deviation of 1.166420. This value shows that, on average, companies with an ESG score of 2019 in the ASEAN-5 region fund most of their operations and investments with equity. Thai Airways International PCL owned the highest debt-to-equity ratio in 2019, 12.5238665. Thai Airways International PCL, commonly known as Thai Airways, is the national airline of Thailand. The company with the lowest debt-to-equity ratio in 2019 is Vale Indonesia Tbk, 0.000577. Vale Indonesia is a nickel mining company operating in Indonesia. The company is a subsidiary of Vale S.A., a global mining company based in Brazil.

The dividend payout ratio is a financial ratio that measures how much percentage of a company's net profit is distributed as dividends to shareholders in return for their share ownership. A high ratio indicates that the company provides shareholders with a good return on investment. The average dividend payout ratio of companies in the ASEAN-5 region with an ESG value in 2019 is 58.52%, with a standard deviation of 65.33%. This value shows that, on average, companies with a 2019 ESG value in the ASEAN-5 region provide dividends with a reasonably high value greater than 50%. The highest dividend payout ratio in 2019 was owned by International Container Terminal Service Inc, which was 4.7151. International Container Terminal Services Inc. (ICTSI) is a logistics and transportation company in the Philippines.

**Table 4. Multicollinearity Test**

| Variance Inflation Factors |                      |                |              |
|----------------------------|----------------------|----------------|--------------|
| Variable                   | Coefficient Variance | Uncentered VIF | Centered VIF |
| C                          | 2747.665             | 30.61587       | NA           |
| ESG                        | 0.316777             | 11.57992       | 1.014095     |
| QUICK                      | 108.6951             | 3.068125       | 1.139650     |
| BETA                       | 477.1819             | 8.715644       | 1.578588     |
| MAX_DRAWDOWN               | 4767.569             | 4.693903       | 1.545419     |
| ROA                        | 28954.96             | 2.091037       | 1.472422     |
| INVENTORY_TO               | 0.011884             | 1.098144       | 1.009127     |
| DEBT_TO_EQUITY             | 82.21557             | 1.911670       | 1.237592     |
| DIVIDEND                   | 233.9310             | 1.997305       | 1.104635     |
| STRATEGIC_OWNER            | 2086.591             | 7.923041       | 1.112823     |

Source: Data processed, 2023

This study's multicollinearity detection was done by looking at the Variance Inflation Factor (VIF) value. It can be seen in Table 4 that all VIF for each variable is worth less than 10 with a value range of 1.014095 to 1.578588. Therefore, there are no symptoms of multicollinearity in the research model, and the model can be used as a reliable predictor.

**Table 5. Heteroscedasticity Test**

| Heteroskedasticity Test: Breusch-Pagan-Godfrey |          |                     |        |
|------------------------------------------------|----------|---------------------|--------|
| F-statistic                                    | 1.283280 | Prob. F(9,132)      | 0.2517 |
| Obs*R-squared                                  | 11.42485 | Prob. Chi-Square(9) | 0.2477 |
| Scaled explained SS                            | 7.067562 | Prob. Chi-Square(9) | 0.6301 |

Source: Data processed, 2023

The method used to detect indications of heteroscedasticity in this study is the Breusch-Pagan-Godfrey test. Based on the output in Table 5., the probability value of Chi-Square is

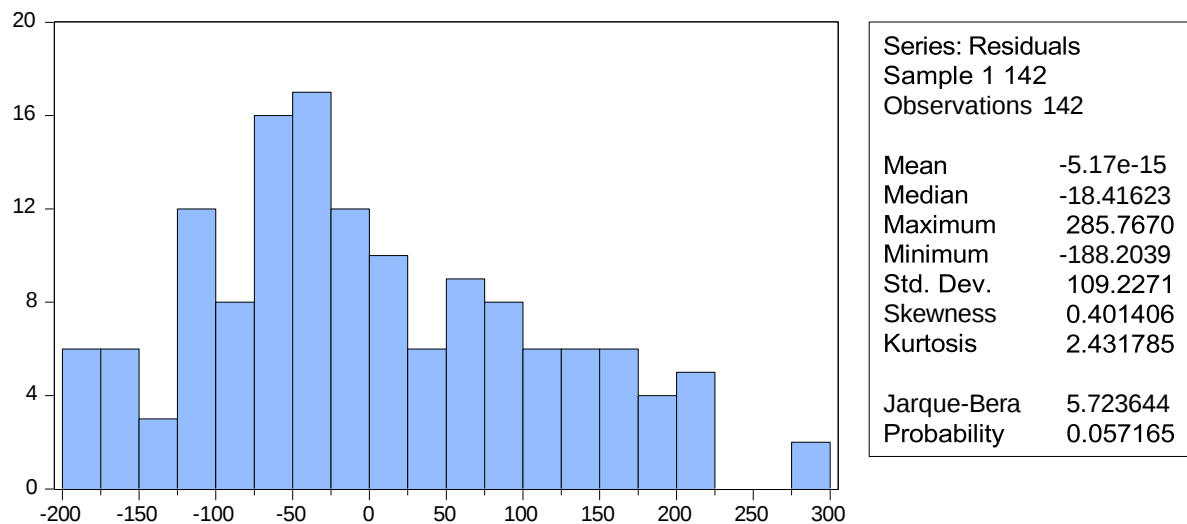
0.2477, which is greater than the  $\alpha$  value of 0.05. Therefore, it can be concluded that this model is free from heteroscedasticity symptoms and has high accuracy.

**Table 6. Autocorrelation Test**

| <b>Breusch-Godfrey Serial Correlation LM Test:</b> |          |                     |        |
|----------------------------------------------------|----------|---------------------|--------|
| F-statistic                                        | 0.091196 | Prob. F(2,130)      | 0.9129 |
| Obs*R-squared                                      | 0.198950 | Prob. Chi-Square(2) | 0.9053 |

Source: Data processed, 2023

The autocorrelation test in this study was carried out using the Breusch-Godfrey Serial Correlation L.M. test. The test results show that the probability value 0.9129 is greater than  $\alpha = 0.05$ . Therefore, there is no autocorrelation problem in this model, and this model is sufficient to explain the variation in the data. The absence of autocorrelation underscores the model's reliability, while its capability to explain the variance in the data solidifies its adequacy as an explanatory framework.



**Figure 3. Normality Test**

Source: Data processed, 2023

Normality testing in this study was carried out using the Jarque-Bera test. The test results show that the Jarque-Bera test statistic is 5.723644 with a critical point of  $X^2(0.05;2) = 5.99$  or a p-value of 0.057165 greater than  $\alpha = 0.05$ . Therefore, based on the Jarque-Bera test results and the comparison with the critical value and significance level, it can be concluded that the residuals from the normally distributed and the research models can be used as reliable predictors. This finding underscores the validity of utilizing these residuals as dependable predictors within the context of the study, lending support to their efficacy in informing subsequent analytical or predictive endeavors.

From the result of the hypothesis test, the multiple linear regression analysis equations with cross-section data generate the following estimation model:

$$\begin{aligned}
 RSLNC_t = & 210,8993 - 0,935143ESG_t - 13,33535QUICK_t + 37,31206BETA_t + \\
 & 212,0963MAX\_DRAWDOWN_t - 562,2141ROA_t + \\
 & 0,332517INVENTORY\_TO_t - 32,53387DEBT\_TO\_EQUITY_t - \\
 & 12,71132DIVIDEND_t - 69.23546STRATEGIC\_OWNER_t.....
 \end{aligned}
 \tag{2}$$

**Table 7. T-Test Multiple Linear Regression Analysis**

| Dependent Variable: TIME TO RECOVERY |             |            |             |           |
|--------------------------------------|-------------|------------|-------------|-----------|
| Method: Least Squares                |             |            |             |           |
| Observations Included: 142           |             |            |             |           |
| Variable                             | Coefficient | Std. Error | t-Statistic | Prob.     |
| C                                    | 210.8993    | 52.41818   | 4.023400    | 0.0001    |
| ESG                                  | -0.935143   | 0.562830   | -1.661503   | 0.0990*   |
| QUICK                                | -13.33535   | 10.42570   | -1.279085   | 0.2031    |
| BETA                                 | 37.31206    | 21.84449   | 1.708076    | 0.0900*   |
| MAX_DRAWDOWN                         | 212.0963    | 69.04758   | 3.071741    | 0.0026*** |
| ROA                                  | -562.2141   | 170.1616   | -3.304002   | 0.0012*** |
| INVENTORY_TO                         | 0.332517    | 0.109013   | 3.050244    | 0.0028*** |
| DEBT_TO_EQUITY                       | -32.53387   | 9.067280   | -3.588052   | 0.0005*** |
| DIVIDEND                             | -12.71132   | 15.29480   | -0.831088   | 0.4074    |
| STRATEGIC_OWNER                      | -69.23546   | 45.67922   | -1.515688   | 0.1320    |

Note: \*, \*\*, \*\*\* indicate a significance level at 10%, 5%, and 1%

Source: Data processed, 2023

Based on the regression output above, it can be concluded that:

#### **ESG Performance and Corporate Resilience**

The hypothesis test results showed that ESG performance positively affects corporate resilience during the COVID-19 pandemic, so H1 is accepted. The negative sign on the regression coefficient indicates that ESG performance has a negative relationship with stock time to recovery, meaning that if there is an increase in ESG value, the stock price will rise faster to its lowest point in the year before the COVID-19 pandemic. The faster the stock price rises, the stronger the company will be.

This conclusion is in line with research (Zhou & Zhou, 2022), which found that the increase in stock price volatility of companies with high ESG values was lower than companies with low ESG values. ESG performance is essential in increasing stock resilience and stabilizing stock prices. These results are also supported by research (Yingxu, 2020), which found that companies with good ESG performance in each industry can recover more quickly during a crisis from market turbulence. ESG can be used as an indicator of relevant corporate resilience. In addition, these results are also consistent with research from (Broadstock et al., 2020), which found that ESG performance had a positive relationship with short-term cumulative returns from CSI 300 companies during the COVID-19 pandemic.

#### **Financial Flexibility and Corporate Resilience**

The results of the hypothesis test show that financial flexibility has no significant effect on corporate resilience during the COVID-19 pandemic, so H2 is rejected. This result is not following the hypothesis and is not following previous research conducted by (Cardillo et al., 2022), which found that high levels of cash holding and liquidity in the pre-COVID period helped companies to perform and absorb externalities of COVID-19 by better than other companies.

This conclusion is also inconsistent with the results of research from (Fahlenbrach et al., 2021), which found that companies with higher financial flexibility experienced a decrease in stock prices of 26% or 9.7% lower compared to companies with low financial flexibility. Even though the company has high financial flexibility and is potentially responsive to the challenges of the COVID-19 pandemic, the pivot process in business must be done slowly. Financial flexibility cannot guarantee that the company will maintain profitability and continue to distribute dividends to shareholders. Not all business processes in the industry can be helped by digitalization during a pandemic. Based on the regression analysis results, shareholders trust the profitability and efficiency of company activities in inventory turnover and long-term debt levels as determinants of company resilience during the COVID-19 pandemic.

**Table 8. F-Test Multiple Linear Regression Analysis**

| <b>Simultaneous Parameter Significance</b> |           |                        |          |
|--------------------------------------------|-----------|------------------------|----------|
| R-squared                                  | 0.373324  | Mean dependent var     | 148.9577 |
| Adjusted R-squared                         | 0.330596  | S.D. dependent var     | 137.9776 |
| S.E. of regression                         | 112.8893  | Akaike info criterion  | 12.35851 |
| Sum squared resid                          | 1682207   | Schwarz criterion      | 12.56667 |
| Log-likelihood                             | -867.4544 | Hannan-Quinn criteria. | 12.44310 |
| F-statistic                                | 8.737225  | Durbin-Watson stat     | 2.054201 |
| Prob(F-statistic)                          | 0.000000  |                        |          |

Source: Data processed, 2023

Based on the output results in the table above, the F-statistic results are 8.737225 with a significance level of 0.000000, which indicates that the significance level is less than 0.05. So it can be concluded that ESG performance, financial flexibility, stock volatility, max drawdown, return on assets, inventory turnover, debt-to-equity ratio, dividend payout ratio, and strategic ownership simultaneously affect corporate resilience during the COVID-19 pandemic. The table above shows that the Adjusted R-Squared value formed in this study is 0.330596, which indicates that during the COVID-19 pandemic, the ability of the independent variables and control variables (ESG performance, financial flexibility, beta, max drawdown, ROA, inventory turnover, debt to equity ratio, dividend payout ratio, and strategic owner) in explaining the dependent variable (time to recovery) is 33.0596%. The remaining 66.9404% is explained by other variables not included in this research model.

In the context of robustness testing, a compare means analysis is applied to examine the stability and reliability of the results obtained from a statistical model or analysis by comparing the means of different groups or conditions. This analysis is employed to evaluate the robustness of the conclusions drawn from the initial analysis under varying conditions or assumptions. The compare means analysis as a robustness test involves comparing the means of two or more groups or conditions using statistical tests such as t-tests or analysis of variance.

Based on group statistics in Table 8, it can be concluded that, on average, companies with high ESG performance in the ASEAN-5 region have higher resilience than companies with low ESG performance, which are explained consistently in those five proxies. On average, companies with high ESG performance generate ROA of 4.93%, higher than those with low ESG performance, which only generate ROA of 3.58%. Companies with high ESG performance also have lower stock volatility when measured by beta and price standard deviations. Companies with high ESG performance have an average beta of 1.11, while companies with low ESG performance have an average beta of 1.22. In addition, companies

with high ESG performance have an average price standard deviation of 15.54% from price predictions. In comparison, companies with low ESG performance have an average price standard deviation of 16.09% from price predictions. Companies with high ESG performance also experience lower share price falls than those with low ESG performance. During the COVID-19 pandemic, companies with high ESG performance experienced an average share price fall of 23.75%, while companies with low ESG performance experienced an average share price fall of 25.21%. Companies with high ESG performance also recover faster than those with low ESG performance. During the COVID-19 pandemic, stocks of companies with high ESG performance recovered on average within 137 days, 29 days faster than companies with low ESG performance, which recovered on average 166 days. This finding suggests that, on average, organizations with good ESG processes may be better prepared to face the challenges provided by the pandemic.

**Table 9. Group Statistics**

| Variable         | Kategori | N  | Mean     | Std. Deviation | Std. Error Mean |
|------------------|----------|----|----------|----------------|-----------------|
| ROA              | High ESG | 84 | 0.049305 | 0.0708004      | 0.0077250       |
|                  | Low ESG  | 58 | 0.035799 | 0.0629323      | 0.0082634       |
| BETA             | High ESG | 84 | 1.114414 | 0.5008972      | 0.0546524       |
|                  | Low ESG  | 58 | 1.222546 | 0.6060123      | 0.0795733       |
| PRICE STDEV      | High ESG | 84 | 0.155434 | 0.0897128      | 0.0097885       |
|                  | Low ESG  | 58 | 0.160971 | 0.0971203      | 0.0127525       |
| MAX DRAWDOWN     | High ESG | 84 | 0.237458 | 0.1824752      | 0.0199097       |
|                  | Low ESG  | 58 | 0.252130 | 0.1544624      | 0.0202819       |
| TIME TO RECOVERY | High ESG | 84 | 136.95   | 143.466        | 15.653          |
|                  | Low ESG  | 58 | 166.34   | 128.851        | 16.919          |

Source: Data processed, 2023

Based on independent samples of t-test presented in Table 9, it can be obtained that of the five resilience proxies, it is known that the Sig (2-tailed) value is not less than 0.05, so it can be concluded that there is no significant difference in company resilience between companies with high ESG values and companies with low ESG values. Although the compare means analysis of the five resilience proxies shows consistent results that companies with high ESG performance have higher resilience during the COVID-19 pandemic than companies with low ESG performance, the gap between the two is statistically insignificant.

## CONCLUSION

This study aims to fill the research gap regarding the role of ESG and financial flexibility in corporate resilience during crises such as the COVID-19 pandemic in the scope of ASEAN-5 countries (Indonesia, Malaysia, Singapore, Thailand, and the Philippines). The study results show that ESG performance significantly positively affects corporate resilience during a pandemic, helping companies recover faster. However, financial flexibility not significantly affects the company's ability to survive during the pandemic. Other variables that affect company resilience are stock price volatility, max drawdown, profitability, and capital structure. Dividend payments and share ownership structure have no significant effect on

company resilience during the pandemic. The article suggests that regulators should make rules and policies that encourage companies to pay attention to ESG aspects and focus on financial performance. It can be done by introducing ESG reporting standards and guidelines and providing tax incentives for companies that meet specific ESG standards. The article also suggests that companies should have the courage to increase investment in ESG aspects. It can be a more holistic and reliable indicator of company performance, even in crises like black swan events. By improving ESG performance, companies can make more accurate predictions about future performance prospects and achieve sustainable competitive advantage.

To address the limitation of this study, the next researcher should be able to conduct additional research on a bigger scale to prevent sampling bias and fewer representative sample sizes, with the goal of making research more universal and relevant in decision-making. Furthermore, future researchers can undertake a series of robustness tests on the corporate resilience variable using a variety of additional proxies such as stock price volatility, abnormal returns, and loss severity as a substitute for time-to-recovery proxy.

## REFERENCES

- Albuquerque, R., Koskinen, Y., Yang, S., Zhang, C., 2020. Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash. *Rev. Corp. Financ. Stud.* 9, 593–621. <https://doi.org/10.1093/rcfs/cfaa011>
- Alharire, B., Alalwani, N., 2021. Stock market performance in Sweden during COVID -19 1–41.
- Alipour, M., Mohammadi, M.F.S., Derakhshan, H., 2015. Determinants of capital structure: An empirical study of firms in Iran. *Int. J. Law Manag.* 57, 53–83. <https://doi.org/10.1108/IJLMA-01-2013-0004>
- Andrew Willis, 2020. ESG as an Equity Vaccine [WWW Document]. URL <https://www.morningstar.ca/ca/news/201741/esg-as-an-equity-vaccine.aspx> (accessed 6.4.23).
- Bae, K.H., El Ghouli, S., Gong, Z. (Jason), Guedhami, O., 2021. Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *J. Corp. Financ.* <https://doi.org/10.1016/j.jcorpfin.2020.101876>
- Broadstock, D.C., Chan, K., Cheng, L.T.W., Wang, X., 2020. Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ’ s public news and information .
- Cardillo, G., Bendinelli, E., Torluccio, G., 2022. COVID-19, ESG investing, and the resilience of more sustainable stocks: Evidence from European firms. *Bus. Strateg. Environ.* <https://doi.org/10.1002/bse.3163>
- Demers, E., Hendrikse, J., Joos, P., Lev, B., 2021. ESG did not immunize stocks during the COVID-19 crisis, but investments in intangible assets did. *J. Bus. Financ. Account.* 48, 433–462. <https://doi.org/10.1111/jbfa.12523>
- Ding, W., Levine, R., Lin, C., Xie, W., 2021. Corporate immunity to the COVID-19 pandemic. *J. financ. econ.* 141, 802–830. <https://doi.org/10.1016/j.jfineco.2021.03.005>
- El Khoury, R., Nasrallah, N., Harb, E., Hussainey, K., 2022. Exploring the performance of responsible companies in G20 during the COVID-19 outbreak. *J. Clean. Prod.* 354, 131693. <https://doi.org/10.1016/j.jclepro.2022.131693>

- Engelhardt, N., Ekkenga, J., Posch, P., 2021. Esg ratings and stock performance during the COVID-19 crisis. *Sustain.* 13, 1–15. <https://doi.org/10.3390/su13137133>
- Fahlenbrach, R., Rageth, K., Stulz, R.M., 2021. How Valuable Is Financial Flexibility when Revenue Stops? Evidence from the COVID-19 Crisis. *Rev. Financ. Stud.* 34, 5474–5521. <https://doi.org/10.1093/rfs/hhaa134>
- Garel, A., Petit-Romec, A., 2021. The Resilience of French Companies to the COVID-19 Crisis. *Finance Vol.* 42, 99–137. <https://doi.org/10.3917/fina.423.0099>
- Gianfrate, G., Kievid, T., Dijk, M. van, 2021. On the Resilience of ESG Stocks during COVID-19: Global Evidence. *Netspar Ind. Ser.* 175, 4–40.
- Grube, C., Park, S.-Y., Rüden, J., 2020. Moving from Cash Preservation to Cash Excellence for the Next Normal [WWW Document]. URL <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/moving-from-cash-preservation-to-cash-excellence-for-the-next-normal#/> (accessed 6.4.23).
- Mounir, H., Ali, H., 2022. Corporate immunity during crises and pandemics : does ESG matter ? Literature review and future prospects. <https://doi.org/10.1108/MSAR-10-2022-0047>
- Mousa, M., Saleem, A., Sági, J., 2022. Are esg shares a safe haven during COVID-19? Evidence from the arab region. *Sustain.* 14. <https://doi.org/10.3390/su14010208>
- Oad Rajput, S.K., Wongchoti, U., Chen, J., Faff, R., 2019. Is Financial Flexibility a Priced Factor in the Stock Market? *Financ. Rev.* 54, 345–375. <https://doi.org/10.1111/fire.12170>
- Pisani, F., Russo, G., 2021. Sustainable finance and COVID-19: The reaction of esg funds to the 2020 crisis. *Sustain.* 13. <https://doi.org/10.3390/su132313253>
- Syafrullah, S., Muharam, H., 2017. Analisis Pengaruh Kinerja Environmental , Social , Dan Governance ( Esg ) Terhadap Abnormal Return. *Diponegoro J. Manag.* 6, 1–14.
- Xia, Y., Qiao, Z., Xie, G., 2022a. Corporate resilience to the COVID-19 pandemic: The role of digital finance. *Pacific-Basin Financ. J.* 74, 101791. <https://doi.org/10.1016/j.pacfin.2022.101791>
- Xia, Y., Qiao, Z., Xie, G., 2022b. Corporate resilience to the COVID-19 pandemic: The role of digital finance. *Pacific-Basin Financ. J.* 74, 101791. <https://doi.org/10.1016/j.pacfin.2022.101791>
- Xu, L., 2021. Stock Return and the COVID-19 pandemic: Evidence from Canada and the US. *Financ. Res. Lett.* 38, 101872. <https://doi.org/10.1016/j.frl.2020.101872>
- Yingxu, Y., 2020. The Impact of ESG Performance During Times of Crisis, Green Financial Perspectives - Proceeds of the Central European Scientific Conference on Green Finance and Sustainable Development, October 2020. Cornivus University of Budapest, Budapest. <https://doi.org/10.14267/978-963-503-890-9>
- Zhou, D., Zhou, R., 2022. Esg performance and stock price volatility in public health crisis: Evidence from COVID-19 pandemic. *Int. J. Environ. Res. Public Health* 19. <https://doi.org/10.3390/ijerph19010202>



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 16-32



### Reciprocal Relationship between Subjective Well-Being, Social Media Engagement and Compulsive Buying Behavior

Derriawan<sup>1)</sup>, Hendryadi<sup>2)</sup>, Suryani<sup>3)</sup>, Laili Savitri Noor<sup>4)</sup>,  
Amelia Okrivina<sup>5)</sup>

<sup>1</sup> Postgraduate School, Universitas Pancasila, Jakarta

<sup>2</sup> Sekolah Tinggi Ilmu Ekonomi Indonesia Jakarta

<sup>3</sup> Universitas Islam Negeri Sultan Maulana Hasanuddin, Banten

<sup>4,5</sup> Economics and Business Faculty, Universitas Pancasila, Jakarta

Email: derriawan.spsup@gmail.com



SINTA 2

DOI : <https://doi.org/10.24843/MATRIK:JMBK.2024.v18.i01.p02>

#### ABSTRACT

This study aimed to investigate the interplay between subjective well-being (SWB), social media engagement (SME), and compulsive buying behavior (CBB). It explored long-term and reciprocal connections among these factors using a longitudinal design with a 2-wave investigation of 226 employees from various sectors in Jakarta, Indonesia. Partial Least Squares Structural Equation Modeling (PLS-SEM) cross-lagged analysis found that SWB at Time 1/Time 2 negatively predicted SME and CBB at the same times, indicating long-term influences. Additionally, SME at Time 1 and CBB at Time 2 significantly predicted SWB at Time 2. The study also found a positive relationship between SME and CBB at both times. This research contributes to the literature by empirically examining the reciprocal relationship among SWB, SME, and CBB, focusing on the association between SWB and CBB.

**Keyword:** compulsive buying behavior; reciprocal relationship; social media engagement; subjective well-being; longitudinal

#### INTRODUCTION

Advances in digital marketing, especially the internet and mobile devices, have made access to online platforms easier and faster. This ease and speed in accessing various sites and online purchasing platforms have driven dramatic changes in consumer behavior. Now, consumers can order and buy products online anytime and anywhere. Because of its convenience, consumers are sometimes trapped in various advertisements and social influences which encourage compulsive transaction behavior. In contrast to impulsive buying behavior, which leads to unplanned purchases, compulsive buying is more interpreted as a shopping disorder (Müller et al., 2021), in which consumers make repeated and excessive product purchases (O'Guinn & Faber, 1989). Although it has attracted much interest from researchers over the last two decades (Tarka et al., 2022), compulsive behavior has received relatively less attention than impulsive behavior. Hence, this study explores the antecedents of compulsive buying behavior based on subjective well-being and social media engagement.

Previous studies have extensively studied compulsive buying behavior based on psychological factors, including self-esteem, self-control, self-image, and hedonic traits (Moon et al., 2022; Mulyono & Rusdarti, 2020; Olsen et al., 2022; Tarka et al., 2022). Other factors include emotion, well-being, stress, and depression (Orsolini et al., 2022; Wolfers & Utz, 2022). Another approach to studying compulsive behavior is through external stimulus factors, including the intensity of internet use, including social media, internet, and smartphone addiction (Maccarrone-Eaglen & Schofield, 2023; Mason et al., 2022; She et al., 2021; Suresh & Biswas, 2020). The present study aimed to develop internal (subjective well-being) and external factors (social media engagement) models to investigate their influence on compulsive buying behavior (CBB). In particular, we explore the role of subjective well-being (SWB) as an antecedent and outcome of social media engagement (SME) and compulsive buying simultaneously.

Previous work has shown that well-being and social media engagement are interrelated, but their cross roles as antecedents and outcomes are equally supported empirically. For example, some researchers examine the role of subjective well-being as an essential antecedent of the intensity of social media use (Przybylski et al., 2013; Reer et al., 2019). However, at the same time, other studies have found that the use of social media affects decreasing well-being (Agarwal & Mewafarosh, 2021; Barry et al., 2022; Orben & Przybylski, 2019; Wheatley & Buglass, 2019; Wolfers & Utz, 2022). Considering these differences, we are interested in examining the reciprocal relationship between SWB and SME as a bridge to explain the cross roles of the two simultaneously. In the same vein, previous studies have also confirmed the role of subjective well-being as a determinant of compulsive buying (Ortiz Alvarado et al., 2020), as well as an outcome of compulsive buying (She et al., 2021). Apparently, previous works only directed a one-way relationship and did not consider the follow-up effect. Hence, in the present study, we propose a reciprocal relationship, where subjective well-being at the initial point can affect compulsive buying, and then compulsive buying behavior also affects subjective well-being in the future.

As presented in Figure 1, the present study aimed to extend the previous study and made three key contributions to the consumer behavior literature. First, we aimed to test the relationship between subjective well-being, social media engagement, and compulsive buying behavior using two different times. Hence, the consistency of the relationship between these three variables will be evaluated based on two time periods: during and after the COVID-19 pandemic. Second, we aimed to test long-term relationships between subjective well-being, social media engagement, and compulsive buying behavior. Drawing 3P Model (Durayappah, 2011; Su et al., 2021) as a theoretical basis for consistency over time in SWB. Furthermore, the long-term effects of SWB on SME and CBB were also evaluated. Third, we address the relevant issue of the directionality of associations between SWB, SWE, and CBB at the same and different time points. The justification for these assertions will be elaborated upon in the following sections.

Related to SWB, Durapayyah (2011) introduced the 3P Model (present, past, and prospect) to study the consistency of individual evaluations of their lives over time. Furthermore, He argues that it is essential to consider general evaluations of the present, the past, and the future to understand SWB. In other words, present happiness is likely to have been caused in the past, and therefore SWB is related to time (Durayappah, 2011). Evaluation of SWB over time is also highly recommended by previous studies (Diener et al., 1999). Responding to the importance of understanding SWB in a time frame, we suspect that the

SWB in this study will be consistent over time, considering that observation periods 1 and 2. Hence, the hypothesis we propose:

H1: SWB at Time 1 is positively related to SWB at Time 2

Based on the assumptions of social comparison theory (Festinger, 1954), individuals with low well-being may be more likely to engage in social media activities to seek comparisons and social validation. On the other hand, a person can be highly involved in social media activities to seek social support, reduce loneliness, cope with stress or out of habit (Mason et al., 2022; Przybylski et al., 2013; Reer et al., 2019). For example, Reer et al. (2017) examine three dimensions to measure well-being (loneliness, depression, and anxiety); their study found that people with low psychological well-being tend to be more involved in social media to cope with stress (Mason et al., 2022). Another assumption comes from social support motives. SWB is closely related to social support in the context of interactions between humans (Cheng et al., 2022; Kong et al., 2021; Su et al., 2021). Thus, individuals who feel they do not get social support in the real world will likely look for alternatives to seek such support on social media to fulfill a sense of connectedness and support.

H2: SWB at Time 1 is negatively related to SME at Time 1

H3: SWB at Time 2 is negatively related to SME at Time 2

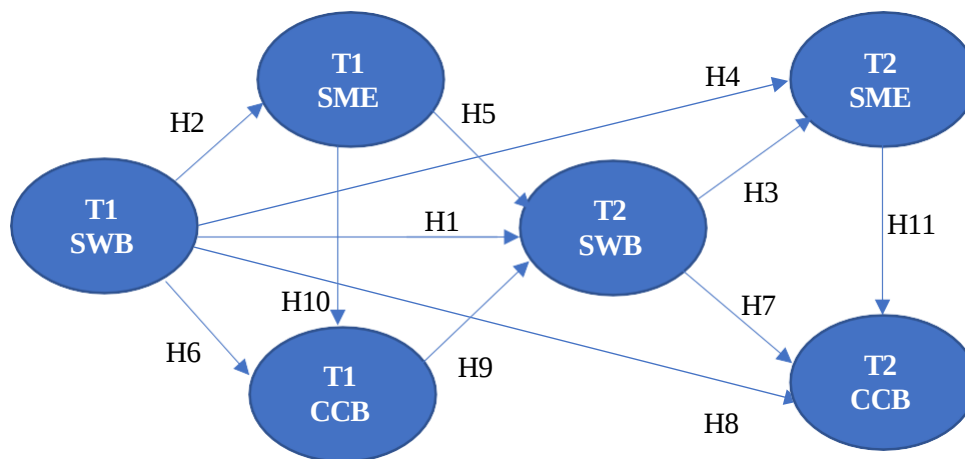
Theoretically, subjective well-being has been confirmed to vary over time based on certain situational factors (Diener et al., 1999; Durayappah, 2011; Lee, 2022), and its effect also can change over time (Soons et al., 2009). According to social comparison theory (Festinger, 1954), individuals compare themselves to others on social media platforms, which can impact their self-perceptions and well-being. Individuals with higher subjective well-being may engage in upward social comparisons, seeking inspiration or motivation from others' positive experiences, leading to continued and sustained social media engagement over time. Moreover, the long-term effects of subjective well-being on social media engagement can be explained through the lens of the 3P Model (Durayappah, 2011), which posits that subjective well-being influences individuals' perceptions, priorities, and practices over time. As individuals experience changes in their subjective well-being, such as fluctuations in mood, life satisfaction, or emotional states, these shifts can impact their attitudes and behaviors toward social media engagement in the long run. For example, individuals with higher levels of subjective well-being may be more inclined to engage with social media platforms to share positive experiences, seek social support, or maintain connections with others. On the contrary, individuals experiencing lower levels of well-being may use social media as a coping mechanism, seeking validation or distraction from negative emotions.

H4: SWB at Time 1 is negatively related to SME at Time 2 (long-term)

The present study also examines the reciprocal relationship between SWB and compulsive buying to clarify the dual roles of SWB and compulsive buying. Previous studies have also found that the two can influence each other (Ortiz Alvarado et al., 2020; She et al., 2021). For example, CBB is often associated with lower well-being in general (Ortiz Alvarado et al., 2020), and on the other hand, researchers also found the effect of CBB on SWB (She et al., 2021). Thus, we are taking a step forward by exploring the reciprocal relationship across time between SME and compulsive buying that has not been explored before. Drawing the 3P Model (present, past, and prospect), subjective well-being can be temporary (Durayappah, 2011), so it is crucial to investigate its effect on attitudes and other behaviors in different time frames. This study also intended to cover the limitations of prior work (Orsolini et al., 2022; Reer et al., 2019; Wolfers & Utz, 2022) that has typically examined the link between SWB,

SME, and compulsive buying behavior in a cross-sectional approach. In the same vein, previous studies have consistently found a negative effect of the use of social media on decreasing well-being (Agarwal & Mewafarosh, 2021; Barry et al., 2022; Orben & Przybylski, 2019; Wheatley & Buglass, 2019; Wolfers & Utz, 2022). Accordingly, we propose that the relationship pattern between SWB and SME is reciprocal, in which low SWB can trigger SME, and SME will also affect SWB in the future.

H5: SME at Time 1 is negatively related to SWB at Time 2



**Figure 1. The hypothesized full cross-lagged model.**

Source: Hypothetical model compiled by the author, 2023

Note. SWB = subjective well-being; SME=Social media engagement; CBB= Compulsive buying behavior; T1 and T2 = Time period data collecting.

Compulsive buying behavior, also known as compulsive shopping or shopping addiction, refers to a pattern of excessive, repetitive, and uncontrollable purchasing of goods or services. As deviant behavior, CBB often results in negative consequences such as financial problems, emotional distress, and well-being (Moon et al., 2022; Nanda & Banerjee, 2021; She et al., 2021). Compulsive buying behavior leads to repetitive and excessive buying behavior as a response to negative emotions experienced by individuals (Aydin et al., 2021; Müller et al., 2015). Researchers believe CBB is not related to product needs and functions but to emotions and moods. The individual with problematic behavior of compulsive purchasers is characterized by a lack of financial control, a sensation of satisfaction and release after the purchase, and a nonsensical and item-unrelated repeating of this behavior (Mason et al., 2022). Compulsive buying behavior also appears as an attempt to fill an emotional void or fulfill an unmet psychological need. Individuals who experience low well-being, such as depression or anxiety (Zhang et al., 2017). Thus, individuals with low well-being (e.g., characterized by high levels of depression and anxiety) may seek temporary gratification or diversion by making impulse purchases. Accordingly, low well-being is often associated with higher stress levels. To reduce stress, individuals may use compulsive buying as a form of coping (Aydin et al., 2021; Ortiz Alvarado et al., 2020). Empirically, CBB is often associated with lower well-being in general (Ortiz Alvarado et al., 2020). On the other hand, researchers

also found the effect of CBB on SWB (She et al., 2021). Referring to the two-way relationship, in our study, we propose that SWB is negatively related to CBB and vice versa, CBB can also cause SWB. Hence, our hypothesis:

H6: SWB at Time 1 is negatively related to CBB at Time 1

H7: SWB at Time 2 is negatively related to CBB at Time 2

H8: SWB at Time 1 is negatively related to CBB at Time 2

H9: CBB at Time 1 is negatively related to SWB at Time 2

Finally, drawing social comparison theory (Festinger, 1954), this study explores the relationship between SMEs and compulsive buying. Since social media has become one of marketers' most popular advertising media in the last five years, it is vital to investigate how individual involvement in social media influences purchase behavior. Researchers previously used various similar concepts, including social media addiction, smartphone addiction, use of networking sites, internet addiction, and social media celebrities' posts (Maccarrone-Eaglen & Schofield, 2023; Mason et al., 2022; She et al., 2021; Suresh & Biswas, 2020; Zafar et al., 2021). Hence, our study provides new insights into compulsive buying as a response to consumers' social media engagement. In particular, the relationship between social media engagement and compulsive buying has not been explored. A prior study linked more compulsive buying based on different factors, including social media addiction (Maccarrone-Eaglen & Schofield, 2023), smartphone addiction (Mason et al., 2022), internet addiction (Suresh & Biswas, 2020), use of networking sites (She et al., 2021), and social media celebrities' posts (Zafar et al., 2021). On the other hand, social media is generally confirmed to affect impulse buying (Aragoncillo & Orus, 2018; Korkmaz & Seyhan, 2021; Szymkowiak et al., 2021). Hence, the proposed hypothesis:

H10: SME at Time 1 is positively related to CBB at Time 1

H11: SME at Time 2 is positively related to CBB at Time 2

## METHODS

This research is part of a collaborative project of three universities in Jakarta, involving two lecturers each as representatives in the data collection process. The target respondents were students with employee status in the undergraduate management study program. A purposive method was used in selecting the sample, namely, students who have an average frequency of online purchases twice a month and have taken marketing management courses. Each lecturer representative collects data (ID, email, and phone number) and asks for the respondent's willingness to participate in the questionnaire voluntarily. This study uses a longitudinal approach collected through two waves in 2022-2023. A time-lag data collecting method or repeated collecting at the same respondents separated by a certain period is commonly used in consumer behavior research, especially when researchers want to reduce common method bias (Podsakoff et al., 2012), or when the research is aimed at determining temporary/long-term effects or relationship models reciprocal (i.e., Du et al., 2021; Yang & Ha, 2023).

Stage one (Time 1) was conducted using an online questionnaire (February 2022). Each respondent is given a unique code to identify the respondent's name and their class. At this stage, respondents were asked to answer questions regarding subjective well-being, social media engagement, and compulsive buying behavior. Stage 2 (Time 2) took the same

respondents as used a paper-pencil questionnaire in class (February 2023). After checking the quality and completeness of the data at Times 1 and 2, the final data of this study amounted to 226 pairs of responses, consisting of 59 percent women and 41 percent men.

The scale used is an adaptation with minor revisions to suit the context of the present study. First, subjective well-being was adopted from the WHO-5. Examples of items are "Last week, I felt cheerful and in good spirits" and "Last week, I felt calm and relaxed" (Topp et al., 2015). Respondents were asked to give a rating of 1 = strongly disagree to 5 = strongly agree. Second, social media engagement is measured using five items regarding the frequency of using social media daily (Przybylski et al., 2013); this scale has good validity and reliability by Mariano et al. (2019). For example items: "How often have you accessed social media such as Twitter, Facebook, and Instagram in the last week." Respondents were asked to answer at five ratings from 1 = 'Never' to 5 = 'Every day.' Finally, compulsive buying behavior adapts a 3-item scale (Ridgway et al., 2008) with minor revisions. Examples of items are "many of the things I buy have not been opened from shopping bags" and "I sometimes buy things I do not use." Respondents were asked to answer 5-rating points: 1 = strongly disagree to 5 = strongly agree.

Data were analyzed using the PLS-SEM cross-lagged approach with the SMART PLS ver 3.6 programs. Following the guidelines of Hair et al. (2019), the analysis was carried out through two stages: evaluation of the measurement and structural models. Furthermore, this study follows previous studies (Khan et al., 2022; Prati et al., 2016), which used SEM techniques to estimate reciprocal models. In addition, because data on the same variables were collected at two different points in time, an invariance analysis was used to test differences between times (Khan et al., 2022; Podsakoff et al., 2003). To test the hypothesis, the study employed bootstrapping by generating 5000 subsamples of the PLS-SEM model, following Hair's (2019) recommendation.

## RESULT AND DISCUSSION

Measurement invariance is applied with the measurement invariance of composite models (MICOM) recommended by Henseler et al. (2016) by comparing the results at Times 1 and 2. MICOM analysis consists of three stages, where a first stage is a non-statistical approach that will automatically be fulfilled when the configuration is done on the model. Stage 2 is assessed by comparing the original correlation with the permutation correlation, where compositional invariance is declared established if the permutation p-value  $> .05$ . As shown in Table 1, the p-values are all  $> 0.05$ , indicating the composite does not differ in both groups (T1 and T2). Furthermore, in stage 3, the mean and variance differences between groups will be tested. The results of the analysis show that both the mean and variance differences have p-values  $> .05$ , indicating that full measurement invariance has been established (Henseler et al., 2016).

**Table 1. MICOM analysis results**

| Step |     | Original Correlation | Correlation Permutation | 5.00% | p-Values |          |
|------|-----|----------------------|-------------------------|-------|----------|----------|
| 2    | CBB | 1.00                 | .99                     | .99   | .67      |          |
|      | SWB | 1.00                 | .99                     | .99   | .85      |          |
|      | SME | 1.00                 | .99                     | .99   | .59      |          |
|      |     | Mean Difference      | Permutation Difference  | 2.50% | 97.50%   | p-Values |
| 3A   | CBB | .04                  | .00                     | -.19  | .16      | .63      |
|      | SWB | -.12                 | .00                     | -.17  | .19      | .17      |
|      | SME | -.06                 | .00                     | -.20  | .17      | .53      |
|      |     | Variance Difference  | Permutation Difference  | 2.50% | 97.50%   | p-Values |
| 3B   | CBB | -.09                 | .00                     | -.22  | .19      | .38      |
|      | SWB | -.03                 | .00                     | -.20  | .17      | .75      |
|      | SME | -.07                 | .00                     | -.19  | .18      | .49      |

Source: Data is processed using SMART PLS, 2023

Notes: SWB = subjective well-being; CBB = compulsive buying behavior; SME = social media engagement.

**Table 2. Indicator reliability, internal consistency, and convergent validity**

| Indicator | Mean |      | VIF  |      | Loading |       | CA      | CR      | AVE     |
|-----------|------|------|------|------|---------|-------|---------|---------|---------|
|           | T1   | T2   | T1   | T2   | T1      | T2    |         |         |         |
| SWB1      | 3.35 | 3.42 | 2.59 | 2.36 | 18.00   | 31.00 | T1=0.90 | T1=0.92 | T1=0.71 |
| SWB2      | 3.41 | 3.54 | 2.42 | 1.99 | 19.00   | 32.00 | T2=0.90 | T2=0.93 | T2=0.72 |
| SWB3      | 3.33 | 3.58 | 2.12 | 2.58 | 20.00   | 33.00 |         |         |         |
| SWB4      | 3.43 | 3.56 | 2.39 | 2.42 | 21.00   | 34.00 |         |         |         |
| SWB5      | 3.54 | 3.62 | 2.06 | 2.72 | 22.00   | 35.00 |         |         |         |
| SME1      | 2.84 | 3.03 | 2.81 | 2.49 | 26.00   | 39.00 | T1=0.90 | T1=0.93 | T1=0.72 |
| SME2      | 2.82 | 3.00 | 2.34 | 2.55 | 27.00   | 40.00 | T2=0.91 | T2=0.93 | T2=0.73 |
| SME3      | 2.68 | 2.87 | 2.33 | 2.38 | 28.00   | 41.00 |         |         |         |
| SME4      | 2.74 | 2.94 | 2.15 | 2.95 | 29.00   | 42.00 |         |         |         |
| SME5      | 2.79 | 3.03 | 2.41 | 2.10 | 30.00   | 43.00 |         |         |         |
| CBB1      | 2.67 | 2.62 | 2.47 | 1.84 | 23.00   | 36.00 | T1=0.83 | T1=0.90 | T1=0.75 |
| CBB2      | 2.73 | 2.62 | 1.63 | 1.93 | 24.00   | 37.00 | T2=0.83 | T2=0.90 | T2=0.75 |
| CBB3      | 2.67 | 2.68 | 2.10 | 2.09 | 25.00   | 38.00 |         |         |         |

Source: Data is processed using SMART PLS, 2023

Notes: SWB = subjective well-being; CBB = compulsive buying behavior; SME = social media engagement; T1 and T2 = Time period data collecting

The evaluation of the measurement model as recommended by Hair et al. (2019), covers reliability indicators, internal consistency, convergent validity, and discriminant validity. The study examined loading indicators in Table 2, all exceeding 0.70, indicating reliable measurement of intended constructs. Internal consistency, assessed through Cronbach Alpha and composite reliability, exceeded 0.70 for all constructs, ensuring consistent measurement within each construct. Convergent validity, evaluated via average variance extracted (AVE), confirmed all constructs met  $AVE > 0.50$ , indicating effective capture of

construct variance and surpassing measurement error variance. These results collectively validate the reliability, internal consistency, and convergent validity of the measurement model, ensuring the accuracy and robustness of the constructs studied.

Moreover, the assessment of discriminant validity in the measurement model is based on two criteria (see Table 3). Firstly, according to the Fornell-Lacker criterion, all Average Variance Extracted (AVE) root values exceed the correlations among latent variables. Second, the HTMT ratio compares the correlations between different constructs (heterotrait) with the correlations within the same construct (monotrait). A value of less than 0.90 for the HTMT ratio suggests that the constructs are quite distinct from each other, supporting discriminant validity (see Table 3). Therefore, the confirmation of discriminant validity in the measurement model is supported by these two evaluation parameters (Hair et al., 2020).

**Table 3. Discriminant validity evaluation**

|                                    | T1 CBB | T1 SME | T1 SWB | T2 CBB | T2 SME | T2 SWB |
|------------------------------------|--------|--------|--------|--------|--------|--------|
| Fornell-Larcker Criterion          |        |        |        |        |        |        |
| T1 CBB                             | 0.86   |        |        |        |        |        |
| T1 SME                             | 0.64   | 0.85   |        |        |        |        |
| T1 SWB                             | -0.70  | -0.64  | 0.84   |        |        |        |
| T2 CBB                             | 0.66   | 0.50   | -0.63  | 0.87   |        |        |
| T2 SME                             | 0.59   | 0.60   | -0.57  | 0.49   | 0.85   |        |
| T2 SWB                             | -0.62  | -0.59  | 0.73   | -0.58  | -0.55  | 0.85   |
|                                    | T1 CBB | T1 SME | T1 SWB | T2 CBB | T2 SME | T2 SWB |
| Heterotrait-Monotrait Ratio (HTMT) |        |        |        |        |        |        |
| T1 CBB                             |        |        |        |        |        |        |
| T1 SME                             | 0.74   |        |        |        |        |        |
| T1 SWB                             | 0.81   | 0.72   |        |        |        |        |
| T2 CBB                             | 0.79   | 0.58   | 0.73   |        |        |        |
| T2 SME                             | 0.68   | 0.66   | 0.63   | 0.56   |        |        |
| T2 SWB                             | 0.72   | 0.65   | 0.81   | 0.66   | 0.60   |        |

Source: Data is processed using SMART PLS, 2023

Notes: SWB = subjective well-being; CBB = compulsive buying behavior; SME = social media engagement; T1 and T2 = Time period data collecting

The structural model is evaluated after ensuring that the measurement model meets validity and reliability. The first stage examines multicollinearity based on the variance inflation factor (VIF), then proceeds with R square, f square, and Q square values (Hair et al., 2019). As shown in Table 2, VIF values range from 1.63– 2.95 (less than 3), indicating that the data does not have a collinearity problem. Second, the evaluation on R square shows that two model (T2 CBB and T1 CBB and T2 SWB) are at a moderate level (R square raging 0.50 – 0.74), and four another models are at the weak level (R square raging 0.25 – 0.49). Third, the evaluation of effect size (f square) shows that one relationship falls into the category of large effect size ( $f^2 > .35$ ): T1 SWB - T1 SME. Two relationships (T1 SWB -> T2 SWB and T1 SWB - T1 CBB) are at a moderate level ( $f^2 .15 - .34$ ), and the rest are at a weak level ( $f^2 0.02 - 0.14$ ). From the evaluation of this effect size, it appears that only one pathway has a

significant effect size; two paths are moderate, and the other pathways are at a weak level (Hair et al., 2019). Next, evaluate Q2 to assess predictive power. As shown in Table 5, the Q square values are all at a high level (Q2 ranging from 0.25 – 0.49), indicating that, in general, the predictive power of all models presented is at a moderate level.

**Table 4. The reciprocal relationship between subjective well-being, social media engagement, and compulsive buying behavior**

| No  | Relationship     | <i>b</i> | <i>SE</i>  | <i>p-value</i> | <i>f</i> <sup>2</sup> |
|-----|------------------|----------|------------|----------------|-----------------------|
| H1  | T1 SWB -> T2 SWB | 0.52     | 0.07       | 0.00           | 0.28                  |
| H2  | T1 SWB -> T1 SME | -0.64    | 0.04       | 0.00           | 0.71                  |
| H3  | T2 SWB -> T2 SME | -0.27    | 0.09       | 0.00           | 0.06                  |
| H4  | T1 SWB -> T2 SME | -0.37    | 0.09       | 0.00           | 0.10                  |
| H5  | T1 SME -> T2 SWB | -0.15    | 0.07       | 0.03           | 0.03                  |
| H6  | T1 SWB -> T1 CBB | -0.48    | 0.07       | 0.00           | 0.30                  |
| H7  | T2 SWB -> T2 CBB | -0.21    | 0.09       | 0.02           | 0.04                  |
| H8  | T1 SWB -> T2 CBB | -0.39    | 0.09       | 0.00           | 0.12                  |
| H9  | T1 CBB -> T2 SWB | -0.17    | 0.07       | 0.02           | 0.03                  |
| H10 | T1 SME -> T1 CBB | 0.33     | 0.08       | 0.00           | 0.14                  |
| H11 | T2 SME -> T2 CBB | 0.15     | 0.07       | 0.02           | 0.03                  |
| No  | Model            | R Sqr    | Adj. R Sqr | Q <sup>2</sup> |                       |
| 1   | T1 CBB           | 0.55     | 0.55       | 0.40           |                       |
| 4   | T1 SME           | 0.42     | 0.41       | 0.29           |                       |
| 5   | T2 CBB           | 0.45     | 0.44       | 0.32           |                       |
| 6   | T2 SME           | 0.36     | 0.36       | 0.26           |                       |
| 7   | T2 SWB           | 0.57     | 0.57       | 0.40           |                       |

Source: Data is processed using SMART PLS, 2023

Notes: SWB = subjective well-being; CBB = compulsive buying behavior; SME = social media engagement; T indicates the period of data collection

All hypothesis testing is shown in Table 4 and Figure 2. First, the hypothesis regarding the consistency of measurement over time: between SWB at Time 1 and SWB at Time 2 has been supported ( $\beta = .52$ ,  $p\text{-value} < .01$ ). The second hypothesis regarding the relationship between SWB at Time 1 and SME at Time 1 was successfully supported ( $\beta = -.64$ ,  $p\text{-value} < .01$ ), also consistent with the T2 SWB to T2 SME path ( $\beta = -.27$ ,  $p\text{-value} < .01$ ) in hypothesis 3. Furthermore, the long-term relationship at T1 SWB to T2 SME is also supported ( $\beta = -.37$ ,  $p\text{-value} < .05$ ). The results of the analysis also provide support for hypothesis 5 regarding a reciprocal relationship, where T1 SME is negatively related to T2 SME ( $\beta = -.15$ ,  $p\text{-value} < .01$ ).

Hypotheses 6-9 focus on the SWB and CBB relationship and how the temporal and reciprocal relationship exists between the two. As shown in Table 5, all hypotheses are supported. T1 SWB is negatively related to T1 CBB ( $\beta = -.48$ ,  $p\text{-value} < .01$ ), as well as path T2 SWB to T2 CBB ( $\beta = -.21$ ,  $p\text{-value} < .05$ ), thus, H6 and H7 is supported. Next, the long-term effect of T1 SWB on T2 CBB is also supported ( $\beta = -.39$ ,  $p\text{-value} < .01$ ), confirming hypothesis 8. The reciprocal relationship between SWB and CBB is also successfully

supported, namely the T1 CBB to T2 SWB pathway ( $\beta = -.17$ ,  $p\text{-value} < .01$ ). The last two hypotheses (H10 and H11) regarding the relationship between SME and CBB are both supported. At Time 1, SME has been positively related to CBB ( $\beta = .33$ ,  $p\text{-value} < .01$ ), and in line with Time 2  $\beta = .15$ ,  $p\text{-value} < .05$ ). Hence, the relationship between SME and CBB has been consistently demonstrated across the two observation periods.

This study highlights the subjective effects of well-being on social media engagement and compulsive buying over time and is reciprocal. Based on the two-wave data collection, our findings reveal that SWB has a negative effect on SME over time and vice versa; SME is also shown to have a negative effect on SWB in the future. As expected, the SWB effect on compulsive buying is supported over time, as well as the reciprocal relationship, whereby CBB also has a negative effect on SWB in the future. We also found a consistent positive effect of SME on CBB at two different times. Next, the theoretical and practical implications based on the findings of this study are described below.

First hypothesis, we confirmed the 3P Model (Durayappah, 2011) in SWB, where the results provide consistency over time in SWB. Compared to the study (e.g., Su et al., 2021) on the stability of SWB in the three observation periods finding a correlation of .38 (T1 to T2) and .41 (T2 to T3), our study provides higher stability by finding the effect of SWB at Time 1 on SWB at Time 2 of .52. Hence, in addition to contributing to the 3P model, this study provides more recent empirical evidence to clarify how individuals' perceptions of their well-being at one point in time can be influenced by experiences of previous periods.

Second, the hypothesis regarding the relationship between SWB and SME (H2-H4). This study found that SWB negatively affects social media engagement and is consistent at two points. At Time 1, SWB had a -.64 effect on SME, while at Time 2, the effect was reduced to -.27; apparently, the observation period in this study largely determines how strong the relationship between the two is. This study was conducted at two substantially different times; where Time 1 was carried out while social restrictions were still in place due to COVID-19, while Time 2 was carried out after the Indonesian government declared the pandemic over. Thus, we argue that social media was more intense when social restrictions were still enforced because people could not freely carry out physical activities. This reason is also in line with the long-term effect of SWB at Time 1 on SME at Time 2 is -.37, much lower than the effect on SME at Time 1. In other words, individuals who feel happier and more satisfied with their lives are less likely to engage in excessive social media activity.

In contrast, someone who experiences low levels of well-being (e.g., depression, loneliness, stress, or emotional difficulties) may tend to spend more time on social media on social media to seek social support and relieve their distress (Worsley et al., 2018). This study's results align with the assumptions made by previous studies regarding the relationship between depression and the use of social media as a coping strategy (Orsolini et al., 2022; Wolfers & Utz, 2022). Specifically, the results of this study provide empirical support in a different way from previous studies (Reer et al., 2019), which revealed that a low level of well-being (marked by high levels of depression, anxiety, and loneliness) could increase social media engagement.

Third, the reciprocal relationship between SME at Time 1 and SWB at Time 2; this relationship has been supported (H5). In other words, in addition to providing support for the direction of the relationship of SWB to SMEs (Mason et al., 2022; Przybylski et al., 2013; Reer et al., 2019) and the negative effect of SMEs to SWB (Agarwal & Mewafarosh, 2021; Barry et al., 2022; Orben & Przybylski, 2019; Wheatley & Buglass, 2019; Wolfers & Utz,

2022) simultaneously. This study is the first to explore the mutual effects of SWB and SMEs. In line with social comparison theory, our research confirms that individuals who experience SWB at low levels deal with it by engaging more intensely in social media activities. Furthermore, high social media engagement leads to lower future well-being (Orben & Przybylski, 2019; Wheatley & Buglass, 2019).

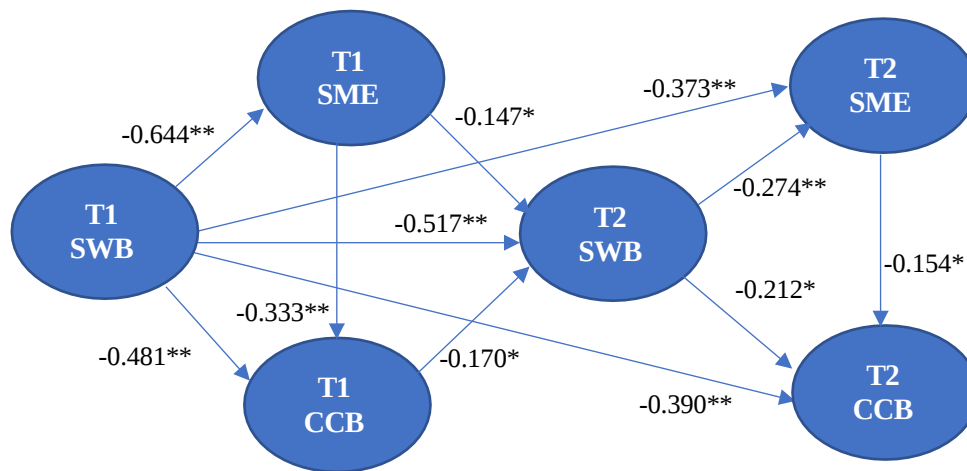
Fourth, the relationship between SWB and CBB at the same time (H6-H9). A path models revealed that SWB at Time 1 has negatively related to compulsive buying behavior at Time 1 ( $\beta = -.48, p < .01$ ), as well as at Time 2 ( $\beta = -.21, p < .05$ ). Interestingly, Time 1 is more dominant than Time 2; hence, two periods of data collection that have different situations (pandemic and post-pandemic) give a difference in the strength of the relationship. It can be interpreted that compulsive buying behavior is more intense during the pandemic to cover deficiencies in well-being. Furthermore, the results of this study also provide that the long-term effect of SWB at Time 1 on CBB at Time 2 is also supported, but the effect is lower when tested simultaneously. Another interesting finding, we were able to prove a reciprocal relationship between SWB and CBB, providing support on two sides: well-being on compulsive buying (Ortiz Alvarado et al., 2020) and compulsive buying on well-being (She et al., 2021).

Moreover, the results of this study provide additional insight into the effect of well-being on compulsive buying, which was previously studied in different variables. For example, Ortiz Alvarado et al. (2020) uses the emotional well-being construct as a driver of impulsive buying using a qualitative approach to a sample of female consumers in Mexican and Spanish. Older research (e.g., Silvera et al., 2008) states that negative psychology can drive impulsive buying behavior. In other words, individuals with a high level of subjective well-being are likelier to have low compulsive behavior tendencies than those with lower subjective well-being. Hence, this study also adds empirical evidence to the S-O-R model, which places the psychological aspect as a mechanism for forming compulsive behavior (Darrat et al., 2023; Mason et al., 2022; Min & Tan, 2022). Thus, this study provides new insights into efforts to understand the reciprocal relationship between compulsive behavior and subjective well-being.

Finally, SME and CBB relationship (H10-H11). The results of this study confirm the positive effect of social media use on compulsive buying behavior. Interestingly, social media engagement at Time 1 and Time 2 was significantly related to compulsive buying behavior Time 1 and 2; emphasized that the relationship between the two was consistent in the two observation periods. Several previous studies have investigated compulsive buying based on different factors, for example, social media addiction (Maccarrone-Eaglen & Schofield, 2023), smartphone addiction (Mason et al., 2022), internet addiction (Suresh & Biswas, 2020), use of networking sites (She et al., 2021), and social media celebrities' posts (Zafar et al., 2021). On the other hand, social media is more often directed at influencing impulse buying (Aragoncillo & Orus, 2018; Korkmaz & Seyhan, 2021; Szymkowiak et al., 2021). Hence, this study provides the first empirical evidence of a relationship between social media engagement and compulsive buying behavior.

Although it has never been explored, we argue that SME as online activity on social media affects CB behavior for two reasons: first, drawing social comparison theory, individuals tend to compare themselves with others to evaluate themselves. Through social media, individuals can be exposed to perfect or idealistic images of other people's lives, especially in possession of goods or luxurious lifestyles. Hence, this situation can trigger

feelings of inferiority or a desire to meet the standards displayed by others, which then encourages compulsive buying behavior. Second, compulsive behavior related to internet use is often explained using the stimulus–organism–response (SOR) model (Mehrabian & Russell, 1974). Stimulus factors can come from the external environment (exposure to advertisements, recommendations, and posts on social media). Exposure to advertisements, posts, and information obtained from social media (stimuli) can trigger compulsive buying behavior in which the user feels tempted (organism) to buy something without considering it thoroughly (response). The S-O-R model is an appropriate framework for explaining how information technology influences buying behavior (Mason et al., 2022). Within this theoretical framework, social media content represents a stimulus that triggers the formation of affective and cognitive states in consumers and ultimately leads to specific behavioral responses. Thus, the current research argues that those with an attachment to social media will receive more stimulative input. They may feel pressured to buy things others think are popular or want, even though they do not need them.



**Figure 2. Model analysis results**

Source: Data is processed using SMART PLS, 2023

Notes: \* p-value < 0.05, \*\* p-value < 0.01

The implications derived from the study offer valuable insights for practical applications in addressing the relationships between subjective well-being, social media engagement, and compulsive buying behavior. Firstly, the findings suggest that individuals with lower subjective well-being are more prone to heightened social media use and compulsive buying tendencies. To mitigate these behaviors, interventions focusing on enhancing social relationships with family, friends, and the community are recommended. By fostering interactions, mutual support, and engagement in social activities, individuals can enhance their subjective well-being and potentially reduce compulsive behaviors associated with social media and buying.

Secondly, considering that the study participants were working students facing challenges in balancing personal satisfaction activities with academic and work responsibilities, universities should tailor support services to meet the unique needs of this

demographic. Implementing strategies that promote personal well-being, such as incorporating blended learning approaches to reduce student burnout (Hendryadi et al., 2022; Ramli et al., 2023), can be beneficial in enhancing the overall academic experience and mental health of working students. Lastly, collaboration between universities and workplaces is essential in raising awareness about the negative impacts of excessive social media usage. Organizing seminars involving psychological and IT experts can educate students and employees about the potential risks associated with prolonged social media engagement and provide strategies for maintaining a healthy digital lifestyle.

## CONCLUSIONS

In this study, a longitudinal design was employed to investigate the relationships between subjective well-being, social media engagement, and compulsive buying behavior over time. The research yielded three significant findings. Firstly, it confirmed a consistent inter-time relationship among the three variables across two different time points, indicating a stable connection between them. Secondly, the study revealed a lasting relationship among subjective well-being, social media engagement, and compulsive buying behavior over the long term, emphasizing the enduring nature of these associations. Lastly, the research highlighted a reciprocal relationship between the variables at two distinct time points, suggesting a mutual influence among subjective well-being, social media engagement, and compulsive buying behavior. Overall, the study provided empirical evidence supporting the theoretical frameworks of the 3P Model, the stimulus–organism–response (SOR) model, and social comparison theory in explaining the intricate dynamics of these variables within the consumer context in Indonesia.

Despite the significance offered by this study, several limitations warrant attention in future research endeavors. Firstly, the research primarily focuses on the direct effects of social media engagement and compulsive buying behavior without considering potential moderating factors (Tarka & Kukar-Kinney, 2022; Xu et al., 2022) such as gender, income level, and personality traits (e.g., self-esteem, hedonic, materialism). Future studies could explore how these individual characteristics moderate the relationship between social media use and compulsive buying, providing a more nuanced understanding of the underlying mechanisms driving these behaviors. Secondly, while the study utilized longitudinal panel data collected at two-time points, the reliance on a single data source for questionnaire completion raises concerns about common method bias (Podsakoff et al., 2012). Future research could incorporate multiple data sources to assess social media engagement and compulsive buying behavior, enhancing the reliability and validity of the findings.

Thirdly, the study's findings do not conclusively establish the long-term effects of subjective well-being on social media engagement and compulsive buying behavior. Although the observed negative relationship aligns with expectations, the significance of this relationship may require validation through a larger sample size. Future research efforts could address this limitation by expanding the sample size and reexamining the relationship between subjective well-being, social media engagement, and compulsive buying behavior to provide more robust and generalizable insights. The last limitation comes from the research sample, which is student employees with employee status at two universities in Indonesia. As previous studies have shown that culture is an essential determinant of buying behavior (Tarka &

Kukar-Kinney, 2022), we call on future researchers to examine whether the results of this study can be replicated in contexts outside Indonesia.

## REFERENCES

- Agarwal, S., & Mewafarosh, R. (2021). Linkage of Social Media Engagement With Fomo and Subjective Well Being. *Journal of Content, Community and Communication*, 13(7), 46–57. <https://doi.org/10.31620/JCCC.06.21/06>
- Aragoncillo, L., & Orus, C. (2018). Impulse buying behaviour: an online-offline comparative and the impact of social media. *Spanish Journal of Marketing - ESIC*, 22(1), 42–62. <https://doi.org/10.1108/SJME-03-2018-007>
- Aydin, D., Selvi, Y., Kandeger, A., & Boysan, M. (2021). The relationship of consumers' compulsive buying behavior with biological rhythm, impulsivity, and fear of missing out. *Biological Rhythm Research*, 52(10), 1514–1522. <https://doi.org/10.1080/09291016.2019.1654203>
- Barry, C. T., Moran-Miller, K., Levy, H. F., & Gray, T. (2022). Social media engagement, perceptions of social media costs and benefits, and well-being in college student-athletes. *Journal of American College Health*, 1–10. <https://doi.org/10.1080/07448481.2022.2142797>
- Cheng, G., He, S., He, Q., Xie, X., Tian, G., Jiang, N., Li, C., Min, X., Li, R., Shi, Y., Zhou, T., & Yan, Y. (2022). Gender and residence differences in the association between social support and subjective well-being among Chinese oldest-old: A national longitudinal study. *Archives of Gerontology and Geriatrics*, 98, 104545. <https://doi.org/10.1016/j.archger.2021.104545>
- Darrat, A. A., Darrat, M. A., & Darrat, M. A. (2023). Does wanting more lead to losing control? Examining the psychological drivers of compulsive buying. *Young Consumers*, 24(1), 56–73. <https://doi.org/10.1108/YC-01-2022-1453>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302.
- Du, J., Kerkhof, P., & van Koningsbruggen, G. M. (2021). The reciprocal relationships between social media self-control failure, mindfulness and wellbeing: A longitudinal study. *PLOS ONE*, 16(8), e0255648. <https://doi.org/10.1371/journal.pone.0255648>
- Durayappah, A. (2011). The 3P Model: A General Theory of Subjective Well-Being. *Journal of Happiness Studies*, 12(4), 681–716. <https://doi.org/10.1007/s10902-010-9223-9>
- Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hendryadi, H., Puspita, N., Endit, I., Suryani, S., Kusumaningrum, H., Cahyadi, A., Islam, U., & Antasari, N. (2022). Evaluation of Loneliness , Social Self-efficacy , and Burnout Relationship among Islamic University Students. *Indonesian Journal of Islamic Education Studies*, 5(December 2022), 162–179. <https://doi.org/10.1037/pag0000287.3>

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405–431. <https://doi.org/10.1108/IMR-09-2014-0304>
- Khan, R., Murtaza, G., Neveu, J. P., & Newman, A. (2022). Reciprocal relationship between workplace incivility and deviant silence—The moderating role of moral attentiveness. *Applied Psychology*, 71(1), 174–196. <https://doi.org/10.1111/apps.12316>
- Kong, F., Yang, K., Yan, W., & Li, X. (2021). How Does Trait Gratitude Relate to Subjective Well-Being in Chinese Adolescents? The Mediating Role of Resilience and Social Support. *Journal of Happiness Studies*, 22(4), 1611–1622. <https://doi.org/10.1007/s10902-020-00286-w>
- Korkmaz, S., & Seyhan, F. (2021). The effect of social media on impulse buying behavior during the covid 19 pandemic. *International Journal of Health Management and Tourism*, 6(3), 621–646. <https://doi.org/10.31201/ijhmt.994064>
- Maccarrone-Eaglen, A., & Schofield, P. (2023). The influence of social media addiction on compulsive buying behaviour: A comparative analysis of LGBT and heterosexual consumers. *Journal of Consumer Behaviour*, 22(1), 98–121. <https://doi.org/10.1002/cb.2115>
- Mariano, T. E., Nobrega, J. M., Pimentel, C. E., Paiva, T. T., & Alves, T. P. (2019). Evidências Psicométricas do Questionário de Engajamento em Mídias Sociais. *Revista de Psicologia Da IMED*, 11(2), 115. <https://doi.org/10.18256/2175-5027.2019.v11i2.3303>
- Mason, M. C., Zamparo, G., Marini, A., & Ameen, N. (2022). Glued to your phone? Generation Z's smartphone addiction and online compulsive buying. *Computers in Human Behavior*, 136, 107404. <https://doi.org/10.1016/j.chb.2022.107404>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. The Massachusetts Institute of Technology.
- Min, Y., & Tan, C. C. (2022). Research and Application of Compulsive Buying Behaviors of Consumers in E-Commerce Livestreaming on Big Data. *Human-Centric Intelligent Systems*, 2(3–4), 113–123. <https://doi.org/10.1007/s44230-022-00010-2>
- Müller, A., Laskowski, N. M., Wegmann, E., Steins-Loeber, S., & Brand, M. (2021). Problematic Online Buying-Shopping: Is it Time to Considering the Concept of an Online Subtype of Compulsive Buying-Shopping Disorder or a Specific Internet-Use Disorder? *Current Addiction Reports*, 8(4), 494–499. <https://doi.org/10.1007/s40429-021-00395-3>
- O'Guinn, T. C., & Faber, R. J. (1989). Compulsive Buying: A Phenomenological Exploration. *Journal of Consumer Research*, 16(2), 147. <https://doi.org/10.1086/209204>
- Orben, A., & Przybylski, A. K. (2019). The association between adolescent well-being and digital technology use. *Nature Human Behaviour*, 3(2), 173–182. <https://doi.org/10.1038/s41562-018-0506-1>
- Orsolini, L., Volpe, U., Albert, U., Carmassi, C., Carrà, G., Cirulli, F., Dell'Osso, B., Del Vecchio, V., Di Nicola, M., Giallonardo, V., Luciano, M., Menculini, G., Nanni, M. G., Pompili, M., Sani, G., Sampogna, G., Tortorella, A., & Fiorillo, A. (2022). Use of social network as a coping strategy for depression among young people during the COVID-19 lockdown: findings from the COMET collaborative study. *Annals of General Psychiatry*, 21(1), 44. <https://doi.org/10.1186/s12991-022-00419-w>
- Ortiz Alvarado, N. B., Rodríguez Ontiveros, M., & Quintanilla Domínguez, C. (2020). Exploring Emotional Well-Being in Facebook as a Driver of Impulsive Buying: A Cross-

- Cultural Approach. *Journal of International Consumer Marketing*, 32(5), 400–415. <https://doi.org/10.1080/08961530.2020.1722979>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*, 63(1), 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Prati, G., Albanesi, C., & Pietrantonio, L. (2016). The Reciprocal Relationship between Sense of Community and Social Well-Being: A Cross-Lagged Panel Analysis. *Social Indicators Research*, 127(3), 1321–1332. <https://doi.org/10.1007/s11205-015-1012-8>
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Ramli, M., Cahyadi, A., Mizani, H., Hendryadi, & Mais, R. G. (2023). Loneliness, academic self-efficacy, and student engagement in the online learning environment: the role of humor in learning. *Research and Practice in Technology Enhanced Learning*, 19, 002. <https://doi.org/10.58459/rptel.2024.19002>
- Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out. *New Media & Society*, 21(7), 1486–1505. <https://doi.org/10.1177/1461444818823719>
- Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B. (2008). An Expanded Conceptualization and a New Measure of Compulsive Buying. *Journal of Consumer Research*, 35(4), 622–639. <https://doi.org/10.1086/591108>
- She, L., Rasiah, R., Waheed, H., & Pahlevan Sharif, S. (2021). Excessive use of social networking sites and financial well-being among young adults: the mediating role of online compulsive buying. *Young Consumers*, 22(2), 272–289. <https://doi.org/10.1108/YC-11-2020-1252>
- Silvera, D. H., Lavack, A. M., & Kropp, F. (2008). Impulse buying: the role of affect, social influence, and subjective wellbeing. *Journal of Consumer Marketing*, 25(1), 23–33. <https://doi.org/10.1108/07363760810845381>
- Su, T., Tian, L., & Huebner, E. S. (2021). The reciprocal relations among prosocial behavior, satisfaction of relatedness needs at school, and subjective well-being in school: A three-wave cross-lagged study among Chinese elementary school students. *Current Psychology*, 40(8), 3734–3746. <https://doi.org/10.1007/s12144-019-00323-9>
- Suresh, A. S., & Biswas, A. (2020). A Study of Factors of Internet Addiction and Its Impact on Online Compulsive Buying Behaviour: Indian Millennial Perspective. *Global Business Review*, 21(6), 1448–1465. <https://doi.org/10.1177/0972150919857011>
- Szymkowiak, A., Gaczek, P., & Padma, P. (2021). Impulse buying in hospitality: The role of content posted by social media influencers. *Journal of Vacation Marketing*, 27(4), 385–399. <https://doi.org/10.1177/13567667211003216>
- Tarka, P., & Kukar-Kinney, M. (2022). Compulsive buying among young consumers in Eastern Europe: a two-study approach to scale adaptation and validation. *Journal of Consumer Marketing*, 39(1), 106–120. <https://doi.org/10.1108/JCM-05-2020-3833>

- Tarka, P., Kukar-Kinney, M., & Harnish, R. J. (2022). Consumers' personality and compulsive buying behavior: The role of hedonistic shopping experiences and gender in mediating-moderating relationships. *Journal of Retailing and Consumer Services*, 64, 102802. <https://doi.org/10.1016/j.jretconser.2021.102802>
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychotherapy and Psychosomatics*, 84(3), 167–176. <https://doi.org/10.1159/000376585>
- Wheatley, D., & Buglass, S. L. (2019). Social network engagement and subjective well-being: a life-course perspective. *The British Journal of Sociology*, 70(5), 1971–1995. <https://doi.org/10.1111/1468-4446.12644>
- Wolfers, L. N., & Utz, S. (2022). Social media use, stress, and coping. *Current Opinion in Psychology*, 45, 101305. <https://doi.org/10.1016/j.copsyc.2022.101305>
- Worsley, J. D., McIntyre, J. C., Bentall, R. P., & Corcoran, R. (2018). Childhood maltreatment and problematic social media use: The role of attachment and depression. *Psychiatry Research*, 267, 88–93. <https://doi.org/10.1016/j.psychres.2018.05.023>
- Xu, C., Unger, A., Bi, C., Papastamatelou, J., & Raab, G. (2022). The influence of Internet shopping and use of credit cards on gender differences in compulsive buying. *Journal of Internet and Digital Economics*, 2(1), 27–45. <https://doi.org/10.1108/JIDE-11-2021-0017>
- Yang, C. Z., & Ha, H.-Y. (2023). The evolution of E-WOM intentions: A two time-lag interval approach after service failures. *Journal of Hospitality and Tourism Management*, 56, 147–154. <https://doi.org/10.1016/j.jhtm.2023.06.024>
- Zafar, A. U., Qiu, J., Li, Y., Wang, J., & Shahzad, M. (2021). The impact of social media celebrities' posts and contextual interactions on impulse buying in social commerce. *Computers in Human Behavior*, 115, 106178. <https://doi.org/10.1016/j.chb.2019.106178>



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 33-44



### Factors that Influence Shared E-Scooter Usage Intentions on University Campus

Waranpong Boonsiritomachai<sup>1)</sup>, Ploy Sud-On<sup>2)</sup>

<sup>1)</sup> Kasetsart Business School, Kasetsart University, Bangkok, Thailand

<sup>2)</sup> Mahidol University International College, Nakhon Pathom, Thailand

Email: Waranpong.b@ku.th



SINTA 2

DOI : <https://doi.org/10.24843/MATRIK:JMBK.2024.v18.i01.p03>

#### ABSTRACT

In response to increasing environmental awareness, universities have introduced shared e-scooters for staff and students. However, usage remains low, indicating a disparity. This study investigates factors influencing Kasetsart University (Bangkok, Thailand) students' intentions to use shared e-scooters. A Likert-scale survey gathered data from 424 qualified respondents, and multiple regression analysis identified six factors: social norms, environmental concerns, infrastructure quality, perceived convenience, safety concerns, and cost. Environmental concerns and cost had no significant impact on students' intentions to use e-scooters. This study helps stakeholders, including the student council, e-scooter suppliers, and university administration, understand student demands and formulate suitable policies for on-campus mobility. Boosting e-scooter adoption can also justify the university's investment. However, the study is limited by its exclusive focus on student perspectives. Future research should integrate qualitative methods alongside quantitative approaches for a comprehensive understanding and better policy and service development for e-scooter adoption.

**Keyword:** intention to use; shared e-scooter; theory of planned behavior

#### INTRODUCTION

Many university campuses have sprawling, large spaces to accommodate the many faculties and various venues for student activities appropriate for both a stimulating and conducive learning environment as well as rest at the university. It is thus critical to provide a comfortable and efficient commuting experience within the campus. In Thailand, there are numerous modes of commute to get around campus that includes walking, bicycles, motorcycles, cars, and buses. Riding a hired motorcycle is popular among university students because of the convenience as students simply pay, and the motorbike driver will drive and drop them to the front of the lecture building (Puratmaja et al., 2017). Motorcycle use however, pose safety risks, that have resulted in numerous accidents and, in some cases, severe injuries and even death. Furthermore, some hired motorcycle ride operators are reckless and break the law by riding in unsafe manners such as using the mobile phone while riding, carrying more than one passenger, speeding, riding while intoxicated, not wearing helmets, disregarding traffic laws, and operating their vehicles in unfavorable weather conditions (Chumpawadee et al., 2015).

Easy and efficient access to transportation is becoming more important as students have to travel in various buildings or to participate in extracurricular activities across the campus. Universities have also been actively promoting eco-friendly mobility initiatives to reduce the university's carbon footprint. Kasetsart University's Bangkok campus is the largest university campus in Thailand accommodating a sizable student population. Electric scooters (e-scooters) were recently introduced on campus at Kasetsart University. The UI GreenMetric World University Ranking in 2023 ranked Kasetsart University 73rd in the world and the first university in Thailand to make the list. Kasetsart University's eco plan takes into account regional features and the surrounding environment. In terms of on-campus transportation, the university limits the use of cars by promoting car sharing, encouraging the use of bicycles and walking, and more recently investing in e-scooters (Limphaiboon et al., 2022).

The study addresses a crucial research gap in the use of shared e-scooters on university campuses, emphasizing the need for universities to prioritize sustainability in line with the United Nations Sustainable Development Goals (SDGs) (United Nations, 2017). Despite recognizing the environmental benefits of e-scooters, there's a shortage of studies focused on their use within universities. While past research has explored e-scooter behavior in various settings, there's a specific need for investigation tailored to university contexts. For example, Guo & Zhang (2021) conducted a study about the behavior of people using e-scooters in Florida. Chen et al. (2021) studied the role of environmental concern in forming intentions for switching to e-scooters citywide in Taiwan. As universities aim for eco-friendliness, e-scooters present another option for sustainable transportation, supporting SDG 11: Sustainable Cities and Communities by creating inclusive, safe, and resilient urban areas. Integrating e-scooters into campus transportation systems further contributes to SDG 13: Climate Action, addressing climate change. The study also aims to identify factors influencing students' willingness to adopt e-scooters, informing policy development to encourage their use on campuses and indirectly promoting environmental awareness and supporting SDG 3: Good Health and Well-being (United Nations, 2017). Ultimately, the research outcomes are expected to benefit universities and businesses by informing policies that encourage increased e-scooter usage and raising students' awareness of environmental issues and the importance of conservation through eco-friendly transportation.

The Theory of Planned Behavior (TPB) developed by Icek Ajzen is an extension of the Theory of Reasoned Action (TRA) (Ajzen, 1991). For decades, TPB was the primary framework used to study human behavior. This theory is highly influential in understanding user decisions and advancing human behavior research. This theory supports researchers in understanding the complex dynamics of human intentions and actual behavior. An individual will perform the behavior only if there is a plan to perform the behavior. This action comes from intention. This theory has been applied to many fields. For instance, Yuriev et al. (2020) employed TPB to predict people's behaviors toward recycling, energy conservation, and public transportation use. This study aspires to clarify how people's views toward the environment, social norms around environmental conservation, and perceived control over their actions influence their environmental behaviors. More recent research, such as by Albayati et al. (2023), used TPB to identify the variables that influence engagement with Non-Fungible Tokens (NFTs) in the metaverse and found that social, technical, regulatory, market, and trust have an impact on the intention to invest in NFTs and ultimately on forming behaviors. NFTs, like shared e-scooters, represent relatively new concepts for individuals unfamiliar with them. Therefore, when individuals have not previously engaged with these

concepts, they may harbor uncertainties and hesitations. Consequently, examining additional supporting factors that encourage individuals to be among the early adopters is essential. TPB, with its emphasis on understanding intentions and behaviors, provides a suitable framework for exploring these dynamics in shared e-scooter contexts. By leveraging TPB, researchers can delve into the underlying factors that influence individuals' intentions to adopt these innovations, shedding light on the complexities of human decision-making and paving the way for successful adoption strategies. Therefore, this study explores the complex interplay between the intention to utilize shared e-scooters among university students and various essential factors, including social norms, environmental concerns, infrastructure quality, perceived convenience, safety concerns, and cost.

Social norms prescribe how one should interact with other people and when conducting themselves. As a general rule, the more favorable the attitude and social norm, the stronger the person's intention to perform the behavior (Leeuw et al., 2011). Perceived social acceptance can impact people's decisions. Zhang et al. (2016) discovered that the expectation of others and internalized responsibility both raise the intention to use public transportation and increase actual usage of it. In the context of e-scooters, social norms can encourage or hinder potential users from using them. The research by Sanders et al. (2020) indicates that the visibility of e-scooters and the observation of their use by others can normalize this mode of transport and increase its adoption. When considering the previous study by Tsou et al. (2019), the researchers also confirmed that social influence may actually boost adoption. This phenomenon can explain how social influence can create personal confidence when using new services or products. People in a community are pressured by other members or friends to conform. The family's actions and attitude have a significant impact on their cognition. As shared e-scooter use on-campus is a recent initiative for students, social norms may have an influence on their adoption. Hence, it is hypothesized that:

**H1:** Social norms have a positively significant impact on the intention to use shared e-scooters on university campuses.

Many studies have shown that environmental attitudes can predict the intention to use or adopt services and products. Tsou et al. (2019) found that the more concern for the environment, the higher the adoption, especially energy sharing experiences. In Western countries where cars are the primary form of personal transportation, EVs are most commonly linked with electric vehicles that replace traditional gasoline vehicles. In other parts of the world, such as in Southeast Asia, electrically powered two-wheeled vehicles serve this purpose (Chen et al., 2021). According to Tuli et al. (2021), one approach to reduce carbon footprint and support sustainable urban life is to utilize e-scooters. Another study by Chen et al. (2021) conducted in Taiwan explained that the Taiwan government, for over 20 years promoted research and development of electric scooters, and that users of fossil-fueled scooters who are environmentally conscious attempt to switch to e-scooters. Hence, it is hypothesized that:

**H2:** Environmental concerns have a positively significant impact on the intention to use shared e-scooters on university campuses.

The infrastructure quality of an urban area significantly influences the adoption and use of various forms of transportation. Hull & O'holleran (2014) claim that good bicycle infrastructure design in cities encourages more people to ride. In the case of e-scooters, bike lanes, parking facilities, and the overall design of the urban landscape can either encourage or hinder the use of e-scooters. Zuniga-Garcia et al. (2021) found that riders prefer paths with a

medium to high level of comfort, such as bike lanes over sidewalks. This demonstrates the importance of infrastructure when deciding to use e-scooters or not. Another study by Ma et al. (2021) found consistent results, which suggested that the quality of pavement and dedicated spaces for scooters can impact usage. The presence of e-scooter parking zones and bike lanes, among other campus infrastructure, may influence university students' mobility decisions. Hence, it is hypothesized that:

**H3:** Infrastructure quality has a positively significant impact on the intention to use shared e-scooters on university campuses.

Convenience is one of the elements that influence a passenger's choice of transportation method. Students have various options while commuting from one building to another. Students' adoption of shared e-scooters, especially on university campuses, may be significantly influenced by their convenience. The ease of accessing e-scooters and their flexibility for short-distance travel make them a suitable choice among students. Sanders et al. (2020) explained that the ability to avoid traffic congestion, the lack of a requirement for parking space, and overall travel time efficiency are important factors that contribute to the perceived convenience of e-scooters for those living in urban areas. Furthermore, as technology advances, mobile applications for identifying and unlocking e-scooters have become more accessible and popular among passengers (Guo & Zhang, 2021). When considering the location to conduct this present study, convenience may be one of the reasons for students to use shared e-scooters as flexible mobility solutions due to the Kasetsart campus's density and the students' busy schedules. Hence, it is hypothesized that:

**H4:** Perceived convenience has a positively significant impact on the intention to use shared e-scooters on university campuses.

Safety is one of the top concerns among passengers when using transportation (Ma et al., 2021). The perception of safety risk, either due to traffic conditions or the behavior of other road users, can be a significant barrier to the use of e-scooters. The research by James et al. (2019) highlighted the impact of vibrations and speed variations on rider safety, emphasizing the need for better infrastructure to mitigate these risks. With their maximum speed of 15–20 mph, off-the-shelf e-scooters can be unsafe when used on busy sidewalks shared by pedestrians. Meanwhile, many facilities may not be able to fully support the safe use of e-scooters, which frequently have small wheels, due to physical limitations. As a result of safety concerns, various places have prohibited the use of e-scooters. In addition, there have been news reports of scooter-related accidents, some resulting in fatalities (Ma et al., 2021). These findings are essential for understanding the reluctance among university students, where safety concerns may outweigh the convenience that e-scooters offer. Hence, it is hypothesized that:

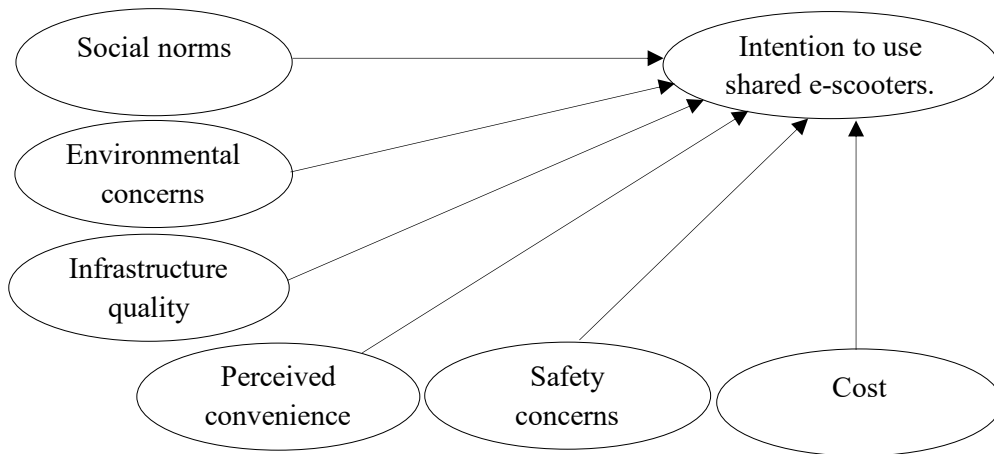
**H5:** Safety concerns have a positively significant impact on the intention to use shared e-scooters on university campuses.

When choosing a means of transportation, passengers must take the cost of transportation into account. Low costs benefit passengers, particularly those with restricted budgets. Considering the current research context, the majority of Thai students continue to rely on their parents' income to meet their daily living expenses (Paireepinas & Dhiravisit, 2020). As a result, e-scooters must be less expensive or comparable to conventional modes of transportation. Guo & Zhang (2021) found that the economic incentives associated with e-scooter use, such as pricing strategies and promotional offers, can significantly affect a passenger's decision to use this mode of transport. Additionally, the study by Sanders et al.

(2020) indicates that the relative cost-effectiveness of e-scooters, especially when compared to public transit or personal vehicles, is a compelling factor for cost-conscious passengers. Hence, it is hypothesized that:

**H6:** Cost has a negatively significant impact on the intention to use shared e-scooters on university campuses.

This present study proposes six hypotheses, consisting of six dependent factors and one dependent factor. The conceptual framework is illustrated in Figure 1.



**Figure 1. Conceptual Framework of Research**

## METHODS

The present study was conducted using the quantitative method which is to test theories by means of measurement that emphasizes numerical data on the factors studied. The self-administered survey was used to collect data. Questions in the questionnaire used a five-point Likert scale (from 1 (strongly disagree) to 5 (strongly agree)). The scales for the intention to use shared e-scooters were adapted from Eccarius & Lu (2020). The scales for social norms were adapted from Kellstedt et al. (2021), whereas the scales for environmental concerns were adapted from Halvadia et al. (2022). The scales for perceived convenience were adapted from Sanders et al. (2020), while the scales for cost were adapted from Almannaa et al. (2021). Infrastructure quality and safety concerns were adapted from Guo & Zhang (2021). These questions are appropriate for the present study because they enable the systematic collection and presentation of data about variables of interest. By employing a survey, the research captures a picture of attitudes and perceptions in each factor toward shared e-scooters, which can be used to generate broader patterns and trends within the target population.

The present study's population comprises of students currently enrolled at Kasetsart University's Bangkok campus, with a total enrollment of 36,000 students. Given the diversity of the student population, a random sampling approach was used to ensure that the sample represented the total population. This strategy will eliminate sample bias, making the study's conclusions more generalizable. Additionally, the research encompasses students across all academic levels, including undergraduate, master's, and doctoral candidates. Following the

Cohen (1962) approach in determining the sample size of this population with 95% confidence, and a margin of error of 5%, a sample size of at least 384 people would be necessary. In addition, to compensate for incomplete or unusable surveys, this study collected 450 questionnaires.

A pilot study was conducted with a small subset (30 people) of the target population to further test the survey instrument's reliability. The feedback from the pilot test was used to make adjustments before its wider distribution. Furthermore, this questionnaire achieved the Cronbach's Alpha coefficient of 0.816, showing a high level of reliability. The data for this study was collected over a three-month period, where survey respondents were approached at various locations around the university campus. The researchers utilized a QR code system, allowing students to easily access the online survey via mobile devices.

424 out of 450 questionnaires could be evaluated, with 26 eliminated because respondents did not complete all of the required information. This present study examined the questionnaire responses using the Cronbach Alpha coefficient to determine the level of reliability and consistency for each variable. The score ranged from 0.744 to 0.951 and being close to 1 and not less than 0.65 indicated the variable's reliability met the criterion (Nunnally, 1978). The data was then evaluated with multiple regression statistics.

## RESULT AND DISCUSSION

This section discusses the outcomes of the data analysis. Table 1 displays the descriptive statistics and frequencies.

**Tabel 1. Characteristics of Respondents**

|         |                         |     |               |        |     |
|---------|-------------------------|-----|---------------|--------|-----|
| Gender  | Female                  | 232 | Year of study | First  | 154 |
|         | Male                    | 192 |               | Second | 121 |
|         |                         |     |               | Third  | 65  |
|         |                         |     |               | Fourth | 71  |
|         |                         |     |               | Other  | 13  |
|         |                         |     |               |        |     |
| Faculty | Business Administration | 58  | Age           | 17     | 11  |
|         | Economics               | 61  |               | 18     | 44  |
|         | Science                 | 58  |               | 19     | 102 |
|         | Social Science          | 42  |               | 20     | 68  |
|         | Engineering             | 38  |               | 21     | 71  |
|         | Humanities              | 64  |               | 22     | 65  |
|         | Veterinary Medicine     | 28  |               | 23     | 20  |
|         | Agriculture             | 39  |               | 24     | 38  |
|         | Others                  | 36  |               | 24 up  | 5   |

Source: Data Processed, 2024

Based on the data in Table 1, female respondents accounted for 54.71 percent of the sample. More than 36 percent are still freshmen, followed by sophomores at 28.5 percent. The faculty of Humanities received the most responses (15 percent), followed by the faculty of Economics (14.4 percent). Age varied across all categories, with the most common age of 19, which accounted for 24 percent of the sampled population.

Multiple regression analysis was used to assess the impact of several factors on Kasetsart University students' intentions to utilize shared e-scooters. The model consisted of six independent variables: social norms, environmental concerns, infrastructure quality, perceived convenience, safety concerns, and cost. Table 2 shows that respondents gave answers ranging from strongly disagreeing to highly agreeing. Respondents in this present study chose social norms as the highest scoring variable with an average score of 3.67, followed by perceived convenience, which had an average score of 3.49. The next was Infrastructure quality with an average score of 3.38. The top three criteria with the lowest scores were cost, safety concerns, and environmental concerns, with scores of 3.25, 3.17, and 2.78 respectively.

**Table 2. Descriptive Statistics of Respondents' Answer**

| Variable                           | Min | Max | Average | St.dev |
|------------------------------------|-----|-----|---------|--------|
| Social Norms                       | 2   | 5   | 3.67    | .8642  |
| Environmental Concerns             | 1   | 5   | 2.78    | .7121  |
| Infrastructure Quality             | 2   | 5   | 3.38    | .7003  |
| Perceived Convenience              | 2   | 5   | 3.49    | .8354  |
| Safety Concerns                    | 1   | 5   | 3.17    | .7223  |
| Cost                               | 2   | 5   | 3.25    | .7228  |
| Intention to Use Shared E-Scooters | 1   | 5   | 3.36    | .9634  |

Source: Data Processed, 2024

The model summary is shown in Table 3. The model summary shows a strong relationship between the predictors and the usage intention, with an R square of .762. This means that approximately 76.2% of the variance in usage intention can be explained by the independent variables included in the model. The adjusted R square value of .756 is a more precise estimate of the variance explained by the model when applied to the broader population.

**Table 3. Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .850 <sup>a</sup> | .762     | .756              | .74225                     |

a. Predictors: (Constant), Social Norms, Environmental Concerns, Infrastructure Quality, Perceived Convenience, Safety Concerns, Cost

Source: Data Processed, 2024

Examining the proposed hypothesis in this study, the results show that all predictors, with the exception of environmental concerns and cost, contributed considerably to the model, as illustrated in Table 4. Improvements in social norms, infrastructural quality, convenience, and safety can be interpreted as an increase in students' inclination to utilize shared e-scooters. In contrast, environmental concerns and cost had no significant effect on usage intention, demonstrating that in the context of this present study, both the environment and the cost of utilizing shared e-scooters are not determining factors for students.

**Table 4. Multiple Regression Results of Intention to Use Shared E-Scooters**

| Independent factors | Intention to Use Shared E-Scooters |    |      |   |   |
|---------------------|------------------------------------|----|------|---|---|
|                     | B                                  | SE | Beta | t | p |

| Results       | Constant                   | .601 | .194 |      | 3.012 | .32   |
|---------------|----------------------------|------|------|------|-------|-------|
| H1: Supported | X1: Social Norms           | .326 | .058 | .275 | 5.618 | .001* |
| H2: Rejected  | X2: Environmental Concerns | .101 | .056 | .042 | .377  | .247  |
| H3: Supported | X3: Infrastructure Quality | .184 | .059 | .134 | 2.135 | .002* |
| H4: Supported | X4: Perceived Convenience  | .231 | .058 | .181 | 3.953 | .001* |
| H5: Supported | X5: Safety Concerns        | .241 | .510 | .209 | 4.122 | .002* |
| H6: Rejected  | X6: Cost                   | .011 | .059 | .008 | .181  | .857  |

Note: \* = significant at a significance level 95%

Source: Data Processed, 2024

Compared to previous studies, this study found that social norms have significant influence on the intention to use shared e-scooter. This result is aligned with the findings from Sanders et al. (2020). Social roles can shape passenger transportation preferences. In this study conducted among teenagers, this segment usually likes to emulate or imitate those who are close to them. Therefore, they may have increased desire to make the switch if they see their friends using shared e-scooters to commute. In terms of infrastructure quality, it is important, especially for e-scooters, and it has an impact on passengers willingness to use e-scooters. Bieliński & Ważna (2020) confirmed the contribution of well-developed infrastructural facilities to the growing adoption of e-scooters among citizens in northern Poland. Safety is another factor that impacts the adoption of shared e-scooters. The result of this present study, along with many others, indicates that safety is a strong predictor of adoption. For example, Kazemzadeh et al. (2023) showed that passengers have serious safety concerns when choosing emerging transportation modes such as e-scooters. Safety concerns not only the scooter rider, but also the safety of other vehicles on the road. In terms of convenience, this present study found a positive relationship with the intention to use shared e-scooters. This finding is supported by Sanders et al. (2020) who conducted a study on e-scooters in the United States and found that e-scooters are rapidly changing transportation modes in US university campuses because passengers perceive them as convenient, faster, and better in hot weather than walking. Furthermore, it is used primarily for transportation rather than recreation. The current study is conducted in Bangkok, where parking at the university is limited and the weather in Thailand is hot. As a result, using a shared e-scooter is one of the most practical solutions for students, as it eliminates the need to find parking and allows them to park directly in front of lecture halls.

In contrast to the findings of most prior studies, the intention to use shared e-scooters in this present study is not significantly impacted by environmental concerns. When examining the responses from the questionnaire respondents, it is found that the environmental concern factor received the lowest average score. When considering each question within the environmental concern factor, such as "Using shared e-scooters helps reduce carbon emissions" or "University-led environmental initiatives encourage me to consider using shared e-scooters as a more sustainable transportation option," it becomes apparent that the majority of questionnaire respondents tend to disagree with these statements. One possible explanation for this could be that most students either disregard or believe that environmental issues are irrelevant to them. As a result, individuals may not understand how using shared e-scooters can help improve the environment. In terms of cost, this study did not find any impact on the intention of using shared e-scooters significant. When considering the responses from the questionnaire, it becomes apparent that scores regarding the cost of using shared e-scooters are relatively low compared to other factors. Furthermore, when analyzing

specific questions in cost factor such as "I am concerned about the cost of using shared e-scooters on a daily basis" or "The cost savings compared to other modes of transportation significantly influenced my decision to use shared e-scooters," a significant number of respondents tend to disagree with these statements. This suggests that they may not consider the cost of using shared e-scooters or believe that using e-scooter transportation does not result in significant savings. Additionally, considering the labor force in Thailand, where labor costs are relatively low, using motorcycle taxis for commuting within university campuses may not incur high expenses for students. Furthermore, this result can imply that Kasetsart University students prioritize social acceptance by others and safety before cost. Alternatively, it's possible that students are keenly aware that the university, being located in the capital of the country, expects a higher cost of living. Therefore, students could budget in advance and not focus on the cost of using an e-scooter. Chen et al. (2021) claimed that when passengers opt to use e-scooter, the ease of usage is more important than the price.

## CONCLUSIONS

This study sheds light on the elements that influence university students' desires to utilize shared e-scooters, providing a valuable viewpoint on urban academic mobility. According to the research, students chose the e-scooter mode of transportation based on a variety of reasons, including following social norms, availability of decent infrastructure, wanting convenience, and being concerned about safety. Remarkably, both environmental concerns and cost had no significant effect on the desire to use shared e-scooters. This implies that students place a higher importance on safety and ease of use for short excursions than on price and environmental friendliness. These results, along with several previous studies, show that users do place higher importance on factors other than cost and environment concerns when it comes to using shared transportation services.

This study contributes to the theoretical understanding of shared e-scooter adoption among university students by employing the Theory of Planned Behavior (TPB). The TPB framework provides a comprehensive lens through which to explore the intricate dynamics of human intention and behavior. By applying TPB, this research investigates into the underlying factors shaping students' intentions to adopt shared e-scooters, explaining the complexities of decision-making processes in the context of sustainable transportation options. For instance, TPB facilitates analyze how individual attitudes, subjective norms, and perceived behavioral control impact the intention to adopt shared e-scooters. This approach provides insights into the cognitive mechanisms guiding students' choices in sustainable transportation, highlighting interactions between personal beliefs, social influences, and perceived control over behavior. Through this lens, the study elucidates how factors like environmental concerns, social norms, and convenience perceptions collectively influence students' intentions to embrace shared e-scooters as a viable transportation option on university campuses.

Bringing share e-scooters for students is considered an investment by the university; therefore, utilization of resources such as the use of share e-scooters will encourage continued investment. In addition, increased utilization of e-scooters can improve the university's eco credentials for sustainable environmental management. Therefore, the involved stakeholders including university administrators, lecturers, student council board, and e-scooter suppliers, may benefit from the outcomes of this study to encourage higher adoption of shared e-scooter

use. As social norms influence students' decision-making, stakeholders should promote social initiatives aimed at making e-scooter use more commonplace within the university community. In terms of infrastructure quality and safety, stakeholders should prioritize road safety on campus by providing special lanes for e-scooters. Also, the e-scooter must be robust and safe, and the university should strongly enforce traffic rules or require users to wear helmets for their own protection. Parking for e-scooters and having a sufficient number of scooters cannot be overlooked. Students will be more inclined to utilize scooters if they realize that they are readily available at all locations and that they don't have to waste time searching for parking spaces.

Although this study did not find significant importance in terms of cost and environmental concerns, future research should examine these two factors to comprehend the underlying reasons. This will provide a more comprehensive understanding of the dynamics influencing students' intentions regarding shared e-scooter adoption on university campuses. The lack of significance regarding cost and environmental concerns in this study may stem from the specific context or location where the research was conducted. Alternatively, the use of shared e-scooters may vary in different locations, leading to differences in cost implications. For instance, when comparing the costs of shared e-scooter usage with other transportation methods in different countries or regions, there may be significant variations in expenses. These differences could impact individuals' decision-making processes when selecting e-scooters. Moreover, awareness or perception of environmental factors may differ among populations in various areas, influencing users' decisions regarding shared e-scooter adoption. Therefore, it is crucial to consider these factors when planning future research endeavors. Furthermore, future research should address the long-term sustainability of e-scooter programs and how they integrate with other modes of transportation. Furthermore, comparative studies across universities, nations, or cultural contexts may provide larger insights regarding shared e-scooter mobility. It is critical to recognize the limitations of the current investigation. Because the focus of the study is on Kasetsart University, the findings may not be immediately applicable to another context. Furthermore, this study solely focused on sampling students, excluding lecturers or university staff. Thus, future research can enhance this limitation by integrating qualitative methods alongside quantitative approaches and by comparing various groups within the university community. This comprehensive approach would provide additional perspectives by examining a broader spectrum of participants, thereby addressing this limitation more effectively.

## REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50(2), 179-211.
- Albayati, H., Alistarbadi, N., & Rho, J. J. (2023). Assessing engagement decisions in NFT Metaverse based on the Theory of Planned Behavior (TPB). *Telematics and Informatics Reports*, 10(100045), 1-14.
- Almannaa, M. H., Alsahhaf, F. A., Ashqar, H. I., Elhenawy, M., Masoud, M., & Rakotonirainy, A. (2021). Perception analysis of E-scooter riders and non-riders in Riyadh, Saudi Arabia: Survey outputs. *Sustainability*, 13(863), 1-24.
- Bieliński, T., & Wazna, A. (2020). Electric scooter sharing and bike sharing user behaviour and characteristics. *Sustainability*, 12(22), 1-13.

- Chen, C.-F., Eccarius, T., & Su, P.-C. (2021). The role of environmental concern in forming intentions for switching to electric scooters. *Transportation Research Part A: Policy and Practice*, 154, 129-144.
- Chumpawadee, U., Homchampa, P., Thongkrajai, P., Suwanimitr, A., & Chadbunchachai, W. (2015). Factors related to motorcycle accident risk behavior among university students in northeastern Thailand. *Southeast Asian J Trop Med Public Health*, 46(4), 805-821.
- Cohen, J. (1962). The statistical power of abnormal-social psychological research: a review. *The Journal of Abnormal and Social Psychology*, 65(3), 144-176.
- Eccarius, T., & Lu, C.-C. (2020). Adoption intentions for micro-mobility–Insights from electric scooter sharing in Taiwan. *Transportation research part D: transport and environment*, 84(102327), 1-18.
- Guo, Y., & Zhang, Y. (2021). Understanding factors influencing shared e-scooter usage and its impact on auto mode substitution. *Transportation research part D: transport and environment*, 99(102991), 1-13.
- Halvadia, N. B., Bhatt, K., Sharma, M., Sharma, A., & Dash, S. (2022). Consumers’ intention to use bicycle-sharing services: The role of consumer consciousness. *Cleaner and Responsible Consumption*, 7(100076), 1-7.
- Hull, A., & O’holleran, C. (2014). Bicycle infrastructure: can good design encourage cycling? *Urban, Planning and Transport Research*, 2(1), 369-406.
- James, O., Swiderski, J., Hicks, J., Teoman, D., & Buehler, R. (2019). Pedestrians and e-scooters: An initial look at e-scooter parking and perceptions by riders and non-riders. *Sustainability*, 11(20), 5591.
- Kazemzadeh, K., Haghani, M., & Sprei, F. (2023). Electric scooter safety: An integrative review of evidence from transport and medical research domains. *Sustainable Cities and Society*, 89(104313), 1-11.
- Kellstedt, D. K., Spengler, J. O., & Maddock, J. E. (2021). Comparing Perceived and Objective Measures of Bikeability on a University Campus: A Case Study. *Sage Open*, 11(2), 1-10.
- Leeuw, A., Valois, P., & Houssemand, C. (2011). Predicting the intentions to buy fair-trade products: The role of attitude, social norm, perceived behavioral control, and moral norm. *OIDA International Journal of Sustainable Development*, 2(10), 77-84.
- Limphaiboon, C., Suphachan, S., & Ruttanatheerawichien, K. (2022). Factors affecting the development to become a green university of Thai private universities. *KKBS Journal of Business Administration and Accountancy*, 6(1), 34-47.
- Ma, Q., Yang, H., Mayhue, A., Sun, Y., Huang, Z., & Ma, Y. (2021). E-Scooter safety: The riding risk analysis based on mobile sensing data. *Accident Analysis & Prevention*, 151(105954), 1-22.
- Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.
- Paireepinas, P., & Dhiravisit, A. (2020). Educational Inequality: A Study of the Urban Poor in Thailand. *International Journal of Interdisciplinary Educational Studies*, 15(1), 1-11.
- Puratmaja, Y., Handayani, L., & Sunardi, K. S. (2017). Factors Associated with Motorcycle Risk Behavior in Thai University Students, Khon Kaen. *International Journal of Evaluation and Research in Education*, 6(4), 270-276.

- Sanders, R. L., Branion-Calles, M., & Nelson, T. A. (2020). To scoot or not to scoot: Findings from a recent survey about the benefits and barriers of using E-scooters for riders and non-riders. *Transportation Research Part A: Policy and Practice*, 139, 217-227.
- Tsou, H., Chen, J., Chou, C. Y., & Chen, T. (2019). Sharing economy service experience and its effects on behavioral intention. *Sustainability*, 11(18), 5050.
- Tuli, F. M., Mitra, S., & Crews, M. B. (2021). Factors influencing the usage of shared E-scooters in Chicago. *Transportation Research Part A: Policy and Practice*, 154, 164-185.
- United Nations. (2017). *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*. Retrieved 17 January 2024 from [https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202021%20refinement\\_Eng.pdf](https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202021%20refinement_Eng.pdf)
- Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, 155(104660), 1-16.
- Zhang, D., Schmöcker, J.-D., Fujii, S., & Yang, X. (2016). Social norms and public transport usage: empirical study from Shanghai. *Transportation*, 43, 869-888.
- Zuniga-Garcia, N., Juri, N. R., Perrine, K. A., & Machemehl, R. B. (2021). E-scooters in urban infrastructure: Understanding sidewalk, bike lane, and roadway usage from trajectory data. *Case studies on transport policy*, 9(3), 983-994.



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 45-55



### Brand Anticipation in an Era of Uncertainty: Understanding Consumer Behaviour towards Companies' Future Anticipation Efforts

Andriya Risdwiyanto<sup>1)</sup>, Filasti Rahma<sup>2)</sup>, Loso Judijanto<sup>3)</sup>, Arif Saefudin<sup>4)</sup>

<sup>1</sup> Universitas Proklamasi 45, Yogyakarta, Indonesia

<sup>2</sup> Politeknik Baubau, Sulawesi Tenggara, Indonesia

<sup>3</sup> IPOSS Jakarta, Jakarta, Indonesia

<sup>4</sup> Universitas PGRI Yogyakarta, Yogyakarta, Indonesia

Email: andriya.risdwiyanto@up45.ac.id



SINTA 2

DOI : <https://doi.org/10.24843/MATRIK:JMBK.2024.v18.i01.p04>

#### ABSTRACT

Modern companies invest heavily in understanding future customer needs, but these efforts are sometimes unappreciated, leading to poor results. This research aims to understand future anticipation by linking it to companies' predictions of technological, cultural, and competitive changes and how consumers perceive these changes. Using qualitative methods, data was collected through semi-structured interviews and focus group discussions (FGD) with eight participants each. The findings show that customers highly value visionary company initiatives, forming positive memories that strengthen brand relationships. These memories, particularly in the precordium area of the brain, impact loyalty and shopping behavior, emphasizing the importance of introspection and personal experience. The research also introduces the concept of "massclusivity" and its relationship with elite consumers, like tablet owners. The novelty of this study lies in applying futurology in marketing and utilizing autobiographical memory.

**Keywords:** consumer behaviour; corporate anticipation; era of uncertainty; future; technology products

#### INTRODUCTION

Brands have a significant role for companies and consumers, where consumers shape their identity through their products. In contrast, companies benefit financially and have good consumer relationships, leading to increased profits (Puente-Díaz & Cavazos-Arroyo, 2021). Brand building is also vital in motivating internal stakeholders, especially employees who feel honoured to be part of the best brands (Goisauf et al., 2020). Furthermore, brand development contributes to the development of society, with brand innovations improving people's quality of life (A. Huang et al., 2022). However, achieving these benefits for consumers, companies, and society is difficult. Therefore, brands and companies must invest to continue to compete in the future. This means that future-focused brand strategies must be formulated and implemented to create stronger brands and achieve success that integrates companies, consumers, and society (Bibri, 2021; Riyadi et al., 2023).

The needs of the company's stakeholders are the main key to business success. Therefore, brands become strategic assets that must be transformed into effective resources for stakeholders, especially when an organisation excels over its competitors (Jain & Ranjan, 2020; Murliasari et al., 2023). Developments in the service sector and increased investment in trade and manufacturing have created an intensely competitive environment, often referred to as the 'red ocean', where companies must constantly learn and adapt their competitive strategies (Dabić et al., 2023). This is a proactive approach to brand building for the future. Despite this understanding, many managers are still fixated on short-term tactics and lack a strategic vision, which often leads to brand failure (Bamel et al., 2022). Understanding and anticipating the future is strategic in an organisation, where companies must balance expected outcomes (such as profits and reputation) and the costs required to achieve those goals (Anton & Nucu, 2020).

Many companies claim to be able to forecast consumer needs and wants and have greater insight into the right time to launch new products and services. However, many new products and services still fail. The main cause of this failure is often the company's inability to accurately predict future consumer behaviour, an error that stems from reliance on experience (Amanatin & Wijaya, 2023; Tiberius et al., 2021). Understanding how to learn the brand knowledge integrated into consumers' lives over the years is key for brand managers. It is an important factor for the success of a brand, yet often overlooked by researchers in this field (Aschemann-Witzel & Janssen, 2022). The autobiographical memory approach has been applied in children's market research (Ligaraba et al., 2023; Marchini et al., 2021). However, how this approach can be widely adopted and applied across organisations requires some thought. Through understanding consumer memories, companies can gain benefits, such as building stronger relationships between the company and its consumers.

On the other hand, the relationship between brands and consumers has been widely researched. Understanding brand building through consumers' autobiographical memory is a useful yet rarely applied approach in brand studies. This is important because brand memories, including recognition of colours, images and symbols, can be researched more deeply through autobiographical profiles (Rangaswamy et al., 2022; Zhang et al., 2021). Other research has also been conducted on consumer attitudes towards European, Asian and African brand extension strategies (Attor et al., 2022; Haq et al., 2021; MacNiven et al., 2023), but how futuristic brands are perceived by consumers based on their memories has not been widely researched. The emphasis on future prediction in brand strategy, specifically related to the perceived value of such endeavours through autobiographical memory generation, has not been widely researched. While there are many studies in marketing exploring consumer memory (C. Huang et al., 2022; Rangaswamy et al., 2022; Zhang et al., 2021), research exploring customer memories as a foundation for future predictions is minimal. As such, we consider this an opportunity to advance theoretical understanding in marketing and introduce a new paradigm in research on this topic.

It is recognised that there is no single dominant method for developing knowledge in the marketing field - new approaches and paradigm shifts in enriching marketing theory are always appreciated (Haq et al., 2021; Paetz, 2021). To broaden marketing insights by introducing new paradigms, this study adopts DeRoo's philosophical perspective on the future (Verster et al., 2019). It applies the psychological theory by Steinberg et al. (Paetz, 2021) to explore and explain how companies anticipate the future from the perspective of

their key stakeholders, namely consumers. This study is also rooted in Mello and colleagues' theory of time perspective (Dressler & Paunovic, 2021), which examines attitudes and thought processes regarding the past, present and future. To better understand behaviours associated with anticipation for the future, we draw on the sociological theory of futurology, which focuses on Huber and Bell's generalisations about predictive ability (García-Salirrosas & Gordillo, 2021). By combining these two theoretical frameworks, we evaluate a conceptual framework designed to predict the impact of future anticipatory actions by firms and their relation to the formation of brand loyalty.

In this context, Indonesia has experienced significant economic growth, with an average growth of 5.35% from 2000 to 2016. This has made Indonesia one of the emerging economic powers in Asia, alongside countries such as China, India and Singapore. Indonesia once accounted for 53% of Samsung's global sales, with 3.5 million smartphone users (Ferine et al., 2023; Sestino & Amatulli, 2024). Moreover, with stable economic growth and its status as a G-20 member, Indonesia is a potential market for high-tech products, especially those that are future-orientated. With a population of approximately 118 million people of productive age, Indonesia offers a vast market for various digital products (Prasetyo & Saefudin, 2023; Ferine et al., 2024).

The ability to forecast future trends emphasises the importance of conducting more research on predictive trends, which are currently under-researched. This study examines the link between brand associations and future predictions and their impact on consumer brand loyalty. The importance of companies looking to the future and anticipating it is crucial, yet there is little research in this area. The focus has been on the relationship between future anticipation and marketing outcomes such as consumer loyalty (Gerlich, 2023; Giza & Wilk, 2021; Kita et al., 2021). This research aims to develop an understanding of future anticipation by linking it to companies' predictions of technological, cultural and competitive changes and how consumers perceive these changes. From a marketing perspective, it is important that consumers appreciate the company's efforts and that the gap between management's orientation and consumers' expectations of a brand is minimised, which indicates strategic success. Through this research, we hope to help managers understand better consumers' perceptions of their futuristic strategies so that they can design more effective strategies while introducing new products and services.

## METHODS

Given the limited literature available to explore the relationship between futurology and branding in the context of consumer autobiography from an internal company perspective, we decided to use qualitative methods in this study. A case study approach in qualitative research is often recommended when a deep and detailed understanding is required (Yin, 2016). To strengthen our methodology, we adopted a triangulation strategy consistent with the practice in contemporary qualitative research, using multiple methods in data collection (Miles et al., 2014). According to Miles, Huberman, and Saldana (2014), the simultaneous use of data and theory triangulation provides a more complete and in-depth picture of the phenomenon under study, and increases confidence in the research results. Data were collected through several means, including semi-structured interviews and Focus Group Discussions (FGDs).

In the inception phase, we conducted semi-structured interviews to gain an understanding of future anticipation and its relation to autobiographical memory, brand identity and brand interaction. The main objective of these interviews was to gain a broader understanding of how participants perceive the future and the autobiographical memories associated with them. The interviews were also effective in uncovering their autobiographical memory. The collected data from eight participants, considered technology product experts due to their experience and expertise in computer and gadget sales and repair in Yogyakarta, Indonesia. Respondent's selected for their in-depth knowledge of technology products and understanding of customer needs regarding future products. Through these interviews, we managed to capture participants' personal experiences, which provided valuable insights for our study. These interviews were designed to deepen our understanding of future anticipation initiatives. In particular, the interviews were geared towards confirming whether Product X is a good example of a perceived future anticipation measure by further scrutinising respondents' reactions and views towards Product X.

In this study, in addition to applying semi-structured interviews, we also conducted Focus Group Discussions (FGDs) to deepen the understanding of participants' perceptions of the anticipatory actions taken by the company. The FGDs were selected based on the results of the interviews and the projective method to further explore the group's opinions on anticipatory actions and their relation to autobiographical memory and brand identity (Julmi, 2020; Lapan et al., 2012). This research integrates various important concepts to navigate the complexities of predicting the future. We apply future anticipation theory from the field of futurology, as outlined by Mische and Mello, to provide a deeper understanding of future concepts. This approach is used to gather perspectives from technology experts and individuals who are familiar with technology products.

## **RESULT AND DISCUSSION**

### **Perceptions of Anticipatory Future Actions**

As an initial step in our research, we chose semi-structured interviews to explore perceptions of anticipatory future actions, brand relationships and autobiographical memory. Through these interviews, we identified common understandings of anticipating the future, including the anticipatory steps taken by Company X to make Product X an innovator and pioneer, ahead of competitors, and appear authentic, original, sophisticated and futuristic. We found that most people who use Product X as a status symbol perceive anticipatory actions as 'good function' and following trends. In contrast, those who don't have it often see Product X as 'expensive', 'exclusive' and 'original'.

These findings provide marketers and service providers with insights into the importance of anticipating the future to capture the attention of a number of consumers and play a vital role in improving market performance. Our results are in line with research conducted by Rangaswamy et al. (2022), who found that when companies anticipate customer needs, they are well received by consumers and have a positive impact on market performance. Research by Zhang et al. (2021) also confirms that consumers appreciate and are grateful for the additional effort companies make to fulfil their needs. Therefore, while

anticipation of the future can be a key differentiation factor to support market-focused companies, relying solely on claims or anticipation alone is not enough to ensure success.

In our interviews, a frequent answer given by participants when asked about the usefulness of Product X for their future needs, such as the question "How is this product useful to you in the future?" was that the majority of participants felt that Product X would still fulfil their needs (such as for entertainment, internet access, and running applications for work or study) for at least the next five years. This shows that most participants had a positive view of the usefulness and effectiveness of Product X in solving their problems. However, some participants also highlighted the shortcomings of Product X. They mentioned that Product X requires additional supporting devices (such as a PC and iTunes app), has limitations in accessing free apps, and only supports a limited number of apps.

From these findings, we can conclude that future anticipation by provider companies offers a competitive advantage. However, companies must realise that their anticipatory actions increase customer expectations. Attor et al. (2022) suggest that identifying future trends helps to better prepare for the present. Our findings support the results of previous studies (Haq et al., 2021; MacNiven et al., 2023), which suggest that thinking about the future can help increase awareness and wisdom in dealing with the present.

Next, in the FGDs, we asked subjects to express their understanding of future anticipation in the context of tablet PCs, specifically Product X. Similar to the responses in the semi-structured interviews, we asked subjects to express their understanding of future anticipation in the context of tablet PCs. Like the responses in the semi-structured interviews, most subjects praised Product X for its simple yet futuristic design, portability, speed, and various accessories supporting their needs. They also highlighted the hardware quality of Product X, such as the more responsive touchpad and sensitive screen, and the attractive software, such as gaming applications. Some respondents even stated that Product X outperformed other brands regarding graphics and processors.

In addition, these positive perceptions align with the responses from the semi-structured interviews, where respondents stated that Company X's anticipatory steps towards the future increased customer expectations. This aligns with the view of Attor et al. (2022), who state that identifying future trends helps prepare for challenges. This positive response also emerged when discussing the differences between the first and second generation of Product X, where respondents noted significant changes in Product X-2, such as the addition of a camera, improved graphics quality, and better camera pixels, although other features remained the same.

### **Perception of Brand Relationship and Autobiographical Memory**

Overall, users of Product X have a positive view of this brand relationship. They perceive Product X as a solution to various problems, including work, study and entertainment. They also value after-sales services such as product warranty and company responsiveness. Some respondents even shared their positive experiences, such as satisfaction when claiming a warranty for problems with the Product X screen or asking for help downloading apps and getting information about the product. Respondents also believe that Company X recruits competent employees.

An individual's association with a particular brand often creates a set of experiences that can be considered part of their autobiographical narrative. For example, some users feel that using Product X is much more convenient than using a laptop when playing games or

surfing the internet, especially when they feel lonely with nothing else to occupy their time. They felt that Product X provided a more intuitive and satisfying experience in this regard.

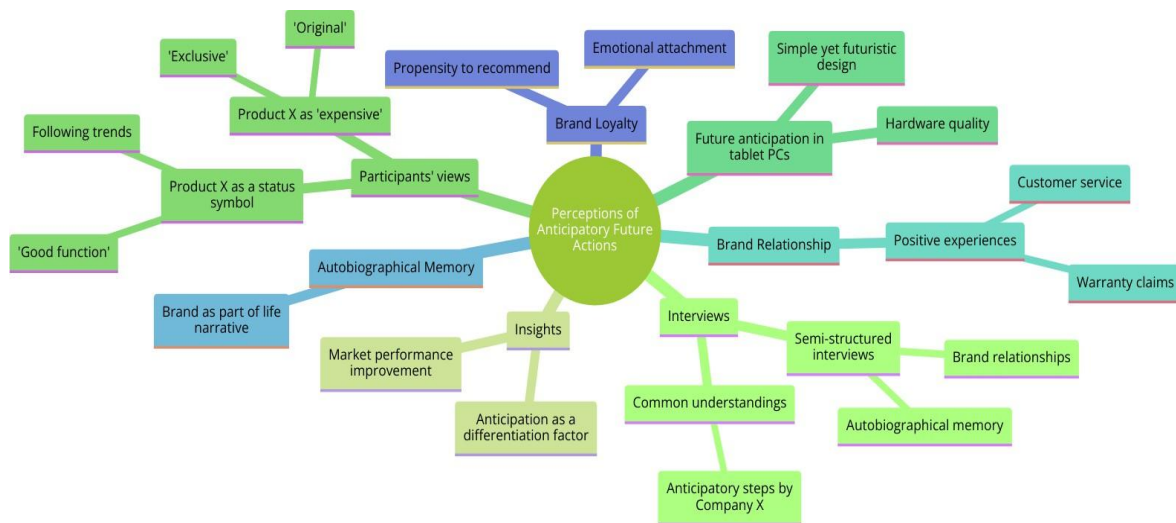
Another respondent also expressed his experience with Product X, describing how it provided practical solutions in his daily life. He noted that through Product X, he could easily download class tutorial materials when he forgot to bring his printed materials. He also appreciated the great durability of Product X, as even though the product was dropped once, it still maintained its quality well. This shows how an individual's relationship with a brand can form an important part of their life narrative, with every positive experience associated with the brand becoming part of their autobiographical story.

In FGDs involving users of Product X, participants generally expressed a positive view of the relationship they had built with the brand maintained by Company X. They pointed out that Product X had provided significant support in their work, enhanced their learning experience, and reduced stress levels by providing a variety of satisfying entertainment features. They pointed out that Product X has provided significant support in their work, enhanced their learning experience, and reduced stress levels by providing a variety of satisfying entertainment features. Not only that, they also convey a favourable impression of the quality of Product X itself and have confidence that the company is committed to improving the weak aspects of the product. This reflects their positive perceptions of the brand and products produced by Company X, as well as their confidence in the company's ability to continuously evolve and improve their user experience.

### **Perception of Brand Loyalty**

In our semi-structured interviews focusing on brand loyalty, when asked whether they would buy again from the same brand for other products, such as tablet PCs, or whether they would recommend this brand or Product X to others who need tablet PCs, the common answers from subjects were a strong desire to buy the brand again and a definite recommendation to others. Some respondents even strongly recommended Product X, arguing that Product X is superior to other brands and offers many advantages. Some expressed a desire to continue buying products from Company X, mainly because they were already emotionally attached to the product, which they thought had a more attractive design and brighter colours. Based on this explanation, especially regarding autobiographical memory and brand loyalty, we can conclude that positive autobiographical memory plays a significant role in influencing customer loyalty to a brand or product.

In Figure 1, it show in focused group discussions (FGD), positive responses regarding loyalty, particularly towards brand attachment, are reflected in the form of autobiographical memory. This phenomenon has the potential to influence the level of customer loyalty towards a specific brand or product. It is evident from the participants' earnestness in expressing their intention to recommend Product X to others based on their appreciation of its superior design, aesthetics, and diverse benefits compared to other brands. The concepts related to autobiographical memory and brand loyalty further bolster the findings derived from semi-structured interviews on brand loyalty. Positive autobiographical memories, encompassing verbal narratives, mental imagery, and emotional experiences undergone by Product X users (as outlined by Marchini et al., 2021), play a significant role in shaping and maintaining the level of customer loyalty towards a brand or product.



**Figure 1. The Perceptions of Anticipatory Future Actions**

Source: previous studies analysis

The results of this phenomenological study are closely related to previous research on technology adoption and market performance, as presented by previous research results (Anton & Nucu, 2020; Bamel et al., 2022; Jain & Ranjan, 2020; Tiberius et al., 2021). Participants gave significant responses regarding the importance of companies in anticipating the future, especially in technological intelligence. Their comments covered a wide range of aspects, from futuristic benefits to the convenience and usability offered by technology. This suggests that companies can achieve competitive advantage through these anticipatory measures, as revealed by previous studies (Aschemann-Witzel & Janssen, 2022; Kita et al., 2021; Ligaraba et al., 2023). In addition, these anticipatory efforts also contribute to increased consumer expectations, in accordance with previous findings (Gerlich, 2023; Giza & Wilk, 2021; C. Huang et al., 2022; Marchini et al., 2021; Zhang et al., 2021).

These findings specifically highlight the importance of the relationship between brand loyalty and the role of autobiographical memory in consumer dynamics, which is seen as a reflection of the competence of the human resources involved in the process. The strength of brand loyalty is reflected in customers' propensity to recommend the brand to others and in the emotional experience they have of the brand (Rangaswamy et al., 2022; Zhang et al., 2021). Customers form a "mental chain" that connects the brand image with autobiographical memory, product attributes, and the language used by consumers in semiotic and semantic contexts. This significantly strengthens their propensity to identify and select leading brands, as advocated by previous research (Attor et al., 2022; Haq et al., 2021; MacNiven et al., 2023). The word association technique approach in this study helps in illustrating the strong relationship between product attributes and innovation. The analysis of product attributes revealed five dominant aspects or conditions, which include technological advancement, usefulness and relevance, futuristic characteristics, and brand identity. In addition, research conducted by Zhang et al. (2021) concluded that brand personality reinforces key attributes such as "contemporary", high social status, and "metrosexual" aspects. However, more importantly, brand personality is also closely related to anthropomorphic characteristics, which describe it as having human-like traits.

Our findings indicate that companies' efforts in predicting the future are highly appreciated by most consumers, which contributes to the formation of favourable autobiographical memories and may act as a foundation for brand loyalty. As such, it is important for companies to openly communicate and consistently scale up their future prediction efforts to consumers. Without effective communication of these initiatives, consumers may not understand the investments and may be wasted. Furthermore, companies should regularly conduct market analyses to identify future trends. This includes the challenge of understanding future consumer needs and wants and taking advantage of market, cultural and technological trends to forecast future trends. In order to anticipate the future, it is recommended for companies to establish innovation labs aimed at key areas such as marketing, finance, human resources, and production to detect and capitalise on upcoming trends.

The managerial findings of this study show that while consumers have a great affinity with key product categories and brands, they tend to be less enthusiastic about claims of continuous product feature updates. Such claims are often not perceived as meaningful improvements by consumers but rather seen as a reaction to competitive pressures and market cycle dynamics. Today's consumers are more discerning and experienced and value simplicity in marketing and management, seeking solutions that deliver tangible improvements in personal productivity. They value companies that demonstrate innovation and market leadership as a core part of their identity. Therefore, companies should focus on authentically anticipating the future by adopting proactive rather than reactive strategies to the market. This will enable them to lead, foresee, and even shape societal changes, resulting in increased collaboration with consumers, capitalisation of customer ideas, and utilisation of crowdsourcing.

## CONCLUSIONS

Anticipatory efforts and developing brand relationships, such as after-sales service and superior features, enhance competitiveness and build customer loyalty, even in product weaknesses. These actions create autobiographical memories that influence consumer perceptions and purchase decisions. Brand personality plays a role in product differentiation and appeal, raising customer expectations. Anticipating future needs proved attractive to many consumers, demonstrating the importance of proactivity in maintaining a competitive advantage. Findings suggest that anticipation of the future, including strategic vision and understanding of market developments, plays a key role in improving market performance and is valued by consumers for the value it brings. Visionary leadership and a commitment to transparency and honesty fulfil consumer needs in a relevant way, strengthening brand relationships and consumer experiences. Autobiographical memory, particularly in the precuneus of the brain, impacts consumer loyalty and behaviour, demonstrating the importance of self-reflection and personal experience. The study also highlights the trend of "massclusivity" and product relationships with "premium" consumers, such as tablet computer ownership. However, limitations of this study include the small sample and methodology, limiting the generalisability of the results and suggesting the need for further research that is more extensive and in-depth.

## REFERENCES

- Amanatin, E. L., & Wijaya, A. (2023). Emotional Shopping in E-Commerce: How are Urban Adolescents Spending During the COVID-19 Pandemic? *Jurnal Ilmu Keluarga Dan Konsumen*, 16(3), 288–298. <https://doi.org/10.24156/jikk.2023.16.3.288>
- Anton, S. G., & Nucu, A. E. A. (2020). Enterprise Risk Management: A Literature Review and Agenda for Future Research. *Journal of Risk and Financial Management*, 13(11). <https://doi.org/10.3390/jrfm13110281>
- Aschemann-Witzel, J., & Janssen, M. (2022). The role of policy actions to accelerate food consumer behaviour change. *Agricultural and Food Economics*, 10(1). <https://doi.org/10.1186/s40100-022-00230-x>
- Attor, C., Jibril, A. B., Amoah, J., & Chovancova, M. (2022). Examining the influence of brand personality dimension on consumer buying decision: Evidence from Ghana. *Management and Marketing*, 17(2), 156–177. <https://doi.org/10.2478/mmcks-2022-0009>
- Bamel, U., Kumar, S., Lim, W. M., Bamel, N., & Meyer, N. (2022). Managing the dark side of digitalization in the future of work: A fuzzy TISM approach. *Journal of Innovation and Knowledge*, 7(4). <https://doi.org/10.1016/j.jik.2022.100275>
- Bibri, S. E. (2021). The underlying components of data-driven smart sustainable cities of the future: a case study approach to an applied theoretical framework. *European Journal of Futures Research*, 9(1). <https://doi.org/10.1186/s40309-021-00182-3>
- Dabić, M., Maley, J. F., Švarc, J., & Poček, J. (2023). Future of digital work: Challenges for sustainable human resources management. *Journal of Innovation and Knowledge*, 8(2). <https://doi.org/10.1016/j.jik.2023.100353>
- Dressler, M., & Paunovic, I. (2021). Reaching for customer centricity—wine brand positioning configurations. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2). <https://doi.org/10.3390/joitmc7020139>
- Ferine, K. F., Murliasari, R., Saefudin, A., & Fahrudin. (2024). From Manual to Digital: An Innovation in The Performance Appraisal System of Medan City Government Employees. *Asian Journal of Management Entrepreneurship and Social Science*, 04(02), 1208–1225.
- Ferine, K. F., Saefudin, A., Ariwibowo, P., & Azim, I. (2023). Financial Management in Reaching Product Empowerment Index Standards Related to Science on MSME Performance. *Jurnal Penelitian Pendidikan IPA*, 9(7), 5716–5724. <https://doi.org/10.29303/jppipa.v9i7.4754>
- García-Salirrosas, E. E., & Gordillo, J. M. (2021). Brand personality as a consistency factor in the pillars of csr management in the new normal. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2). <https://doi.org/10.3390/joitmc7020134>
- Gerlich, M. (2023). The Power of Virtual Influencers: Impact on Consumer Behaviour and Attitudes in the Age of AI. *Administrative Sciences*, 13(8). <https://doi.org/10.3390/admsci13080178>
- Giza, W., & Wilk, B. (2021). Revolution 4.0 and its implications for consumer behaviour. *Entrepreneurial Business and Economics Review*, 9(4), 195–206. <https://doi.org/10.15678/EBER.2021.090412>

- Goisauf, M., Akyüz, K., & Martin, G. M. (2020). Moving back to the future of big data-driven research: reflecting on the social in genomics. *Humanities and Social Sciences Communications*, 7(1). <https://doi.org/10.1057/s41599-020-00544-5>
- Haq, F., Seraphim, J., & Medhekar, A. (2021). Branding heritage tourism in Dubai: A qualitative study. *Advances in Hospitality and Tourism Research*, 9(2), 243–267. <https://doi.org/10.30519/ahtr.782679>
- Huang, A., De la Mora Velasco, E., Haney, A., & Alvarez, S. (2022). The Future of Destination Marketing Organizations in the Insight Era. *Tourism and Hospitality*, 3(3), 803–808. <https://doi.org/10.3390/tourhosp3030049>
- Huang, C., Zhuang, S., Li, Z., & Gao, J. (2022). Creating a Sincere Sustainable Brand: The Application of Aristotle's Rhetorical Theory to Green Brand Storytelling. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.897281>
- Jain, A., & Ranjan, S. (2020). Implications of emerging technologies on the future of work. *IIMB Management Review*, 32(4), 448–454. <https://doi.org/10.1016/j.iimb.2020.11.004>
- Julmi, C. (2020). Research: Qualitative. In *Encyclopedia of Creativity* (pp. 435–441). Elsevier. <https://doi.org/10.1016/B978-0-12-809324-5.23678-X>
- Kita, P., Žambochová, M., Strelinger, J., & Mazalánová, V. K. (2021). Consumer Behaviour of Slovak Households in The Sphere of Organic Food in The Context of Sustainable Consumption. *Central European Business Review*, 10(1), 1–17. <https://doi.org/10.18267/J.CEBR.256>
- Lapan, S. D., Quartaroli, M. T., & Riemer, F. J. (2012). *Qualitative research: an introduction to methods and designs*. Jossey-Bass.
- Ligaraba, N., Chuchu, T., & Nyagadza, B. (2023). Opt-in e-mail marketing influence on consumer behaviour: A Stimuli–Organism–Response (S–O–R) theory perspective. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2184244>
- MacNiven, S., Lennon, J. J., Roberts, J., & MacNiven, M. (2023). The language of marketing hyperbole and consumer perception–The case of Glasgow. *PLoS ONE*, 18(12 Decembe). <https://doi.org/10.1371/journal.pone.0295132>
- Marchini, A., Riganelli, C., Diotallevi, F., & Polenzani, B. (2021). Label information and consumer behaviour: evidence on drinking milk sector. *Agricultural and Food Economics*, 9(1). <https://doi.org/10.1186/s40100-021-00177-5>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook* (Third Edit). SAGE Publications.
- Murliasari, R., Rony, Z. T., Djafar, T., Peristiwo, H., Saefudin, A., & Islah, K. (2023). Dilemma of Human Resources in Public Services : An Analysis of Performance among Honorary Employees. *Jurnal Manajemen Pelayanan Publik*, 07(02), 445–455. <https://doi.org/http://dx.doi.org/10.24198/jmpp.v7i2.49801>
- Paetz, F. (2021). Recommendations for sustainable brand personalities: An empirical study. *Sustainability (Switzerland)*, 13(9). <https://doi.org/10.3390/su13094747>
- Prasetyo, D. B., & Saefudin, A. (2023). Digitalisasi Inovasi Layanan Pertanahan: Pengecekan Sertipikat Online di Kantor Pertanahan Kabupaten Purbalingga. *Jurnal Pertanahan*, 13(1), 17–27.

- Puente-Díaz, R., & Cavazos-Arroyo, J. (2021). Experiential purchases, as memorable moments in consumers' lives, trigger nostalgia. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1944010>
- Rangaswamy, E., Nawaz, N., & Changzhuang, Z. (2022). The impact of digital technology on changing consumer behaviours with special reference to the home furnishing sector in Singapore. *Humanities and Social Sciences Communications*, 9(1). <https://doi.org/10.1057/s41599-022-01102-x>
- Riyadi, S., Darwis, M., Judijanto, L., Nicolas, D. G., & Saefudin, A. (2023). Effective Promotion Strategy of Integrated Islamic Education Institutions in Modern Society. *Qalamuna - Jurnal Pendidikan, Sosial, Dan Agama*, 15(1), 667–676. <https://doi.org/10.37680/qalamuna.v15i1.4192>
- Sestino, A., & Amatulli, C. (2024). The challenge of integrating “intelligent” technologies in luxury shopping contexts: The role of brand personality appeal and consumers' status consumption orientation. *Journal of Retailing and Consumer Services*, 76. <https://doi.org/10.1016/j.jretconser.2023.103488>
- Tiberius, V., Schwarzer, H., & Roig-Dobón, S. (2021). Radical innovations: Between established knowledge and future research opportunities. *Journal of Innovation and Knowledge*, 6(3), 145–153. <https://doi.org/10.1016/j.jik.2020.09.001>
- Verster, A., Petzer, D. J., & Cunningham, N. (2019). Using brand identity to build brand equity: A comparison between the South African and Dutch business-to-business architectural industry. *South African Journal of Business Management*, 50(1). <https://doi.org/10.4102/sajbm.v50i1.1372>
- Yin, R. K. (2016). *Qualitative research from start to finish* (2nd Editio). The Guilford Press.
- Zhang, X., Liu, H., & Yao, P. (2021). Research jungle on online consumer behaviour in the context of web 2.0: Traceability, frontiers and perspectives in the post-pandemic era. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), 1740–1767. <https://doi.org/10.3390/jtaer16050098>



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 56-70



### Investigating the Impact of Event Experience on Satisfaction and Behavioural Intention of Music Event Audiences

Trihadi Pudiawan Erhan<sup>1)</sup>, Cendera Rizky Anugrah Bangun<sup>2)</sup>

<sup>1,2</sup> Universitas Multimedia Nusantara

Email: trihadi.pudiawan@umn.ac.id



SINTA 2

DOI : <https://doi.org/10.24843/MATRIK:JMBK.2024.v18.i01.p05>

#### ABSTRACT

Many music events, be it concerts or festivals, are being held worldwide, and Indonesia is one of them. Motivation to attend a music festival is an experience that is a balance between fun, self-reflection, and impact. Our objective is to investigate how event experience helps shape satisfaction and, in turn, leads to future behavioural intention. This study uses Partial Least Squares regression to investigate six hypotheses. A total of 206 individuals in Indonesia who attended concerts in the past six months were surveyed, with 150 valid responses, giving a 72.8% response rate. The result shows that event experiences that are escapism, entertainment, and esthetic factors positively affect consumer satisfaction among music festivals and concert attendees, with the exception of education. Furthermore, consumer satisfaction significantly increases the tendency to both recommend and revisit. Thus, this study shows that event organizers need to create a memorable experience to gain favourable behavioural intention.

**Keyword:** behavioral intention; customer satisfaction; event experience; music event

#### INTRODUCTION

There was a time when consumers tended to listen to whatever music was playing on the radio, regardless of their preferences. However, how the music is being consumed, whether people engage with music at home, in a concert, or are they alone, are they with others when listening to the music, how interested they are with music, these are very interesting to know. Today, consumer preferences and expectations have evolved and translated into all aspects of the music experience. Live music events are a social manifestation because they provide a complete consumption experience that involves a stimulus to multiple senses. The field of festivals is recognized as “one of the most productive areas of study in event research” (Dolasinski et al., 2021).

It has been found that people often choose to engage with music because it moves them (Garrido et al., 2013; Saarikallio, 2008) or induces an emotion (Garrido & Schubert, 2011; Lonsdale & North, 2011; Vuoskoski & Eerola, 2017). Enjoyment can be defined as taking pleasure from something. It is similar but not synonymous with happiness, partly due to the duration of the experience: happiness may be more abiding than enjoyment and not as tied to a specific context. Enjoyment has been found to be a motivation for attendance at, and a typical response to, live musical performances, in part due to the presence of others (Baker,

2016; Dearn & Price, 2016). In their research on chamber music festival goers, Pitts (2016) discussed the positive effects of being able to see other audience members responding to the music. However, since the outbreak of the Covid-19 pandemic, individuals' lifestyles have continued to change over the last 2 years to adapt to the new reality (Hwang & Lee, 2022).

Many music festivals have emerged since the post Covid-19 era. People have started to attend music festivals because many have been refraining from going to music festivals due to restrictions due to COVID-19. With the recent increase in Korean music, many concerts are being held worldwide, and Indonesia is one of them (Bangun, 2019; Bangun et al., 2020). Indonesia itself is a fairly large market for popular culture. Indonesia became the first country in Asia to have a 2-day concert for the DAY6 Gravity Tour due to the big demands. In Indonesia, in 2023 only, there are numerous music events that have been held with various scales and scopes (e.g., Twice, Suga, Secret Number, Blackpink, Coldplay, Joyland Festival, We The Fest, Synchronize Fest, etc).

The escalating costs associated with attending music festivals or performances, coupled with the proliferation of options available to consumers, underscore the need for organizers to adopt innovative strategies to attract and retain attendees (Gelder & Robinson, 2009; Skirkowski, 2022). Saragih & Amelia (2020) delve into how the experiential aspects of festivals drive attendance, highlighting the importance of these experiences in generating satisfying and unforgettable events. However, the translation of motivations into actionable offerings that resonate with diverse audience segments remains a formidable challenge. This requires a deeper examination of the experiential dimensions that reinforce attendee satisfaction and loyalty, thereby informing the design and delivery of music festivals that transcend mere entertainment to become transformative and immersive experiences.

Further emphasizing the importance of experience, the development of consumer behavior research in a service context has put forward experience as a crucial factor in determining satisfaction (Armbrrecht & Andersson, 2020). Experiences are at the core of live events, and creating unique and memorable experiences is crucial for organizers to survive and grow in the festival market (Oklevik et al., 2022). This raises a fundamental question: What kind of experience ultimately determines attendee satisfaction and leads to positive behavioral intentions?

Despite extensive research on the dimensions influencing music event-goers' experience and satisfaction, there remains a significant gap in understanding how these dimensions specifically translate into subsequent behaviors, such as the intention to recommend and revisit intentions in the context of music events (Nguyen et al., 2020). While studies like Aşan et al. (2020) have successfully delineated aspects such as aesthetics, entertainment, escapism, and education as critical to shaping consumer satisfaction, the literature still lacks a focused exploration of how these individual dimensions impact longer-term attendee behaviors beyond immediate satisfaction. This research gap is particularly crucial in a post-pandemic world where consumer expectations and behaviours have shifted dramatically (Hooshmand et al., 2023). Addressing this gap could provide valuable insights for event organizers to enhance attendee engagement, improve loyalty, and effectively leverage WOM as a powerful tool for sustainable event marketing. This study aims to address this gap by delving into the specific components of the festival experience that significantly impact consumer satisfaction, exploring how this satisfaction translates into positive behavioural intentions. By focusing on these nuanced relationships, the research seeks to provide strategic insights for event organizers to enhance festival experiences in ways that

align with contemporary consumer expectations, thereby fostering enhanced loyalty and positive word-of-mouth in a highly competitive market.

In "The Experience Economy" by Pine & Gilmore (1998), the concept of staging experiences as a distinct economic offering is expanded upon, emphasizing the shift from goods and services to providing memorable events that engage customers on an emotional level. This framework resonates with the multifaceted nature of music events, where attendees seek not only entertainment but also an immersive journey (Buswell et al., 2016). Pine & Gilmore (1998) further detail the 4E's framework (i.e., Educational, Esthetic, Escapist, and Entertainment) as fundamental components in designing and delivering memorable experiences. These elements intertwine to create a holistic and immersive encounter for festival attendees, catering to their diverse desires and expectations.

In the context of music festivals and events, the educational dimension refers to the incorporation of knowledge-driven elements that enrich attendees' understanding and appreciation of the music and its cultural context. This aspect could be achieved by incorporating elements such as educational panels, artist talks, and interactive multimedia exhibits that convey the historical and technical aspects of music. Engaging attendees in this manner transforms them from passive spectators into active learners, enriching their festival experience (Quadri-Felitti & Fiore, 2013). An event experience also involves a change in memory and knowledge (Berridge, 2020), such intellectual engagement not only promotes a deeper connection with the music and artists but also increases overall satisfaction by enriching attendees' knowledge base (Ayob et al., 2013).

Esthetics refers to the visual and sensory elements that contribute to the overall look and feel of an event (Karim et al., 2022). This encompasses everything from the strategic layout of the venue to the intricate details of stage design and the ambient lighting that sets the mood that is expected to create a multi-sensory experience that resonates with the audience. The carefully curated esthetic elements are not only intended to delight the senses but also to create an environment that fosters an emotional connection between the audience and the performance (Bhandari et al., 2019). This heightened sensory engagement plays a critical role in enhancing the overall experience, contributing to the lasting impact and satisfaction of the event (Duffy & Mair, 2018). By leveraging esthetic elements effectively, music festivals can craft a compelling, visually stimulating experience that resonates with attendees, reinforcing positive memories and ensuring that each moment is both impactful and memorable (Yuksel et al., 2010).

The entertainment dimension at music festivals is central to the overall experience. Although frequently used, there are no clear definitions of the term "entertainment" (Collis, 2017). We follow a general definition of entertainment, which characterizes it as an activity that is diverting, amusing, or pleasing and that agreeably occupies one's time and attention (Vogel, 2020). It is intricately linked to the emotional responses and pleasure of the audience, serving as a crucial determinant of customer satisfaction (Torres et al., 2019). The more entertaining the event, the higher the level of satisfaction among attendees due to the lasting favourable emotional impact, which later influences individuals' overall assessment of the event's quality and value (Morgan, 2008).

Lastly, the escapism dimension of music festivals provides a crucial psychological break from the mundanities of daily life. The music event is believed to provide attendees with a momentary escape from everyday routine due to its immersive characteristics (Luo et al., 2022). This sense of escapism is often facilitated through thematic elements, unique

settings, and special performances that collectively foster a sense of otherworldliness and adventure. As attendees are drawn into experiences that differ markedly from their routine environments, the escapism provided not only heightens the enjoyment but also deepens the impact of the experience (Marshall et al., 2023). The ability to detach from the ordinary and immerse in the extraordinary enhances the perceived value of attending the festival, leading to increased satisfaction (Aşan et al., 2020).

Thus, we hypothesize that:

H1: Esthetic positively affects consumer satisfaction.

H2: Education positively affects consumer satisfaction.

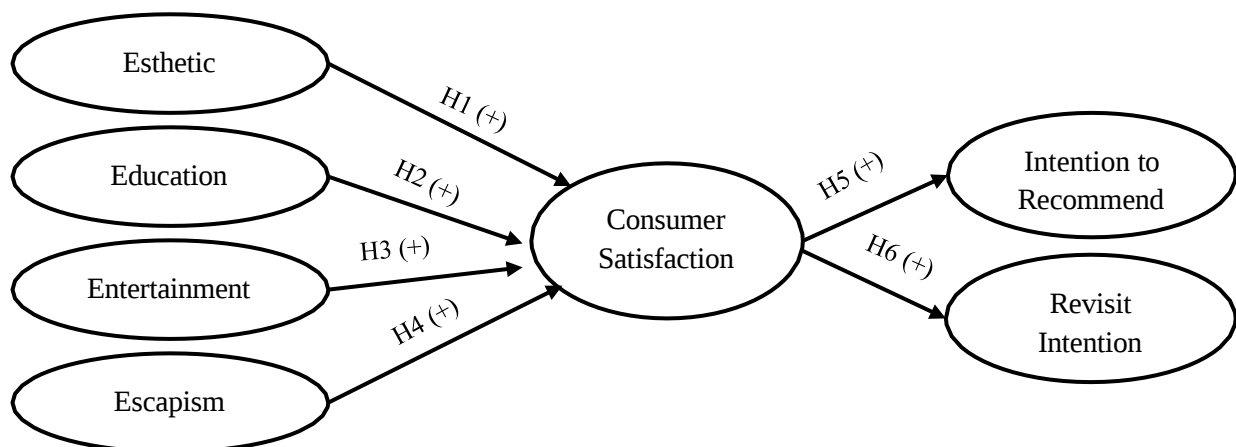
H3: Entertainment positively affects consumer satisfaction.

H4: Escapism positively affects consumer satisfaction.

Behavioural intents are crucial variables for event planners to understand the future actions of the customers (Meeprom & Silanoi, 2020). Behavioural intents can be manifested through numerous means, including intentions to revisit and intentions to recommend (Zeithaml et al., 1996). Prior research has shown that there is substantial evidence supporting the major influence of satisfaction on behavioural intentions across many service sectors (H.-C. Wu et al., 2018). It is expected that attendees will feel a sense of enthusiasm following satisfaction, which will motivate them to share their favourable impression of such an experience with their social circles (Sisson & Alcorn, 2022). At the same time, satisfaction will also create a sense of attachment that will foster a strong drive to the revisit intention (Mainolfi & Marino, 2020).

H5: Consumer satisfaction positively affects Intention to Recommend

H6: Consumer satisfaction positively affects Revisit Intention



**Figure 1. Research Model**

Source: previous studies analysis

## METHODS

This study uses individuals in Indonesia who attended concerts or music festivals within the last six months as its sampling frame. Convenience sampling was utilized to capture diverse types of experiences as it provides practical and efficient participant recruitment based on accessibility and willingness to participate (Malhotra, 2020). The Data was gathered through an electronic survey administered on the Qualtrics platform in December 2023. A

total of 206 individuals completed the survey, with 150 responses considered valid after screening, giving a 72.8% valid response rate. The description of respondent's characteristics is shown in Table 1. The majority of the respondents are female (74.67%), with an age range of  $\leq 20$  (26.00%), followed by 31-35 (22.00%). Employees (40.70%) are the highest type of occupation of our respondents, and they are closely followed by students (37.30%). This study investigated seven variables related to event experiences, namely esthetics, education, entertainment, escapism, consumer satisfaction, intention to recommend, and revisit intention. The measurements for esthetics, education, Entertainment, and escapism were adopted from Sisson & Alcorn (2022), while consumer satisfaction followed Mason & Paggiaro (2012). Intention to recommend and revisit intention was measured according to (Nguyen et al., 2020).

**Table 1. Respondent's Characteristics**

|                                   |                                 |        |
|-----------------------------------|---------------------------------|--------|
| Gender                            | Male                            | 25.33% |
|                                   | Female                          | 74.67% |
| Age                               | $\leq 20$                       | 26.00% |
|                                   | 21-25                           | 21.30% |
|                                   | 26-30                           | 14.70% |
|                                   | 31-35                           | 22.00% |
|                                   | 35-40                           | 11.30% |
|                                   | >40                             | 4.70%  |
| Occupation                        | Students                        | 37.30% |
|                                   | Employee                        | 40.70% |
|                                   | Entrepreneur                    | 7.33%  |
|                                   | Other                           | 14.67% |
| Average Monthly Disposable Income | $\leq$ IDR 2.000.000            | 35.33% |
|                                   | IDR 2.000.001 - IDR 4.000.000   | 26.00% |
|                                   | IDR 4.000.001 - IDR 6.000.000   | 12.67% |
|                                   | IDR 8.000.001 - IDR 41000.000   | 7.33%  |
|                                   | IDR 10.000.001 - IDR 12.000.000 | 8.00%  |
|                                   | IDR 12.000.001 - IDR 14.000.000 | 4.00%  |
|                                   | IDR 14.000.001 - IDR 16.000.000 | 1.33%  |
|                                   | IDR 16.000.001 - IDR 18.000.000 | 0.67%  |
|                                   | IDR 18.000.001 - IDR 20.000.000 | 1.33%  |
|                                   | > IDR 20.000.000                | 3.33%  |

Source: Author's own creation, 2023

## RESULT AND DISCUSSION

The reliability and validity were tested using PLS-SEM. The Composite Reliability (CR) value assessed reliability with CR scores above 0.7 indicating reliability (Hair et al., 2009). Table 2 demonstrates that the CR score is above the minimum threshold, hence confirming reliability. Next is the assessment of convergent validity. Apart from the CR score, Hair et al. (2009) recommended that both the value of factor loading above and the Average Variance Extracted (AVE) score above 0.5 will indicate convergent validity. Table 2 shows that convergent validity is attained because all factor loading values and AVE scores are over 0.5.

**Table 2. Construct Measurement, Reliability, and Convergent Validity**

| Item description summary                                |                                                                                    | Factor Loading | CR    | AVE   |
|---------------------------------------------------------|------------------------------------------------------------------------------------|----------------|-------|-------|
| <b>Esthetic (Cronbach's alpha: 0.798)</b>               |                                                                                    |                |       |       |
| ES1                                                     | This music event setting was well assembled in harmony.                            | 0.861          | 0.869 | 0.625 |
| ES2                                                     | This music event stages and setting offered a good experience.                     | 0.771          |       |       |
| ES3                                                     | This music event setting was elaborate and meticulous.                             | 0.811          |       |       |
| ES4                                                     | The place of This music event was attractive in many ways                          | 0.711          |       |       |
| <b>Education (Cronbach's alpha: 0.870)</b>              |                                                                                    |                |       |       |
| ED1                                                     | This festival improved my knowledge of music.                                      | 0.833          | 0.911 | 0.719 |
| ED2                                                     | I learned many new things about music at this festival.                            | 0.852          |       |       |
| ED3                                                     | This festival made me desire to learn more about music.                            | 0.822          |       |       |
| ED4                                                     | This festival was a good learning experience.                                      | 0.883          |       |       |
| <b>Entertainment (Cronbach's alpha: 0.806)</b>          |                                                                                    |                |       |       |
| EJ1                                                     | I enjoyed watching other visitors enjoy this music event.                          | 0.833          | 0.882 | 0.714 |
| EJ2                                                     | I enjoyed many activities at this music event.                                     | 0.826          |       |       |
| EJ3                                                     | I enjoyed being one of the visitors at this music event.                           | 0.874          |       |       |
| <b>Escapism (Cronbach's alpha: 0.809)</b>               |                                                                                    |                |       |       |
| EC1                                                     | I was completely immersed into this music event.                                   | 0.866          | 0.883 | 0.715 |
| EC3                                                     | I could imagine I was a different person at this music event                       | 0.788          |       |       |
| EC4                                                     | This music event made me like I was in a different world                           | 0.881          |       |       |
| <b>Consumer Satisfaction (Cronbach's alpha: 0.876)</b>  |                                                                                    |                |       |       |
| CS1                                                     | This music event met my expectations                                               | 0.875          | 0.923 | 0.801 |
| CS2                                                     | I made the right choice in attending this music event                              | 0.925          |       |       |
| CS3                                                     | This music event gave me high satisfaction                                         | 0.884          |       |       |
| <b>Intention to Recommend (Cronbach's alpha: 0.855)</b> |                                                                                    |                |       |       |
| IR1                                                     | I would recommend this music event to others                                       | 0.888          | 0.911 | 0.774 |
| IR2                                                     | I would talk positively about this music event to others                           | 0.892          |       |       |
| IR3                                                     | I would tell my friends and relatives to this music event                          | 0.859          |       |       |
| <b>Revisit Intention (Cronbach's alpha: 0.799)</b>      |                                                                                    |                |       |       |
| RI1                                                     | I am willing to revisit this music event                                           | 0.923          | 0.884 | 0.722 |
| RI3                                                     | I am interested in revisiting this music event                                     | 0.928          |       |       |
| RI4                                                     | I would consider this music event my first choice, compared to other music events. | 0.672          |       |       |

Note: CR: Composite Reliability; AVE: Average Variance Extracted

Source: Author's own creation, 2023

Fornell & Larcker (1981) tested discriminant validity by comparing the square root of each AVE to the Inter-Correlation (IC) value. When the square root of the AVE and the IC value were compared in Table 3, the square root of the AVE was less than the IC value. These results show that the discriminant validity between the constructs has been achieved.

In addition, the Heterotrait-Monotrait (HTMT) criterion was utilized to provide a further evaluation of the discriminant validity. In order to determine discriminant validity using this method, the HTMT ratio score needs to be less than 0.90, as stated by Henseler et al. (2015). The values of the HTMT presented in Table 3 indicate that there are no discriminant validity issues using the HTMT.90 criterion, as all the values are below 0.90. As a consequence, the HTMT.90 test demonstrates that discriminant validity has been attained.

**Table 3. Average Variance Extracted, Inter-Correlation, & HTMT**

|                            | 1            | 2            | 3            | 4            | 5            | 6           | 7           |
|----------------------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|
| Esthetic (1)               | <b>0.791</b> | 0.417        | 0.655        | 0.451        | 0.617        | 0.58        | 0.525       |
| Education (2)              | 0.339        | <b>0.848</b> | 0.539        | 0.551        | 0.331        | 0.427       | 0.497       |
| Entertainment (3)          | 0.531        | 0.429        | <b>0.845</b> | 0.775        | 0.68         | 0.686       | 0.523       |
| Escapism (4)               | 0.378        | 0.435        | 0.633        | <b>0.846</b> | 0.558        | 0.637       | 0.636       |
| Consumer Satisfaction (5)  | 0.522        | 0.29         | 0.599        | 0.499        | <b>0.895</b> | 0.832       | 0.745       |
| Intention to Recommend (6) | 0.483        | 0.368        | 0.58         | 0.544        | 0.725        | <b>0.88</b> | 0.72        |
| Revisit Intention (7)      | 0.409        | 0.402        | 0.434        | 0.503        | 0.627        | 0.595       | <b>0.85</b> |

Note: Diagonal from top left to the bottom right is the IC value; down-left to the IC value is the square root of the AVE; up-right to the IC value is the HTMT value

Source: Author's own creation, 2023

We also examine the indicator's collinearity. This is done to identify predictor variable independence. The outer Variance Inflation Factor (VIF) was utilized in this study to assess collinearity between the indicators. Table 4 shows the VIF values, which vary from 1.234 to 3.100. It is worth mentioning that, according to Hair et al. (2011), a VIF value greater than 5 indicates collinearity. As a consequence, collinearity across predictor constructs is not an issue, and we may proceed with the results report analysis.

**Table 4. Variance Inflation Factor**

| Variable         | Code | VIF   | Variable      | Code | VIF   | Variable               | Code | VIF   |
|------------------|------|-------|---------------|------|-------|------------------------|------|-------|
| <b>Esthetic</b>  | ES1  | 1.907 | Entertainment | EJ1  | 1.887 | Consumer Satisfaction  | CS1  | 2.095 |
|                  | ES2  | 1.675 |               | EJ2  | 1.889 |                        | CS2  | 2.985 |
|                  | ES3  | 1.806 | Escapism      | EJ3  | 1.573 | Intention to Recommend | CS3  | 2.487 |
|                  | ES4  | 1.396 |               |      |       |                        | IR1  | 2.088 |
| <b>Education</b> |      |       |               |      |       |                        | IR2  | 2.436 |
|                  | ED1  | 2.637 | Escapism      | EC1  | 1.542 |                        | IR3  | 1.987 |
|                  | ED2  | 2.827 |               | EC3  | 1.961 | Revisit Intention      | RI1  | 3.634 |
|                  | ED3  | 2.1   |               | EC4  | 2.292 |                        | RI3  | 3.732 |
|                  | ED4  | 2.456 |               |      |       |                        | RI4  | 1.252 |

Source: Author's own creation, 2023

We then look at the value R<sup>2</sup> and Q<sup>2</sup> statistics to analyze the predictive capabilities and relevance of the model, as described by Japutra et al. (2021). The variance explained (R<sup>2</sup>) indicates the proportion of variance in the dependent variable explained by the independent variables (Hair et al., 2009). Cohen (2013) suggested the R<sup>2</sup> values for endogenous latent variables are assessed as follows: 0.25 (substantial), 0.09 (moderate), and 0.01 (weak). The results (see Table 5) show that the model explained the variance of 43.7% of consumer satisfaction, 52.6% of intention to recommend, and 39.4% of revisit intention. The value of Q<sup>2</sup> is used to assess the predictive capabilities of the model. As a relative measure of predictive relevance, Q<sup>2</sup> values of 0.02 (small), 0.15 (medium), and 0.35 (large) indicate that an exogenous construct has a predictive relevance for the endogenous construct (Hair Jr et al., 2021). Our results show that the Q<sup>2</sup> values for our endogenous constructs are 0.381 (consumer satisfaction), 0.356 (intention to recommend), and 0.237 (revisit intention). Thus, it is safe to conclude that the model has predictive relevance and capabilities.

After establishing the model's predictive relevance and capabilities, an inner model was generated using a bootstrapping procedure (5,000 subsamples) to test the hypotheses. Table 4 shows the results of the direct relation of our model. The results show that escapism ( $\beta = 0.189$ ; t-value = 2.111;  $p < 0.05$ ), Entertainment ( $\beta = 0.346$ ; t-value = 3.473;  $p < 0.01$ ),

and esthetic ( $\beta = 0.279$ ;  $t\text{-value} = 3.307$ ;  $p < 0.01$ ) have a positive and significant direct effect on consumer satisfaction. Thus, the data supported H1, H3, and H4. However, education does not significantly impact consumer satisfaction ( $\beta = -0.035$ ;  $t\text{-value} = 0.475$ ;  $p > 0.1$ ). Therefore, H2 is not supported by the data. The results also indicate that both intention to recommend ( $\beta = 0.725$ ;  $t\text{-value} = 14.020$ ;  $p < 0.01$ ) and revisit intention ( $\beta = 0.627$ ;  $t\text{-value} = 9.297$ ;  $p < 0.01$ ) are positively affected by consumer satisfaction. As a result, the evidence supports H5 and H6.

**Table 5. Results of Structural Equation Analysis**

| Path                                                       | $\beta$ | STDEV | T statistics        |
|------------------------------------------------------------|---------|-------|---------------------|
| Esthetic $\rightarrow$ Consumer Satisfaction               | 0.279   | 0.084 | 3.307*              |
| Education $\rightarrow$ Consumer Satisfaction              | -0.035  | 0.074 | 0.475 <sup>ns</sup> |
| Entertainment $\rightarrow$ Consumer Satisfaction          | 0.346   | 0.100 | 3.473*              |
| Escapism $\rightarrow$ Consumer Satisfaction               | 0.189   | 0.090 | 2.111*              |
|                                                            |         |       | *                   |
| Consumer Satisfaction $\rightarrow$ Intention to Recommend | 0.725   | 0.052 | 14.020              |
|                                                            |         |       | *                   |
| Consumer Satisfaction $\rightarrow$ Revisit Intention      | 0.627   | 0.067 | 9.297*              |
| <b>Variance Explained (<math>R^2</math>)</b>               |         |       |                     |
| Consumer Satisfaction                                      | 0.437   |       |                     |
| Intention to Recommend                                     | 0.526   |       |                     |
| Revisit Intention                                          | 0.394   |       |                     |

Note:  $\beta$ : Path Coefficient; \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ; <sup>ns</sup> not significant

Source: Author's own creation, 2023

This study provides a comprehensive examination of the factors that influence consumer satisfaction and the subsequent behavioural intentions in the specific context of music festivals and concerts. The findings contribute valuable insights into the intricate dynamics of event experiences, offering a nuanced understanding of attendee satisfaction and its implications for future consumer behaviour.

The analysis clearly demonstrates that escapism, entertainment, and esthetic factors play pivotal roles in shaping consumer satisfaction at music festivals and concerts. The significance of these hedonic aspects underscores the power of events. Hedonic consumption relates to multisensory, fantasy, and emotive aspects of experience, providing an escape from the ordinary, offering entertainment, and creating esthetically pleasing experiences (Armbrrecht & Andersson, 2020; Hirschman & Holbrook, 1982). These findings align seamlessly with existing literature that underscores the pivotal role of hedonism in influencing consumer satisfaction (Grappi & Montanari, 2011). For music event attendees, the emotional and sensory elements of escapism, entertainment, and esthetics contribute to the reinforcement of satisfaction, making these factors crucial elements for event organizers aiming to create memorable and satisfying experiences (Garrod & Dowell, 2020; Wood & Kinnunen, 2020). These elements resonate deeply with the desires of attendees to experience something out of the ordinary, enriching their sensory and emotional engagement.

Entertainment, in particular, stands out among these factors as having the largest impact on satisfaction. This can be attributed to its direct engagement with the emotional and sensory responses of the audience. Entertainment at music events typically involves a

blend of live performances, interactive elements, and perhaps digital enhancements that collectively produce a rich, engaging atmosphere (Pizzolitto, 2023). This aspect of the experience is not merely about passive observation but involves active participation and emotional investment from the audience, which intensifies their overall event satisfaction (Komarac & Ozretić Došen, 2022).

Moreover, the entertainment value at music festivals often serves as a catalyst for memorable experiences. High-quality, engaging entertainment is likely to elicit strong emotional reactions of joy, excitement, and awe, which are fundamental in creating lasting memories (Wu et al., 2024). These emotional responses are crucial as they directly influence attendees' satisfaction and their subsequent decisions to share their positive experiences through word-of-mouth and to return to future events (Wei & Miao, 2017).

Contrary to our initial beliefs, this study objects to conventional expectations by showing that education does not significantly impact consumer satisfaction within the context of music festivals and concerts. However, these results are in line with the findings by Yürük et al. (2017) that also finds that education does not affect satisfaction in a music event context. The education aspect of events contributes to the cognitive aspect of an experience. At the music festival or concert, participants are more passive in comparison to any other type of event. Thus, this makes them less inclined to engage in cognitive-type activities as they are more likely only want to absorb stimulus (Oklevik et al., 2022).

Moreover, the study emphasizes the pivotal role of consumer satisfaction in shaping critical behavioural intentions among attendees. The intention to recommend the event and express a desire to revisit is significantly influenced by the level of satisfaction experienced during the music festival or concert (Llopis-Amorós et al., 2019). Satisfied consumers emerge as ambassadors for the event, fostering positive word-of-mouth and contributing to the potential for long-term customer loyalty (De Nisco et al., 2017). This highlights the practical significance for event organizers to prioritize attendee satisfaction, as it enhances the current event experience and influences future attendance and promotion (Mainolfi & Marino, 2020).

This study also offers valuable insights for event organizers in the music festival and concert industry, specifically providing practical implications designed to enhance attendee satisfaction and foster positive behavioural outcomes in the future. First, event organizers should prioritize the creation of immersive and esthetically pleasing experiences that provide an escape for attendees. Incorporating elements that stimulate Entertainment and sensory delight can significantly contribute to heightened satisfaction levels. The strategic use of lighting, stage design, and visual esthetics can amplify the overall event experience, leaving a lasting impression on attendees (Edensor, 2015; Tan et al., 2023).

Second, recognizing the significant impact of escapism and entertainment on satisfaction, event organizers should collaborate closely with artists and performers to curate experiences that resonate with attendees (Minor et al., 2004). Engaging artists who can create immersive and emotionally resonant performances aligns with the desires of the audience, potentially elevating the overall satisfaction of the event (Tung Au et al., 2017). A well-crafted and engaging stage performance has the power to transport individuals from their everyday reality into a state of heightened emotion, imagination, and sensory experience.

Furthermore, understanding the strong influence of consumer satisfaction on behavioural intentions, organizers should actively encourage attendee advocacy. Implementing social media engagement initiatives and post-event activities strategies can

help capture and leverage positive word-of-mouth (Strand & Robertson, 2020). A simple strategy to promote the action of sharing highlights and captivating moments by creating specific hashtags and interactive posts will prompt user-generated content. Providing exclusive, sharable, behind-the-scenes content will also give an incentive to keep the post-event engagement high. Interacting with the followers by responding to comments, reposting, and expressing gratitude will foster a sense of community.

Additionally, initiatives that incentivize repeat attendance can contribute to the cultivation of long-term customer loyalty. Providing special discounts, early bird access, or exclusive perks for those expressing their intention to revisit. Personalizes communication channels, such as targeted email or social media direct messages, will also allow for a more direct form of communication to share a more tailored information or offerings.

Furthermore, knowing the non-significant impact of education on consumer satisfaction, event organizers should tailor their marketing and communication strategies to focus on the emotional and experiential aspects of the event rather than relying on educational components. Highlighting the entertainment value, diverse musical offerings, and unique experiences can be more effective in attracting and satisfying a broad audience (Dobson, 2010).

## CONCLUSIONS

In conclusion, this study sheds light on the intricate dynamics of consumer satisfaction and behavioural intentions within the context of music festivals and concerts. The positive and significant relationship identified between escapism, entertainment, and esthetic factors and attendee satisfaction underscores the pivotal role of hedonic experiences in shaping perceptions. The non-significant impact of education prompts gives a piece of evidence to event organizers to focus their strategies on the emotional and experiential dimensions that resonate most strongly with their audience.

The study further highlights the critical influence of consumer satisfaction on behavioural intentions, as satisfied attendees demonstrate a higher prospect of recommending the event and signal an intention to revisit it. This point stresses the importance of delivering a positive, memorable experience, actively cultivating positive word-of-mouth, and fostering long-term customer loyalty.

While this study provides valuable insights, there are avenues for future research that can extend our understanding of consumer behaviour in the context of music festivals and concerts. One limitation of this study is the potential simplification of contextual and demographic variation among respondents. While this research identifies key factors of the attendee's experience (i.e., esthetic, education, entertainment, and escapism), it may not capture the complexity of individual preference to its fullest. This study relies on generalization and may not account for a diverse segment of the audience with unique expectations and backgrounds.

Future research should delve deeper into the diversity of audiences and their specific preference by taking into account individual characteristics such as socioeconomic status, age, cultural background, etc. For instance, as indicated by (Oklevik et al., 2022), the educational level had mixed effects on satisfaction across different event types, suggesting a nuanced influence that varies with the nature of the event. Therefore, future studies could

benefit from investigating how educational engagement, specifically during diverse event formats, such as rehearsals or competition-based concerts, affects consumer behaviour and satisfaction. Such an exploration would enrich the theoretical framework and offer practical guidance for organizers on effectively incorporating educational elements to enhance attendee experiences.

Furthermore, another promising avenue is to investigate the role of technology in shaping customer satisfaction. With the increasing integration of interactive technology in live events, understanding how these innovations impact satisfaction could provide valuable insights. Exploring the influence of personalized digital experience, social media interaction, and mobile applications could help event organizers leverage these technologies effectively.

Lastly, this study acknowledges a fundamental limitation in its analysis due to the diverse nature of concerts in Indonesia, which vary widely not only by musical genre (e.g., K-pop, EDM, indie, and rock) but also by the type of event (e.g., concert, festival, recital, private events, etc.). These variations introduce complexities in uniformly assessing and comparing experiences, potentially affecting the generalizability of the research findings across different types of events (Pizzolitto, 2023). Thus, future research should aim to specifically address the diversity of concert types by developing a more segmented approach in the study of music concert experiences. This could involve a comparative analysis of how different genres and event types influence audience perceptions, engagement levels, and economic impacts.

## REFERENCES

- Ambrecht, J., & Andersson, T. D. (2020). The event experience, hedonic and eudaimonic satisfaction and subjective well-being among sport event participants. *Journal of Policy Research in Tourism, Leisure and Events*, 12(3), 457–477.
- Aşan, K., Kaptangil, K., & Gargacı Kınay, A. (2020). Mediating role of perceived festival value in the relationship between experiences and satisfaction. *International Journal of Event and Festival Management*, 11(2), 255–271.
- Baker, A. J. (2016). Music scenes and self branding (Nashville and Austin). *Journal of Popular Music Studies*, 28(3), 334–355.
- Bangun, C. R. (2019). Participatory culture: a study on Bangtan Boys fandom Indonesia. *KOMUNIKA: Jurnal Dakwah Dan Komunikasi*, 13(2).
- Bangun, C. R., Kumaralalita, N., & Sukur, G. F. F. (2020). Studying fandom online: A case study of Twice and Stray Kids fandom on fan fiction practices of @ Eskalokal and @ Gabenertwice on Twitter. *Aspiration Journal*, 1(2), 211–231.
- Berridge, G. (2020). Designing event experiences. In *The Routledge handbook of events* (pp. 378–395). Routledge.
- Bhandari, U., Chang, K., & Neben, T. (2019). Understanding the impact of perceived visual aesthetics on user evaluations: An emotional perspective. *Information & Management*, 56(1), 85–93.

- Buswell, J., Williams, C., Donne, K., & Sutton, C. (2016). *Service quality in leisure, events, tourism and sport*. CABI.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic press.
- Collis, C. (2017). What is entertainment? The value of industry definitions. *Entertainment Values: How Do We Assess Entertainment and Why Does It Matter?*, 11–22.
- De Nisco, A., Papadopoulos, N., & Elliot, S. (2017). From international travelling consumer to place ambassador: Connecting place image to tourism satisfaction and post-visit intentions. *International Marketing Review*, 34(3), 425–443.
- Dearn, L. K., & Price, S. M. (2016). Sharing music: Social and communal aspects of concert-going. *Networking Knowledge: Journal of the MeCCSA Postgraduate Network*, 9(2).
- Dobson, M. C. (2010). New audiences for classical music: The experiences of non-attenders at live orchestral concerts. *Journal of New Music Research*, 39(2), 111–124.
- Dolasinski, M. J., Roberts, C., Reynolds, J., & Johanson, M. (2021). Defining the field of events. *Journal of Hospitality & Tourism Research*, 45(3), 553–572.
- Duffy, M., & Mair, J. (2018). Engaging the senses to explore community events. *Event Management*, 22(1), 49–63.
- Edensor, T. (2015). Light design and atmosphere. *Visual Communication*, 14(3), 331–350.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Garrido, S., Davidson, J., & Odell-Miller, H. (2013). Music and mood regulation: A historical enquiry into individual differences and musical prescriptions through the ages. *Australian Journal of Music Therapy*, 24, 89–112.
- Garrido, S., & Schubert, E. (2011). Individual differences in the enjoyment of negative emotion in music: A literature review and experiment. *Music Perception*, 28(3), 279–296.
- Garrod, B., & Dowell, D. (2020). Experiential marketing of an underground tourist attraction. *Tourism and Hospitality*.
- Gelder, G., & Robinson, P. (2009). A critical comparative study of visitor motivations for attending music festivals: A case study of Glastonbury and V Festival. *Event Management*, 13(3), 181–196.
- Grappi, S., & Montanari, F. (2011). The role of social identification and hedonism in affecting tourist re-patronizing behaviours: The case of an Italian festival. *Tourism Management*, 32(5), 1128–1140.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis 7th Edition Pearson Prentice Hall*. JOUR.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hair Jr, J., Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101.
- Hooshmand, R., Sung, B., Jefferies, K., Jefferies, R., & Lin, J. (2023). The impact of COVID-19 on regional event attendees' attitudes: a survey during and after COVID-19 lockdowns. *International Journal of Event and Festival Management*, 14(1), 73–91.
- Hwang, R., & Lee, M. (2022). The influence of music content marketing on user satisfaction and intention to use in the metaverse: A focus on the SPICE model. *Businesses*, 2(2), 141–155.
- Japutra, A., Loureiro, S. M. C., & Wang, S. (2021). The role of personal values and personality traits on intention to recommend a destination. *Tourism Analysis*, 26(4), 349–361.
- Karim, A. K. M. R., Proulx, M. J., de Sousa, A. A., & Likova, L. T. (2022). Do we enjoy what we sense and perceive? A dissociation between aesthetic appreciation and basic perception of environmental objects or events. *Cognitive, Affective, & Behavioral Neuroscience*, 22(5), 904–951.
- Komarac, T., & Ozretić Došen, Đ. (2022). Discovering the determinants of museum visitors' immersion into experience: The impact of interactivity, expectations, and skepticism. *Current Issues in Tourism*, 25(22), 3675–3693.
- Llopis-Amorós, M.-P., Gil-Saura, I., Ruiz-Molina, M. E., & Fuentes-Blasco, M. (2019). Social media communications and festival brand equity: Millennials vs Centennials. *Journal of Hospitality and Tourism Management*, 40, 134–144.
- Lonsdale, A. J., & North, A. C. (2011). Why do we listen to music? A uses and gratifications analysis. *British Journal of Psychology*, 102(1), 108–134.
- Luo, Q., Hu, S., & Guo, Y. (2022). 'Right here, right now!': embodied experiences of pop concert participants. *Current Issues in Tourism*, 25(17), 2838–2853.
- Mainolfi, G., & Marino, V. (2020). Destination beliefs, event satisfaction and post-visit product receptivity in event marketing. Results from a tourism experience. *Journal of Business Research*, 116, 699–710.
- Malhotra, N. K. (2020). *Marketing research: an applied orientation, Seventh Edition* (Global Edition). Pearson.
- Marshall, H., Johnson, J., & Brown, A. E. (2023). Going alone: the experience of solo eventgoers at music events in the UK. *Event Management*.
- Mason, M. C., & Paggiaro, A. (2012). Investigating the role of festivalscape in culinary tourism: The case of food and wine events. *Tourism Management*, 33(6), 1329–1336.

- Meeprom, S., & Silanoi, T. (2020). Investigating the perceived quality of a special event and its influence on perceived value and behavioural intentions in a special event in Thailand. *International Journal of Event and Festival Management*, 11(3), 337–355.
- Minor, M. S., Wagner, T., Brewerton, F. J., & Hausman, A. (2004). Rock on! An elementary model of customer satisfaction with musical performances. *Journal of Services Marketing*, 18(1), 7–18.
- Morgan, M. (2008). What makes a good festival? Understanding the event experience. *Event Management*, 12(2), 81–93.
- Nguyen, T., Lee, K., Chung, N., & Koo, C. (2020). The way of generation Y enjoying Jazz festival: A case of the Korea (Jarasum) music festival. *Asia Pacific Journal of Tourism Research*, 25(1), 52–63.
- Oklevik, O., Kwiatkowski, G., Preuss, H., & Kurdyś-Kujawska, A. (2022). Contextual engagement in event visitors' experience and satisfaction. *Scandinavian Journal of Hospitality and Tourism*, 22(1), 58–79.
- Pine, B. J., & Gilmore, J. H. (1998). *Welcome to the experience economy* (Vol. 76, Issue 4). Harvard Business Review Press Cambridge, MA, USA.
- Pitts, S. (2016). *Valuing musical participation*. Routledge.
- Pizzolitto, E. (2023). Music in business and management studies: a systematic literature review and research agenda. *Management Review Quarterly*, 1–34.
- Quadri-Felitti, D. L., & Fiore, A. M. (2013). Destination loyalty: Effects of wine tourists' experiences, memories, and satisfaction on intentions. *Tourism and Hospitality Research*, 13(1), 47–62.
- Saarikallio, S. H. (2008). Music in mood regulation: Initial scale development. *Musicae Scientiae*, 12(2), 291–309.
- Saragih, H. S., & Amelia, N. (2020). Segmentation of music festival visitors by values of hedonia, life satisfaction and eudaimonia. *International Journal of Event and Festival Management*, 11(4), 453–472.
- Sisson, A. D., & Alcorn, M. R. (2022). How was your music festival experience? Impacts on loyalty, word-of-mouth, and sustainability behaviors. *Event Management*, 26(3), 565–585.
- Skirkowski, J. (2022, November 7). It's Not Just Glasto – Festivals in 2023 Will Be Pricier Than Ever. *Vice*. <https://www.vice.com/en/article/jgpk98/music-festivals-more-expensive-than-ever-2023>
- Strand, A., & Robertson, M. (2020). An attitudinal impacts analysis of social media platforms and brand relationship quality at music festivals. *Event Management*, 24(6), 769–788.
- Tan, K.-L., Ho, J.-M., Sim, A. K. S., Dubos, L., & Cham, T.-H. (2023). Unlocking the secrets of Miri country music festival in Malaysia: a moderated-mediation model examining the power of FOMO, flow and festival satisfaction in driving revisiting intentions. *Asia Pacific Journal of Tourism Research*, 28(5), 416–432.

- Torres, E. N., Wei, W., Hua, N., & Chen, P.-J. (2019). Customer emotions minute by minute: How guests experience different emotions within the same service environment. *International Journal of Hospitality Management*, 77, 128–138.
- Tung Au, W., Ho, G., & Wing Chuen Chan, K. (2017). An empirical investigation of the arts audience experience index. *Empirical Studies of the Arts*, 35(1), 27–46.
- Vogel, H. L. (2020). *Entertainment industry economics: A guide for financial analysis*. Cambridge University Press.
- Vuoskoski, J. K., & Eerola, T. (2017). The pleasure evoked by sad music is mediated by feelings of being moved. *Frontiers in Psychology*, 8, 439.
- Wei, W., & Miao, L. (2017). Memorable experiences in customer–customer interactions (CCIs) at conferences. *Event Management*, 21(6), 771–787.
- Wood, E. H., & Kinnunen, M. (2020). Emotion, memory and re-collective value: shared festival experiences. *International Journal of Contemporary Hospitality Management*, 32(3), 1275–1298.
- Wu, H.-C., Cheng, C.-C., & Ai, C.-H. (2018). A study of experiential quality, experiential value, trust, corporate reputation, experiential satisfaction and behavioral intentions for cruise tourists: The case of Hong Kong. *Tourism Management*, 66, 200–220.
- Wu, R., Han, Y., & Chen, S. (2024). Awe or excitement? The interaction effects of image emotion and scenic spot type on the perception of helpfulness. *Journal of Hospitality and Tourism Management*, 58, 76–84.
- Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management*, 31(2), 274–284.
- Yürük, P., Akyol, A., & Şimşek, G. G. (2017). Analyzing the effects of social impacts of events on satisfaction and loyalty. *Tourism Management*, 60, 367–378.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31–46.



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## Matrik: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 71-86



### Segmentation Analysis of Staycationers in Jakarta

Shinta Wardhani<sup>1)</sup>, Agung Suryawan Wiranatha<sup>2)</sup>,  
I Gusti Ayu Oka Suryawardani<sup>3)</sup>

<sup>1</sup> NHI Bandung Tourism Polytechnic,

<sup>2,3</sup> Faculty of Tourism, Postgraduate Program, Udayana University

Email: shinta.wardhani@poltekpar-nhi.ac.id



SINTA 2

DOI : <https://doi.org/10.24843/Matrik:JMBK.2024.v18.i01.p06>

#### ABSTRACT

Staycation has been growing and continuously gaining popularity in Indonesia during and after the COVID-19 pandemic. This study aims to identify segments of staycation tourists/staycationers in Jakarta, one of Indonesia's most popular staycation destinations. Using quantitative methods, this study implements a proportional sampling design based on accommodation types with a total of 130 valid and reliable online questionnaire surveys. This study identifies factors and clusters using lifestyle variables from Activity, Interest, and Opinion (AIO) Model and examines their correlation with demographic, geographic, and behaviour segmentation. Data were analysed by descriptive statistics, including factor analysis, cluster analysis, discriminant analysis, and cross-tabulation analysis. The findings revealed four types of staycationers in Jakarta: (1) I-want-everything staycationers, (2) independent and attention seekers, (3) indulgent shopaholics, and (4) culture and local adventurers. Profiles and characters of each staycationer segment were analysed, giving significant knowledge about staycation market, particularly in Jakarta. Thus, this study offers valuable information for tourism and hospitality businesses to focus on the most potential market segment.

**Keywords:** AIO model, lifestyle segmentation, market segmentation, marketing, staycation

#### INTRODUCTION

Amid economic euphoria induced by the tourism sector, on March 12, 2020, the World Health Organization (WHO) announced COVID-19 as a global pandemic; thus, various policies to prevent virus transmission were domestically and internationally issued (Sigala, 2020). Due to strict procedures such as travel and mobility bans, community lockdowns, and stay-at-home campaigns, alternative tourism called staycation arose and became a new trend. A staycation is generally defined as a local travel activity by tourists/residents on a daily trip at or near their homes without travelling abroad (Wong et al., 2021). In Indonesia, the staycation trend is defined as a vacation activity carried out by living or settling in a place (for example, a hotel or villa) not far from home or still in the same city (Purnamasari, 2020). Thus, a staycation is a unique phenomenon where residents reinvent their city from tourists' perspective with the help of the local hotel industry that offers leisure facilities and activities (Sadhale & SuvarnaSathe, 2021).

In Indonesia, staycation activities have increased dramatically within the past few years, especially during the COVID-19 pandemic, due to restricted mobilisation policies

(Ministry of Tourism and Creative Economy of Indonesia, 2021b). According to data released by Thinkwithgoogle.com, there was a 220% increase in searches for “staycation” in Indonesia in 2020, much higher than the 150% increase in 2019 when staycations were still relatively new and not widely known in Indonesia. The main staycation destinations in Indonesia during 2020 are Jakarta, Bandung, and Surabaya, followed by Malang, Yogyakarta, Solo, Semarang, and Bali (Ministry of Tourism and Creative Economy of Indonesia, 2021a). Jakarta is considered the most significant city for staycation activities in Indonesia, with a significant number of staycation markets with interest such as work from hotels and special occasion celebrations. The Agoda Survey (2021) shows that a staycation has become a new trend in celebrating the turn of the year, where Indonesian tourists, especially in Jakarta, prefer to stay in an upscale hotel to pamper themselves during the turn of the year. In addition, Jakarta is one of the cities with a significant public interest in doing staycations for work, where complete room facilities such as comfortable work corners and stable internet connections are the main attractions (Godeleova, 2020). These highlight Jakarta as a unique and important staycation market, thus confirming the research focus on the staycation market in the Jakarta area.

However, the increasing demand for staycation activities exposes tourism business businesses to a new problem, mainly how to build a compelling package to develop a staycation demand base (Espaillard et al., 2021). This situation indicates the importance of analysing and studying the staycation phenomenon to obtain a complete and in-depth understanding of the staycation market. The idea of a staycation is still relatively new, so empirical studies of consumer behaviour in this market are not widely available (James, 2014). Research on staycation tourist analysis was carried out by Espaillard et al. (2021) in Canada and James (2014) in the US, who analysed several potential staycation markets in each region. Research on the development of the staycation phenomenon in Indonesia was carried out by the Indonesian Ministry of Tourism and Creative Economy in collaboration with the Faculty of Tourism of Udayana University in 2021 to understand staycation markets in Bali. Nevertheless, the research conducted on the lifestyle segmentation of staycationers was still limited nationally and globally.

Lifestyle segmentation research has begun to be widely applied in various fields. However, in Indonesia, lifestyle segmentation in the tourism sector was carried out by Srihadi et al. (2016), who investigated foreign tourists visiting Jakarta. Through demographic-related questions and 38 AIO questions, 4 (four) foreign tourist segments were obtained: culture interest shopaholic, sporty culture explorer, aspiring vacationer, and want-everything vacationer. Even though many researchers have been studying the phenomenon of staycation in Indonesia, research focusing on the segmentation of staycation tourists in Indonesia has yet to be found. This study attempts to fill the knowledge gap within the research universe by analysing profiles and segmentation of staycation tourists in Jakarta primarily using lifestyle segmentation. Therefore, the findings of this research can complement and enrich the literature related to staycation in Indonesia.

This research aims to identify and analyse existing segments of staycationers in Jakarta, Indonesia, through analysis of lifestyle aspects along with geographic, demographic, and behavioural backgrounds. Thereby providing a better understanding of the characteristics of each segment as the basis for formulating the right strategy or package. Drawing on the theory of market segmentation in tourism, consumer lifestyle, and the concept of staycation, three research questions were constructed as follows: (1) What are the segments of staycationers in Jakarta through the lifestyle clustering (2) What are the demographic, geographic, and

behavioural profiles of staycationers in Jakarta, (3) What are the characteristics of each segment of staycationers in Jakarta. The contributions of this study to the literature on segmentation and marketing of tourism are in two ways: first, by presenting the use of demographic, geographic, behavioural, and lifestyle segmentation for identifying staycation markets; second, by developing marketing strategies and packages based on the identified segments. This research can be applied as a reference for further studies on the development of staycationers segmentation analysis in the other parts of Indonesia, not to mention other types of tourism.

## METHODS

This research combined 4 (four) segmentation methods: geographic, demographic, behaviour, and lifestyle. The originality of this research is a segmentation analysis of staycation market using lifestyle segmentation of Activity, Interest, and Opinion (AIO) Model from Plummer (1974), which has not been studied before in Indonesia. From the 9 (nine) activity dimensions, 9 (nine) interest dimensions and 9 (nine) opinion dimensions proposed by Plummer, only 5 (five) activity dimensions, 4 (four) work dimensions and 5 (five) opinion dimensions were used in this study. The selection process of lifestyle dimensions was based on which dimensions are relevant to staycation activities, which is supported by previous works by James (2014) and Srihadi et al. (2016). The lifestyle dimension can be found in Table 1.

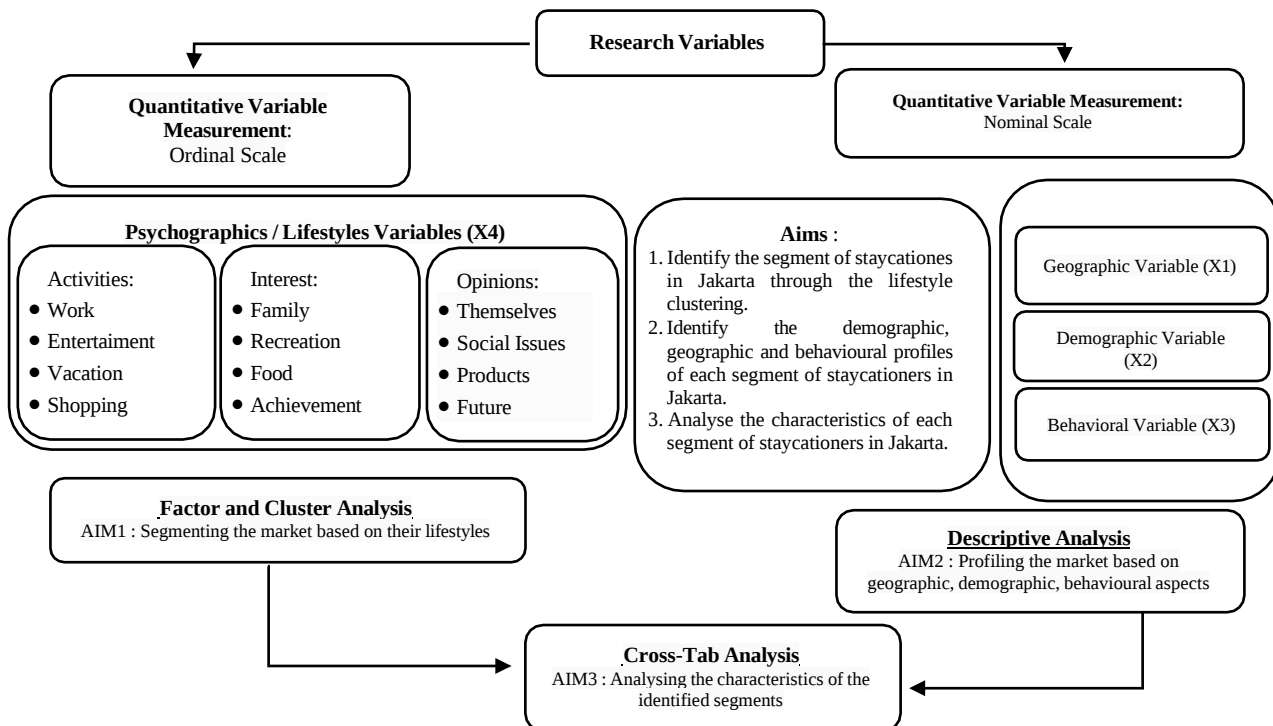
**Table 1. The Lifestyle Dimension**

| Activities      | Interests    | Opinions      |
|-----------------|--------------|---------------|
| Work            | Family       | Themselves    |
| Hobbies         | Home         | Social issues |
| Social events   | Job          | Politics      |
| Vacations       | Community    | Business      |
| Entertainment   | Recreation   | Economics     |
| Club membership | Fashion      | Education     |
| Community       | Food         | Products      |
| Shopping        | Media        | Future        |
| Sports          | Achievements | Culture       |

Source: Plummer, 1974

Other segmentations are widely used for segmentation analysis, such as geographic, demographic, and behaviour segmentation. Kotler (2007) described geographic segmentation as dividing the market into distinct geographic units, such as states, regions, provinces, cities, settlements, or neighbourhoods. In this study, geographic segmentation used the city as the geographic variable. Demographic segmentation differentiates customer groups into demographic units such as age, family size, family life cycle, gender, income, occupation, education, religion, race, generation, nationality, and social class (Kotler, 2007). Demographic variables used in this study are gender, age, occupation, family life cycle, and income. In behavioural segmentation, buyers are divided into groups based on their knowledge, attitude, use, or response to a product (Kotler, 2007). This research used previous research from the Ministry of Tourism and Creative Economy in 2021, which led to the selection of behavioural variables, including accommodation type, saving preference, travel purpose, information source, transportation mode, travel companion, frequency, duration, distance, and spending amount.

The conceptual framework developed for this study is presented in Figure 1. Several variables for segmenting the market are geographic (X1), demographic (X2), behavioural (X3), and psychographics/ lifestyle (X4). Initially, a segmentation based on travellers' lifestyles was conducted to separate the market into several homogenous groups/clusters. Following this process, the relationship between identified clusters and their geographic, demographic, and behavioural background is systematically analysed to gain comprehensive characteristics of each group.



**Figure 1. The conceptual framework with research objectives**

Source: own elaboration, 2021

This study used purposive convenience techniques to select samples. The survey respondents included Jakarta residents who had a staycation trip in Jakarta. The selection criteria for staycationers participating in this study included being permanent/temporary residents of Jakarta, having had a staycation trip within the past two years, and enjoying in-house facilities as primary activities. Busnawir (1982) states that a sampling procedure has two requirements: representative and adequate. Fulfilling the first requirement, the design sample in this study was proportionally obtained from staycationers who stayed at 5 (five) accommodation categories. The accommodation categories included 4-5-star chain hotels, 4-5-star non-chain hotels, 3-star hotels, non-star hotels, and villas/apartments. The second requirement of an adequate sample amount is conducted based on the cluster analysis rules, which need five times the number of variables and are even more acceptable when using a 10:1 ratio (Hair, 2010). Based on the base 10:1 ratio of cluster analysis, a total target of 130 samples was constructed from the 13 lifestyle variables used in this study and distributed in the five categories, as seen in Table 2. The study survey was conducted during the first quarter of 2021 through an online survey by distributing a questionnaire created in Jotform.

**Table 2. Sample Distribution per Category**

| Category                  | Sample Amount | Percentage (%) |
|---------------------------|---------------|----------------|
| 4-5 Star Chain Hotels     | 26            | 20             |
| 4-5 Star Non-Chain Hotels | 26            | 20             |
| 3 Star Hotels             | 26            | 20             |
| Non-Star Hotels           | 26            | 20             |
| Villas/Apartments         | 26            | 20             |
| <b>TOTAL</b>              | <b>130</b>    | <b>100%</b>    |

Source: own elaboration, 2021

The questionnaire used in the study comprised three parts, including two filter questions to identify respondents' definitions of residential and staycation. The first part consisted of six questions about the demographic and geographic aspects such as city, gender, age, occupation, family life cycle, and income. The second part comprised ten behavioural questions, including accommodation type, saving preference, travel purpose, information source, transportation mode, travel companion, frequency, duration, distance, and spending amount. The third part contained 36 AIO measurement items covering tourists' activities, including how they spent their time and money, their interests, and their opinions about themselves and their surroundings. Notably, several questions representing work, vacations, entertainment, shopping, and sports are used to measure activities; family, recreation, food, and achievements are used to measure interest; themselves, social issues, products, future, and culture are used to measure opinions. The AIO statements were generated based on previous research and were measured on a five-point Likert-type scale, in which 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. However, compared to the previous study, the selection of lifestyle indicators and statements was adjusted to ensure that the questionnaire items corresponded precisely with the research aim and targeted respondents.

Statistical Package for the Social Science (SPSS) version 25 was used to analyse and interpret data. After data were collected from respondents, validity and reliability tests were conducted. Subsequently, all data were tested thoroughly by descriptive analysis using factor analysis, cluster analysis (K-Means), and cross-tabulation. First, factor analysis was used to reduce 36 AIO statements into more specific factors by choosing a variable with a strong correlation. Second, validity and reliability tests tested factors from the previous analysis. Third, valid factors were processed using non-hierarchical K-Means cluster analysis to classify staycationers into exclusive mutual groups (Srihadi et al., 2016). Fourth, discriminant analysis was carried out to validate the cluster analysis results. Lastly, the study used cross-tabulation and chi-square analysis to examine whether there was a relationship between demographic, geographic, and behavioural variables with the established lifestyle clusters/segments.

## RESULTS

The geographic profiles show that most respondents are from South Jakarta. Looking specifically at the demographic profiles, the majority of respondents were female (52.3%), between 25-34 (58.5%), employed (86.2%), young singles (46.2%), and had an income <15 million/month (56.9%). Respondents' behaviour when having a staycation shows that most of them use the internet as the primary source of information (84.6%), prefer private vehicles for

mobilisation (66.9%), travel with family members (47.7%), have a regular staycation for 1-6 times/year (75.4%), length of stay around 1-2 nights (89.2%), search for 0-15km staycation destination distance from home (39.2%), spend around <2 million/trip (51.5%), think that staycation is saving travelling expenses (77.7%), and allocating the saving for another staycation trip in the future (40%).

**Table 3. Behavioural profiles of respondents (N=130)**

|                                | Frequency (%) |                           | Frequency (%) |
|--------------------------------|---------------|---------------------------|---------------|
| <b>Staycation Purpose</b>      |               | <b>Distance</b>           |               |
| Vacation/sightseeing           | 8 (6.2)       | 0 - 15 km                 | 48 (36.9)     |
| Rest and relaxation            | 65 (50)       | 16 - 30 km                | 51 (39.2)     |
| Business/Working               | 8 (6.2)       | 31 - 45 km                | 14 (10.8)     |
| Family Togetherness            | 40 (30.8)     | 46 - 60 km                | 9 (6.9)       |
| Socialisation/Celebration      | 9 (6.9)       | > 60 km                   | 8 (6.2)       |
| <b>Information source</b>      |               | <b>Length of stay</b>     |               |
| Internet                       | 110 (84.6)    | 1 - 2 nights              | 116 (89.2)    |
| Friends/relatives              | 20 (15.4)     | 3 - 4 nights              | 14 (10.8)     |
| <b>Travel Companion</b>        |               | <b>Frequency/year</b>     |               |
| Alone                          | 18 (13.8)     | 1 - 6 times               | 98 (75.4)     |
| Family                         | 62 (47.7)     | 7 - 12 times              | 25 (19.2)     |
| Friend                         | 24 (18.5)     | 13 - 18 times             | 6 (4.6)       |
| Partner                        | 26 (20)       | > 24 times                | 1 (0.8)       |
| <b>Staycation expense/trip</b> |               | <b>Accommodation type</b> |               |
| < IDR 2 million                | 67 (51.5)     | 4 - 5 stars chain         | 26 (20)       |
| IDR 2 - 5 million              | 49 (37.7)     | 4 - 5 stars non-chain     | 26 (20)       |
| IDR 6 - 10 million             | 10 (7.7)      | 3 stars                   | 26 (20)       |
| IDR 11 - 15 million            | 2 (1.5)       | non star                  | 26 (20)       |
| > IDR 15 million               | 2 (1.5)       | villa/apartment           | 26 (20)       |
| <b>Saving opinion</b>          |               | <b>Saving allocation</b>  |               |
| Yes                            | 101 (77)      | For future staycation     | 52 (51.5)     |
| No                             | 29 (22.3)     | For staying extension     | 9 (8.9)       |
|                                |               | For saving                | 40 (39.6)     |
| <b>Transportation mode</b>     |               |                           |               |
| Public transportation          | 12 (9.2)      |                           |               |
| Private vehicle                | 87 (66.9)     |                           |               |
| Online transportation          | 31 (23.8)     |                           |               |

Source: Processed data, 2021

**Factor analysis of staycationers' lifestyles.** Factor analysis requires several fundamental tests: Kaiser Meyer Olkin (KMO) and Bartlett's Test of Sphericity, Measure of Sampling Adequacy (MSA), and Communalities. Two items with MSA values below 0.5 were removed from the analysis, leaving 34 AIO statements that fulfil all the requirements. A factor analysis with a varimax rotation was then performed to identify the primary lifestyle factors among staycationers. Items with a loading factor lower than 0.40 were removed, and the remaining items were reanalysed. The procedure was repeated until only items with a factor loading above 0.40 were attained. High correlations between a factor and its items can be seen from high factor loading values. Ten factors with eigenvalues greater than 1.00 were identified, explaining 67.604% of the variation. After that, the reliability test was carried out to ensure the consistency and feasibility of each factor used. Eight factors with high-reliability coefficients were exposed, accounting for 60.06% of the total variance. Table 4

and Table 5 illustrates the result of factor analysis and the reliability coefficients computed for each factor.

**Table 4. Factor analysis result I**

| Factor                                                               | Loading Factor | Eigen value | Variance (%) | Reliability  | Mean | Overall mean |
|----------------------------------------------------------------------|----------------|-------------|--------------|--------------|------|--------------|
| <b>Factor 1: Culture Adventurous</b>                                 |                | <b>7,59</b> | <b>22,33</b> | <b>0,762</b> |      | <b>4,16</b>  |
| I am full of enjoyment and discover a challenge everyday             | 0,699          |             |              |              | 4,13 |              |
| I am interested in a different way of life                           | 0,752          |             |              |              | 4,25 |              |
| I enjoy meeting new people                                           | 0,483          |             |              |              | 3,77 |              |
| I like exploring a different culture                                 | 0,650          |             |              |              | 4,25 |              |
| Immersing myself in the culture while on vacation is important to me | 0,646          |             |              |              | 4,42 |              |
| <b>Factor 2: Aspiring Economizer</b>                                 |                | <b>3,11</b> | <b>9,16</b>  | <b>0,759</b> |      | <b>4,35</b>  |
| I feel responsible to complete any work                              | 0,576          |             |              |              | 4,55 |              |
| I often shop at discount stores                                      | 0,402          |             |              |              | 3,88 |              |
| I enjoy a quiet and happy private life with my family                | 0,581          |             |              |              | 4,49 |              |
| I am sure that my life is meaningful                                 | 0,697          |             |              |              | 4,48 |              |
| I feel optimistic about my future                                    | 0,802          |             |              |              | 4,35 |              |
| <b>Factor 3: Sociable and Family</b>                                 |                | <b>2,44</b> | <b>7,17</b>  | <b>0,565</b> |      | <b>3,99</b>  |
| My entertainment is to go out with friends                           | 0,762          |             |              |              | 4,01 |              |
| Travelling with family comforts me                                   | 0,421          |             |              |              | 4,19 |              |
| I enjoy eating out at a restaurant/café with friends                 | 0,605          |             |              |              | 3,93 |              |
| I like spending time with my good friends                            | 0,846          |             |              |              | 4,07 |              |
| I frequently visit friends and relatives                             | 0,632          |             |              |              | 3,73 |              |
| <b>Factor 4: Foodie and Local Explorer</b>                           |                | <b>1,87</b> | <b>5,51</b>  | <b>0,694</b> |      | <b>3,95</b>  |
| I like to go on recreational trip such as going to an amusement      | 0,510          |             |              |              | 3,36 |              |
| My recreational activities happen around my house/city               | 0,682          |             |              |              | 3,94 |              |
| I love visiting local eateries/cafes/restaurants                     | 0,567          |             |              |              | 4,15 |              |
| I am interested in trying new foods                                  | 0,703          |             |              |              | 4,22 |              |
| Personal goals that I established are practical and feasible         | 0,517          |             |              |              | 4,06 |              |

Source: Processed data, 2021

**Table 5. Factor analysis result II**

| <b>Factor 5: Indulgers</b>                                                  | <b>1,66</b> | <b>4,88</b> | <b>0,687</b> | <b>4,53</b> |
|-----------------------------------------------------------------------------|-------------|-------------|--------------|-------------|
| I prefer vacations that help me relax                                       | 0,628       |             | 4,61         |             |
| I look for coziness when I choose a vacation destination                    | 0,634       |             | 4,6          |             |
| I enjoy socializing or entertaining                                         | 0,596       |             | 4,51         |             |
| I believe tourism can contribute to the conservation of nature and culture  | 0,652       |             | 4,41         |             |
| <b>Factor 6: Shopaholic</b>                                                 | <b>1,46</b> | <b>4,28</b> | <b>0,626</b> | <b>2,89</b> |
| I usually buy well-known brands                                             | 0,746       |             | 2,83         |             |
| I spend a lot of money on shopping                                          | 0,761       |             | 2,94         |             |
| <b>Factor 7: Attention Seeker</b>                                           | <b>1,35</b> | <b>3,96</b> | <b>0,489</b> |             |
| When I have a problem, I turn to family or relatives for help in solving it | 0,597       |             | 3,35         | <b>3,37</b> |
| I like to try new products when they come out on the market                 | 0,761       |             | 3,38         |             |
| <b>Factor 8: Active Achiever</b>                                            | <b>1,22</b> | <b>3,59</b> | <b>0,444</b> | <b>4,17</b> |
| I like taking outdoor trip on the weekend to escape from the routine        | 0,752       |             | 4,01         |             |
| I pay attention to my personal achievements                                 | 0,491       |             | 4,33         |             |

Source: Processed data, 2021

The first factor was named ‘Culture adventurous’, which represented 22.33% of the total variance, with a Cronbach’s alpha value of 0.762. The first factor describes staycationers who courageously enjoy new challenges and unique, adventurous lives, are fascinated by exploring and learning about different cultures, and love to meet people. The second factor was labelled ‘Aspiring economizer,’ explaining 9,16% of the total variance with a Cronbach’s alpha value of 0.759. The second factor describes staycationers who feel optimistic about the future, see life as meaningful, work responsibly, enjoy a quiet and private life with family, and often shop at discount shops. The third factor was ‘Sociable and family traveller’, describing 7.17% of the total variance with a Cronbach’s alpha value of 0.565. The third factor describes staycationers who love to spend time and hang out with friends, enjoy eating out in restaurants/cafés, frequently visit friends and relatives, and are comfortable travelling with family. The fourth factor was named ‘Foodie and local explorer’, representing 5.51% of the total variance with a Cronbach’s alpha value of 0.694. The fourth factor describes staycationers who prefer a recreational trip near home, love outdoor recreation such as an amusement park, regularly visit local restaurants, are interested in trying new foods, and set feasible personal goals. The fifth factor was labelled ‘Indulgers’, explaining 4.88% of the total variance with a Cronbach’s alpha value of 0.687. The fifth factor describes staycationers who prefer relaxed vacations, look for coziness when choosing a vacation destination, enjoy socialising or entertaining outdoors, and positively believe

tourism can contribute to the conservation of nature and culture. The sixth factor was marked 'Shopaholic', describing 4.28% of the total variance with a Cronbach's alpha value of 0.489. The sixth factor describes staycationers, who spend a lot of money on shopping and usually buy well-known brands. The seventh factor was marked 'Attention seeker', describing 3.96% of the total variance with a Cronbach's alpha value of 0.489. The seventh factor describes staycationers who rely on family relatives' help when solving problems and love to try new products in the first launch. The eighth factor was 'Active achiever,' representing 3.59% of the total variance with a Cronbach's alpha value of 0.444. The eighth factor describes staycationers who prefer outdoor trips on the weekend to escape from the weekday routine but also pay attention to personal achievements.

**Table 6. Statistic summary of cluster analysis**

|                               | Cluster 1                       | Cluster 2                       | Cluster 3            | Cluster 4                   | F     | Sig. |
|-------------------------------|---------------------------------|---------------------------------|----------------------|-----------------------------|-------|------|
|                               | (n=69)                          | (n=20)                          | (n=12)               | (n=29)                      |       |      |
| Culture Adventurous           | 4,30                            | 3,65                            | 3,68                 | 4,58                        | 29,02 | 0,00 |
| Aspiring Economizer           | 4,39                            | 3,91                            | 3,77                 | 4,34                        | 23,70 | 0,00 |
| Sociable and Family Traveller | 4,26                            | 3,49                            | 3,65                 | 3,81                        | 10,94 | 0,00 |
| Foodie and Local Explorer     | 4,08                            | 3,70                            | 3,48                 | 3,99                        | 2,52  | 0,06 |
| Indulgents                    | 4,62                            | 4,20                            | 4,48                 | 4,57                        | 0,77  | 0,51 |
| Shopaholic                    | 3,28                            | 2,38                            | 3,25                 | 2,16                        | 30,04 | 0,00 |
| Attention Seeker              | 3,43                            | 3,58                            | 2,71                 | 3,34                        | 8,66  | 0,00 |
| Active Achiever               | 4,12                            | 3,53                            | 3,67                 | 3,88                        | 2,40  | 0,07 |
| Cluster Name                  | I-Want-everything staycationers | Independent & Attention Seekers | Indulgent Shopaholic | Culture & Local Adventurers |       |      |

Source: Processed data, 2021

**Clusters of staycationers' lifestyles.** Using the silhouette plot to measure the significance of graphic length, an optimal number of four clusters was determined, appropriately defining the preferred interpretation, meaning, and size. The silhouette plot assesses the quality of a cluster solution, enabling the effectiveness of object classification and distinguishing clear-cut clusters from weak ones (Landau et al., 2011). The K-Means clustering method was then performed to group the previously formed factors. The mean value was used to interpret and name the clusters. Mean values above 4.00 indicate that a tourist lifestyle attribute is essential, while those below 4.00 indicate that the attribute has low importance. As shown in Table 6, the 130 respondents were grouped into four clusters: (1) I-want-everything staycationers (53%), (2) independent and attention seekers (15%), (3) indulgent shopaholics (9%), (4) culture & local adventurers (22%).

**Discriminant Analysis.** A discriminant analysis was performed to validate the result of the cluster analysis. The analysis examines the differences among the four clusters and the specified variables that distinguish the clusters. The analysis also measures the accuracy degree of respondent classification. Three canonical discriminant functions were calculated and found to be statistically significant; function 1 explained 43.4% of the variance (eigenvalue = 1.843, Wilks' Lambda = 0.076,  $x^2 = 316.274$ ,  $df = 24$ , Sig. = 0.000). Function 2 explained 39.7% of the variance (eigenvalue = 1.684, Wilks' Lambda = 0.217,  $x^2 = 187.766$ ,  $df = 14$ , Sig. = 0.000). Function 3 explained 16.9% of the variance (eigenvalue =

0.715, Wilks' Lambda = 0.583,  $\chi^2 = 66.326$ ,  $df = 6$ , Sig. = 0.000). In total, 96.9% of the 130 grouped cases were correctly classified.

**Geographic, demographic, and behaviour profiles within clusters.** After completing the cluster analysis and determining its accuracy, chi-square tests for independence analysis and cross tabulation were conducted on each cluster using the respondents' geographic, demographic, and behaviour profiles. Based on the chi-square test results, the variables significantly correlate with the clusters are staycation frequency ( $\chi^2=17.845$ ,  $p=0.037$ ) and staycation saving opinion ( $\chi^2=12.208$ ,  $p=0.07$ ). In short, the four clusters significantly differ regarding staycation frequency and staycation savings opinions. Understanding the psychographic segmentation in each cluster and analysing it more deeply through cross-tabulation tests with other segmentations. The interpretation of the statistics is explained through detailed descriptions for each segment as below.

**Cluster 1: I-Want Everything Staycationers.** In this study, staycationers in Jakarta have similar characteristics to Indulgers looking for a quiet, relaxing vacation and comfortable accommodation destinations. Cluster 1 comprises 69 respondents, representing 53% of the sample, the largest segment with eight essential factors. This cluster represents people with considerable responsibility and achievement, an optimistic attitude and a high social spirit. Staycationers in this cluster are happy and feel comfortable when travelling with their family due to their value of a quiet and happy life. This segment enjoys meeting new people and socialising, such as hanging out, eating out, and doing other activities with friends and relatives. They usually go out on weekends to take a break from the routine. During a staycation, they prioritise a relaxing vacation and a quiet and comfortable destination. They like a wide range of activities related to the outdoors, culture, cuisine, and shopping. They love to explore and learn about new cultures. They love to try new foods and visit local eateries. Shopping activities are also part of the lifestyle in this segment. The I-want-everything staycationer is the only segment with the most representative age classes, with the highest percentage of 59.4% aged 25-34. Most of this segment comes from South Jakarta (44.9%) with young singles (49.3%) and families with children (39.1%) life cycles. They like a staycation in non-chain 4-5 star hotels with a distance of around 0 – 30 km (77.1%), a duration of 1-2 nights (85.5%) but sometimes up to 3-4 nights (14.5%). This segment represents the middle-high-income class (46.3%) with higher spending than other segments. The staycation frequencies preferred in this cluster are 1-6 times/year (76.8%). The purpose of a staycation is to rest and relax (56.5%) with their family and partner (66.7%) and friends (20.3%).

**Cluster 2: Independent and Attention Seekers.** Cluster 2 consists of 20 respondents, representing 15% of the sample. This cluster represents people who tend to withdraw from social activities and strongly desire to succeed in work and personal achievement. Staycationers in this cluster tend to be more self-centred than others, supported by the fact that young singles dominate this cluster and the highest percentage of travelling alone. They have a considerable interest in new things related to personal achievement. Activities that attract attention, such as attending product launches, are highly favoured by this segment. However, they are not interested in buying branded goods or spending too much money shopping. They prioritise a relaxing vacation and a comfortable destination when doing a staycation. They love exploring their surrounding areas, such as recreational parks and local eating places. The activities must offer a unique experience, allowing them to become the centre of attention. The Independent and attraction lover is a segment with most of the 25-

44 age group residing in East Jakarta. Most of this segment prefers staycation trips at 4-5 star hotel chains with a further distance of about 16-30 km (55%) and, therefore, chooses to use private vehicles for staycations (85%). The majority are young singles (55%) with a greater propensity to travel alone than other segments (25%). They make the lowest possible expenditure of <2 million (60%) but with a more regular frequency compared to other clusters by 7-12 times (30%) and 13-18 times (20%). The purpose of a staycation is rest and relaxation (50%).

**Cluster 3: Indulgent Shopaholics.** Cluster 3 comprises 12 respondents, representing 9% of the sample; the prominent factors are Indulgers and Shopaholics. This cluster represents people with high needs and desires in their personal development. In social life, they tend to be more flexible; they like socialising with friends and relatives but maintain privacy by avoiding unnecessary attention. Staycationers in this cluster love to go outside after work or weekends to relieve fatigue and routine. Among other clusters, this segment likes to spend time shopping. They have good knowledge of various brands and are willing to buy well-known brands. During a staycation, they seek a comfortable place for relaxation and tranquillity. Their interest in shopping activity is the primary consideration for a staycation location close to a shopping centre or city centre. The Indulgers shopaholic is a segment with the majority of the 25-34 age group (58.3%) living in South Jakarta, and it is the only cluster with all respondents working as employees. They like staycations in villas/apartments and three stars hotels with close distances from their homes, about 0-15 km (66.7%), so having a more flexible transportation mode compared to other clusters, such as private vehicles (50%), public transportation (25%) and online transportation (25%). The frequency of staycations in this cluster is entirely dominated by staycationers who do staycations 1-6 times per year (91.7%) and duration of 1-2 nights (100%). This cluster primarily consists of young singles and young couples without children (75%), with the lowest income among the four clusters, <15 million per year (91.7%). Therefore, they are spending money carefully and prioritising savings. Therefore, they do not consider staycations as saving benefits (58.3%) and tend to use excess vacation money as savings (60%). This cluster is the largest segment with staycation's purpose of celebrating special days (25%) and has the lowest percentage of travelling alone compared to other clusters (8.3%).

**Cluster 4: Culture and Local Adventurers.** Cluster 4 consisted of 29 respondents representing 22% of the sample, with essential factors of Culture adventurous and Foodie & Local explorer, indicating people who like challenges. However, they also value a quiet and happy life with their family. Staycationers in this cluster like outdoor trips to relieve fatigue due to routine. In addition, they are interested in learning about different cultures and local life. They care about diversity and are comfortable and excited to know new people and their culture. They want to explore their surroundings and the locals on a staycation trip. Their preferred activities are mainly related to local culture and cuisines. Among other clusters, this segment is the least likely to spend time and money shopping, thus having a high sensitivity for discounts. The Culture and local adventurous is the only cluster with representative respondents from all Jakarta regions, with the highest distribution of the young age group (Gen Z) of 18-24 (17.2%). They like staycations in hype non-star hotels to see local life better than other types of accommodation. Although most prefer a staycation distance of no more than 30 km from their residence, they are also willing to travel more than 60km (10.3%). This segment has a staycation frequency of no more than 12 times/year with quite varied lengths of stays: 1-2 nights (89.7%) and 3-4 nights (10.3%). Dominated by

families with children (51.7%) from low to middle-income classes, this cluster is quite generous for a staycation spending of 2-5 million (34.5%) and 11-15 million (6,9%). This segment is the largest segment that relies on friends/relatives' recommendations for a staycation decision. They do a staycation for family togetherness (41.4%) and business/working. They are more likely to travel with a partner/spouse than other clusters (31%).

## DISCUSSION

The findings revealed four clusters of I-Want Everything Staycationers, Independent and Attention Seekers, Indulgent Shopaholics and Culture and Local Adventurers. This study adopted the AIO Model from Plummer (1974), which classifies consumers into different lifestyles based on activities, interests, and opinions. Therefore, the study successfully measures staycationers' activity in Jakarta regarding how they spend their time, what interests are vital for them, self-opinions about themselves and their surroundings, and some essential life achievements. Previous research on lifestyle conducted by James (2014) in the US found 4 (four) segments of staycationers: Socialites who are adventurous eaters, Adventurous eaters, Television/movie buffs, and Culture enthusiasts. This research shows that several primary attractions of staycations, such as culinary, adventurous activities, movies, and culture, have shaped the characteristics of staycationers. In addition to this knowledge, the findings in this study contribute new findings that shopping and local wisdom also become vital attractions for staycationers in choosing their destinations.

The findings also explained each cluster's characteristics based on geographic, demographic, and behavioural segmentation. The geographic profiles of staycationers in Jakarta showed that most staycationers resided in South Jakarta. This is supported by the fact that South Jakarta is the center of hype and has a high level of lifestyle in Jakarta. Related to the demographic profiles, the findings in this research show that staycationers in Jakarta are dominated by millennials and Gen Y cohort groups who are digital natives. Thus, they are familiar with the internet and various mobile applications and usually search for information and book-staying packages online. This aligns with research by Srihadi et al. (2016), who found that the demographic profile shows foreign tourists visiting Jakarta are Gen X and Gen Y, with independent travel patterns and advanced technology in look, book, and pay activities. In addition, the finding about the family cycle of millennials and Gen Y, who are majorly single, added information to the previous research conducted by Yesawich (2010) and James (2014), who identified young families with children as one of the segments frequently doing staycationers.

Related to behaviour segmentations, the findings showed that staycation preferences of Jakarta's staycationers are a maximum distance of 30 km, a length of stay of 1 -2 nights (commonly booked on weekends), and a budget of around 5 million for one staycation trip. These findings added new insights about the consumer behaviour of staycationers in Jakarta that complemented the previous research by the Ministry of Tourism and Creative Economy (2021) about behavioural characteristics of staycationers in Bali. Therefore, research on different provinces in Indonesia could be compared and analysed for a thorough market strategy for staycation activities.

The scientific implications of this study are the contribution to putting a definition on staycation. There are many perceptions of the definition of staycation. A staycation is generally defined as a local travel activity by tourists/residents on a daily trip at or near their homes without travelling abroad (Wong et al., 2021). Tore (2021) defined staycation as travelling locally on a small and intimate scale with family or friends. Purnamasari (2020) stated that a staycation is staying at least one night in a rented place, such as a hotel or a villa near or in the city of residence. Moreover, Li (2022) mentioned that staycationers mainly engage in leisure activities inside the hotels. At the same time, Yesawich (2010) put a minimum stay of one night and approximately 80 km from the place of residence for staycation activities. This study defines staycation as alternative tourism that allows people to have a leisure experience by staying at least one night in a local near-home lodging and enjoying in-house hotel facilities as their main activities.

Managerial implications of this study related to the idea of a staycation, which is still relatively new, so knowledge about the lifestyles, geographic, demographic, and behavioural profiles of staycationers would enable lodging businesses to understand the market better. The findings of this study have provided practical guidance for tourism businesses, particularly lodging businesses, by identifying four segments of staycationers in Jakarta. Therefore, new or improved strategies for the staycation market can be implemented based on the identified characteristics of each segment. Details of the promotion strategies for each segment are explained in the Table 7. In summary, lodging marketers can offer a unique staying product and service tailored based on market needs and preferences while attentively building a more resilient business in the long run through business diversification.

**Table 7. Proposed Promotion Strategies**

| <b>Clusters</b>                          | <b>Potential Staycation Package</b>                                                                                                                                                                                                                                                                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>I-Want Everything Staycationer</b>    | <ul style="list-style-type: none"> <li>• On-site activities such as yoga classes, free bicycle rent, batik workshop</li> <li>• On-site Spa voucher with special discounts for all family members</li> <li>• Free kids meal for in-room dining order</li> <li>• Welcome treats and camping tent gimmicks for children</li> </ul>         |
| <b>Independent and Attention Seekers</b> | <ul style="list-style-type: none"> <li>• Information maps about hidden local gems and iconic places</li> <li>• Thematic dinner package with special rates</li> <li>• Room upgrade with bathtub/jacuzzi or floating breakfast in pool</li> <li>• Free on-site vehicles such as bicycles and scooters</li> </ul>                          |
| <b>Indulgent Shopaholic</b>              | <ul style="list-style-type: none"> <li>• Shopping coupons/vouchers in the nearest shopping center</li> <li>• Special room rates at the special moments such as Jakarta Great Online Sale (JOGS), End Year Midnight Sale</li> <li>• Free shopping bag with unique design</li> <li>• Gathering facility for friends and family</li> </ul> |
| <b>Culture and Local Adventurers</b>     | <ul style="list-style-type: none"> <li>• Walking tour and heritage trail activities to the nearest culinary icon and museum with local guide</li> <li>• Complimentary voucher to the local museum, restaurants and events</li> <li>• Shuttle bus to the culture attractions nearby hotel</li> </ul>                                     |

Source: Own elaboration, 2021

## CONCLUSIONS

This study aimed to determine the staycationers segment in Jakarta, examine the demographic, geographic, and behavioural profiles of staycationers in Jakarta, and assess

the characteristics of each identified segment. This study has identified eight lifestyle factors and four segments of staycationers in Jakarta, namely I-want-everything staycationers, Independent and attention seeker, Shopaholic indulgers and Culture and local adventurous. The four clusters have similar essential factors of Indulgents, showing that respondents doing staycation generally look for relaxing holidays and comfortable destinations. Apart from this similarity, each cluster has unique factors that differentiate one another. The finding highlights the importance of segmentation analysis in understanding existing staycation markets, thus underlying fundamental knowledge for further targeting and positioning strategies.

Several limitations in this study need to be addressed. The major limitation of this study is the adequate number of respondents, which can be improved in future research. Although the current study is based on a small sample of respondents, the finding successfully identifies several representative market segments covering actual situations and market conditions. Since this study was limited to staycationers in Jakarta, the conceptual model developed in this research can be used as a reference for future study and be applied to a broader scope in the Indonesian context, as well as a more advanced study of comparison between different provinces. Finally, a different setting of post-pandemic market research will be insightful in understanding the market development after the border reopening. Further research with more respondents and a broader location scope must be carried out to continuously establish relevant and up-to-date market knowledge within new tourism circumstances in a post-pandemic world.

## REFERENCES

- Agoda. (2021). *Agoda survey reveals people prioritising added perks but less likely to splurge on stays*. <https://www.agoda.com/press/agodaspecialofferssurvey?cid=1844104>
- Antara, M., & Dewi, N. P. A. Y. (2022). *Segmenting, Targeting and Positioning: The Marketing Strategy of Jatiluwih Organic Red Rice, Bali*. Pelawa Sari Denpasar Printing and Publisher.
- Busnawir. (1982). *Penentuan Sampel dalam Penelitian*. LIPI.
- de Bloom, J., Nawijn, J., Geurts, S., Kinnunen, U., & Korpela, K. (2017). Holiday travel, staycations, and subjective well-being. *Journal of Sustainable Tourism*, 25(4), 573–588. <https://doi.org/10.1080/09669582.2016.1229323>
- Fitri, A. N. (2020, November 19). *PHRI: Kerugian industri pariwisata karena pandemi sudah lebih dari Rp 100 triliun*. <https://industri.kontan.co.id/news/phri-kerugian-industri-pariwisata-karena-pandemi-sudah-lebih-dari-rp-100-triliun>
- Füller, J., & Matzler, K. (2008). Customer delight and market segmentation: An application of the three-factor theory of customer satisfaction on life style groups. *Tourism Management*, 29(1), 116–126. <https://doi.org/10.1016/j.tourman.2007.03.021>
- Hair, J. F. (2010). *Multivariate Data Analysis with Readings*. (Vol. 7th). Prentice Hall.
- James, A., Ravichandran, S., Chuang, N.-K., & Bolden, E. (2017). Using Lifestyle Analysis to Develop Lodging Packages for Staycation Travelers: An Exploratory Study. *Journal of Quality Assurance in Hospitality & Tourism*, 18(4), 387–415. <https://doi.org/10.1080/1528008X.2016.1250240>

- Kotler, P., & Keller, K. L. (2017). *Manajemen Pemasaran* (Edisi 12). PT. Indeks.
- Landau, S., Leese, M., Stahl, D., Everitt, B. S., Landau, D. S., & Leese, D. M. (2011). *Cluster Analysis*. John Wiley & Sons, Incorporated. <http://ebookcentral.proquest.com/lib/griffith/detail.action?docID=661789>
- Le, D., & Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: Toward a refined pandemic crisis management framework. *International Journal of Hospitality Management*, 94, 102808. <https://doi.org/10.1016/j.ijhm.2020.102808>
- Lee, S.-H., & Sparks, B. (2007). Cultural influences on travel lifestyle: A comparison of Korean Australians and Koreans in Korea. *Tourism Management*, 28(2), 505–518. <https://doi.org/10.1016/j.tourman.2006.03.003>
- Li, Q. (2022). *Hotel Staycation Motivation: An Application of Q Methodology* [University of Guelph]. <https://hdl.handle.net/10214/26981>
- Lin, Z. (CJ), Wong, I. A., Kou, I. E., & Zhen, X. (Christine). (2021). Inducing wellbeing through staycation programs in the midst of the COVID-19 crisis. *Tourism Management Perspectives*, 40, 100907. <https://doi.org/10.1016/j.tmp.2021.100907>
- Manente, M. (2006). Destination management and economic background: Defining and monitoring local tourist destinations. *Enzo Paci Papers*, 6.
- Mill, R. C., & Morrison, A. M. (2012). *The Tourism System* (Vol. 7th). Kendal Hunt Publisher.
- Ministry of Tourism and Creative Economy of Indonesia. (2021a). *Staycation dan Roadtrip Masih Jadi Wisata Favorit 2021*. <https://pedulicovid19.kemenparekraf.go.id/staycation-dan-roadtrip-masih-jadi-wisata-favorit-2021/>
- Ministry of Tourism and Creative Economy of Indonesia. (2021b). *Tren Pariwisata Indonesia di Tengah Pandemi*. Ministry of Tourism and Creative Economy of Indonesia. <https://kemenparekraf.go.id/ragam-pariwisata/Tren-Pariwisata-Indonesia-di-Tengah-Pandemi>
- Mursalina, M., Masbar, R., & Suriani, S. (2022). Impact of Covid-19 Pandemic on Economic Growth of the Tourism Sector in Indonesia. *International Journal of Quantitative Research and Modeling*, 3(1), 18–28. <https://doi.org/10.46336/ijqrm.v3i1.261>
- Nugrahaeni, P. N. (2003). *Perbedaan Kecenderungan Gaya Hidup Hedonis Pada Remaja Ditinjau dari Lokasi Tempat Tinggal*. Universitas Muhammadiyah Surakarta.
- Papatheodorou, A., Rosselló, J., & Xiao, H. (2010). Global Economic Crisis and Tourism: Consequences and Perspectives. *Journal of Travel Research*, 49(1), 39–45. <https://doi.org/10.1177/0047287509355327>
- Plummer, J. T. (1974). The Concept and Application of Life Style Segmentation. *Journal of Marketing*, 38(1), 33. <https://doi.org/10.2307/1250164>
- Purnamasari, T. (2020, July 17). *Biar Nggak Gagal Paham, Ini Loh Arti Staycation!* <https://www.pegipegi.com/travel/biar-nggak-gagal-paham-ini-loh-arti-staycation/>
- Sadhale, M., & Sathe, S. (2021). *Staycation as a marketing tool survival post covid-19 in fire star hotels in pune city*. <http://localhost:8080/xmlui/handle/123456789/9833>
- Scott, N., & Parfitt, N. (2005). Lifestyle Segmentation in Tourism and Leisure: Imposing Order or Finding It? *Journal of Quality Assurance in Hospitality & Tourism*, 5(2–4), 121–139. [https://doi.org/10.1300/J162v05n02\\_07](https://doi.org/10.1300/J162v05n02_07)
- Seyfi, S., Hall, C. M., & Saarinen, J. (2022). Rethinking sustainable substitution between domestic and international tourism: A policy thought experiment. *Journal of Policy*

- Research in Tourism, Leisure and Events*, 1–15.  
<https://doi.org/10.1080/19407963.2022.2100410>
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312–321.  
<https://doi.org/10.1016/j.jbusres.2020.06.015>
- Southan, J. (2021). *Forget working from home, working from hotels is the next big thing*.  
<https://www.euronews.com/travel/2021/01/30/forget-working-from-home-working-from-hotels-is-the-next-big-thing>
- Srihadi, T. F., Hartoyo, Sukandar, D., & Soehadi, A. W. (2016). Segmentation of the tourism market for Jakarta: Classification of foreign visitors' lifestyle typologies. *Tourism Management Perspectives*, 19, 32–39. <https://doi.org/10.1016/j.tmp.2016.03.005>
- Suryani, T. (2008). *Perilaku Konsumen*. Graha Ilmu.
- Thyne, M., Davies, S., & Nash, R. (2005). A Lifestyle Segmentation Analysis of the Backpacker Market in Scotland: A Case Study of the Scottish Youth Hostel Association. *Journal of Quality Assurance in Hospitality & Tourism*, 5(2–4), 95–119. [https://doi.org/10.1300/J162v05n02\\_06](https://doi.org/10.1300/J162v05n02_06)
- Todd, S., & Lawson, R. (2001). Lifestyle segmentation and museum/gallery visiting behaviour. *International Journal of Nonprofit and Voluntary Sector Marketing*, 6(3), 269–277. <https://doi.org/10.1002/nvsm.152>
- Tore, O. (2021). *Agoda Survey Finds out What People are Looking for in 2021*.  
<https://ftnnews.com/other-news/41051-agoda-survey-finds-out-what-people-are-looking-for-in-2021>
- Yesawich, P. (2010). *Are Staycations Here to Stay?*  
<https://www.worldpropertyjournal.com/us-markets/vacation-leisure-real-estate-1/real-estate-news-peter-yesawich-travel-trends-2010-travel-report-y-partnership-tourism-trends-orlando-theme-parks-disney-world-sea-world-universal-studios-2452.php>.



P-ISSN: 1978-2853  
E-ISSN: 2302-8890

## Matrik: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN

Homepage: <https://ojs.unud.ac.id/index.php/jmbk/index>

Vol. 18 No. 1, Februari (2024), 87-103



### Factors that Influence Electric Vehicle Purchase Intention: an Evidence from Indonesia

Emiliana Indri Eryolanda<sup>1)</sup>, Alim Gunadi Sukanto<sup>2)</sup>, Indah Teasari<sup>3)</sup>,  
Andry Mahyudi<sup>4)</sup>, Ariyadi Yudo Purnomo<sup>5)</sup>, Istijanto<sup>6)</sup>

<sup>1,2,3,4,5,6</sup> School of Business and Economics, Universitas Prasetiya Mulya, Indonesia  
email: eryolanda2@gmail.com



SINTA 2

DOI : <https://doi.org/10.24843/Matrik:JMBK.2024.v18.i01.p07>

#### ABSTRACT

Electric vehicles (EV) are new products that will replace conventional vehicles. Previous studies on factors influencing EVs purchase intention rarely includes the impact of social media factors. This study aims to build a comprehensive model examining factors that influence consumer intention to purchase EVs. Based on the theory of reasoned action and risk-benefit model, this study incorporates social media relevance, vendor trustworthiness, vendor expertise, social influence, and perceptions of EV benefits and risks. Data is collected through online surveys. 295 data were obtained and analyzed by exploratory factor analysis and multiple regression using SPSS. The results show that perceived relevance to social media has the greatest influence on EV purchase intention, followed by perceived benefits and risks, social influence, and vendor expertise, while vendor trustworthiness didn't have a significant impact. This study's result contributes to the knowledge of EV buying factors and offers managerial implications for EV providers' business strategy.

**Keyword:** factor, purchase intention, social media, theory of reasoned action, electric vehicle

#### INTRODUCTION

Electric vehicles (EV) have gained more popularity these recent years. The market of EV in some countries has begun to take shape. However, the EV market in Indonesia is still in its infancy. Based on Gaikindo's report on electric car sales, only 705 units were sold in 2019, consisting of 685 units of hybrid type and 20 units of Plug-in Hybrid Electric Vehicle (AHK Indonesia, 2021). Indonesian Transportation Ministry reported that the country had only total 14,400 EVs with 12,464 electric motorcycles and 1,656 electric cars as of mid-November 2021 while they already had about 15.7 million units of passenger car and 115 million units of motorcycle in total on the road at 2020 (Shofa, 2022). The Indonesian Transportation Ministry reported that the increase in electric vehicles to April 2022 was about 5,400 units, thus total electric vehicles in Indonesia were about 20,000 units (Gunawan, 2022). This shows that the EV population in Indonesia is still very low, but the market interest has increased significantly. The Indonesian government itself has officially announced its roadmap to become a major player in the global EV market through the Minister of Industry Regulation No. 27 of 2020, which stated a plan to have annual local production capacity of more than 0.6 million units of electric cars and 2.45 million units of electric motorcycles by 2030 (AHK Indonesia, 2021).

However, as innovative products often carry both positive and negative consequences, it is necessary to analyze factors that can reduce the potential customer's hesitation to adopt EV technology, hence enabling the acceleration of EV adoption in Indonesia.

As customers nowadays are perceptually and behaviorally more engaged to social media, social media platforms are increasingly being used for marketing and advertising of products and services. In an era where technological advances have changed the nature of interaction, social media are becoming new places where government, people, organizations interact with each other socially, politically, educationally and commercially, leading to the exchange of thoughts, information, products and services (Alalwan, 2018). Social media marketing can even result in electronic word-of-mouth which may be useful for introducing technologically-innovative new products like EV. However, the high cost and time spent on social media advertisement (ads), coupled with very low sales when introducing technologically-innovative new products on the market of EV, makes it important to design social media ads that successfully attracts and engages customers, also motivates them to purchase EV despite of the perceived risk. Thus, social media ads may also play an important role to accelerate EV adoption in Indonesia.

A wide range of studies has been done on examining purchase intention of EV using different variables such as attitudes, subjective norms, behavioral control (Bhutto et al., 2022), social influence, technical factors, socio-economic factors (Miranda & Delgado, 2020), among others. Research related to the online engagement impact on EV purchase intention in the U.S has been conducted by Nguyen & Chaudhuri (2019) but the scope of online engagement discussion was only related to e-WOM volume and sentiment. Other research trying to understand the formation of consumer beliefs when facing new technologies was conducted by Featherman et al. (2021). It tried to explore the relation of belief in vendor trustworthiness & expertise in perception of EV adoption's benefits & risks and its subsequent impact on EV purchase intention in the U.S, and suggested that further research can be done by varying the brand, target market, and presentation of information to explore more about the formation of belief in vendor expertise and trustworthiness, and assessments of the technology adoption's risks and benefits. Meanwhile, limited research conducted in Indonesia related to EV purchase intention examined factors such as sociodemographic, financial, technological (Utami et al., 2020), functionality, emotion, cost of ownership and car identity (Febransyah, 2021). Thus, there has been no research that specifically examines the influence of social media advertisement engagement on the EV products purchase intention in Indonesia, when actually social media advertisement has been proven to influence customers especially for first-time purchase of the products (Bughin et al., 2010). Advertisement in social media has been widely used these days to promote products, however its effectiveness to enhance purchase intention of technologically-innovative new products like EV hasn't been observed. It makes engagement on EV social media ads an interesting and important topic to research.

This study tries to analyze the impact of social media ads engagement on EV purchase intention to gain more insight and enrich understanding of EV purchase intention driving factors that has been found by Featherman et al. (2021). The research question that will be answered by this research is "How are the effects of social media ads (measured by perceived relevance) along with perceived risk, perceived benefit, vendor expertise, vendor trustworthiness and social influence on consumer purchase intention of EVs in Indonesia?" It aims to examine the effect of social media ads (measured by perceived relevance) on EV purchase intention in Indonesia, along with other factors that influence the formation of consumer beliefs when facing

new technologies, such as perceived risk, perceived benefit, vendor trustworthiness, vendor expertise and social influence. This study is important because it offers empirical insights for EV marketers to adjust their digital marketing strategy especially on social media advertising to develop meaningful communication that makes customers more engaged, enhances consumer belief in EV adoption and in turn, enhances EV purchase intention. In addition, for EV manufacturers, this research can be taken into consideration for their efforts to continue to develop their brand so that they become the choice of Indonesian consumers. By supporting EV manufacturers and marketers, this research will also contribute to the achievement of Indonesian government targets in the acceleration of EV adoption in Indonesia.

To achieve the objective of this study, the main theoretical framework underlying this research is theory of reasoned action (TRA), because it has been widely applied in innovative technology adoption research thus enabling easy comparison of the research result (Lai, 2017). In addition, it has a long history of application in various field, providing a robust foundation of methodological approach and empirical support. Compared to the theory of technology acceptance model (TAM) which only focus on perceived usefulness and perceived ease of use while ignoring the social influence, TAM doesn't address the intrinsic motivations, so its application in a customer setting, where technologies are adopted not just for completing tasks but also for meeting emotional needs might be limited (Taherdoost, 2018). Meanwhile, compared to the theory of planned behaviour (TPB) which incorporates perceived behavioral control on top of attitude and subjective norm, the theory of reasoned action (TRA) is simpler as it focuses on 2 primary determinants of behavioral intention (attitude and subjective norm) which make it easier to be applied, measured, and communicated, especially where the control over behavior is not an issue or the behavior is under volitional control (Madden et al., 1992).

According to Fishbein & Ajzen (1975), theory of reasoned action is used to understand and predict human behavior by examining the underlying motivation of performing an action (which in this study refers to the actual purchase of EV products). It states that the direct determinant of an actual behavior is the intention to perform it. The intention itself is influenced by attitudes (the way individuals feel towards a particular behavior) and subjective norms (social pressure from relevant groups to perform / not perform the behavior, which in this study is manifested as a social influence variable). Meanwhile, attitude towards a particular behavior is influenced by the evaluation of potential outcomes (positive / negative outcome) and strength of behavioral beliefs regarding the outcomes (whether the outcome is probable).

By referring to the theory of reasoned action, to get people to actually purchase EV products, it's essential to understand factors that influence their purchase intention, which are factors that represent or affect the person's attitude and subjective norm of EV purchase. Regarding this matter, the research of Abzari et al. (2014) showed that marketing communication through social media influences brand attitude and has a significant impact on intention to purchase. Hence, engagement on social media marketing may affect intention to purchase. Consumer engagement itself, according to Watkins et al. (1991) possess similarities with relevance in structure because companies also try to more engaged future customers by enhancing their relevance in consumers' minds. Thus, perceived relevance can be used as operational variables that represent social media ads engagement in this research. It has also been proved to have significant influence towards purchase intention at the research of Alalwan (2018).

In addition, the importance of understanding the drivers of attitude towards purchase behavior also encourages the use of the risk-benefit model as the second theory that underlies

this research. According to the risk-benefit model, a technology acceptance depends on the customer's perception / belief of the risk and benefit (Bruhn, 2007). As perceived risk can be considered as potential negative consequences, perceived benefits can be considered as potential positive consequences of adopting the new technology (M. Featherman et al., 2021). Both may influence customer's belief and their subsequent attitude towards EV purchase.

Sweeney et al. (1999) defined perceived risk as the customer's subjective expectations of a loss. Mitra et al. (1999) found that risks even delay purchase decisions. In the case of EV adoption in the U.S., Featherman et al. (2021) also demonstrated that perceived risk reduces purchase intention, because EV adoption inherent some risks as it's radically innovative technology which requires large expense (for the product purchase and possible home infrastructure upgrades), and also behavioral change. However, customers in different country may have their own unique traits, attitude and behavior (Jarrett, 2017).

Meanwhile, perceived benefit can be defined as the customer's subjective expectations of benefits obtained from the product consumption experience. It has a significant impact on customer's intention to purchase certain products (Kim et al., 2008). Porter & Donthu (2006) stated that customers will likely overcome difficulties of adopting new technology if there are substantive perceived benefits.

In addition, Featherman et al. (2021) found that vendor trustworthiness significantly decreases perceived risk while also increases perceived benefit of EV adoption, thus increases EV purchase intention in the U.S. Gefen (2002) defined vendor trustworthiness as belief about reputation, credibility and honesty of a particular vendor in conducting business. It's an especially important determinant of purchase intention when involving risky product purchase.

Belief of vendor expertise also becoming a purchase decision criterion (Lafferty et al., 2002) as customers prefer to engage with more knowledgeable and experienced vendors (Laura Yale & Gilly, 1995), especially when involving expensive and innovative-related purchases.

Belief of vendor expertise refers to customer's belief about a vendor's knowledge, skill, competency, and experience. Customers proactively review vendor competency, practices, policies, and reputation to be used as decision criterias (Ohanian, 1990).

Another important factor for purchase decision of a radically-innovative product like EV is social influence. Social influence is a manifestation of subjective norm in the theory of reasoned action (M. Featherman et al., 2021). Bearden & Rose (1990) defined social influence as a process where customers consider their important referents' opinions for important purchases, and often make choices that others will agree with. Research of Gunawan & Huarng (2015) reported that social influence has a positive influence on purchase intention.

In addition to the factors influencing purchase intention mentioned above, perceived relevance is also believed to play a significant role. Perceived relevance is the degree to which customers perceive an ads related to them or their values / may contribute to the achievement of personal goals in some way (Zhu & Chang, 2016). Alalwan (2018) stated that customers are likely to purchase products presented in social media ads if they feel the ads are related to their personal preferences and interests. Pavlou & Stewart (2000) also demonstrated that personalization, as an effort to increase perceived relevance, has a positive impact on trust, purchase intention and satisfaction.

Based on the theoretical foundation, proposed conceptual framework, and literature above, the following hypothesis are proposed:

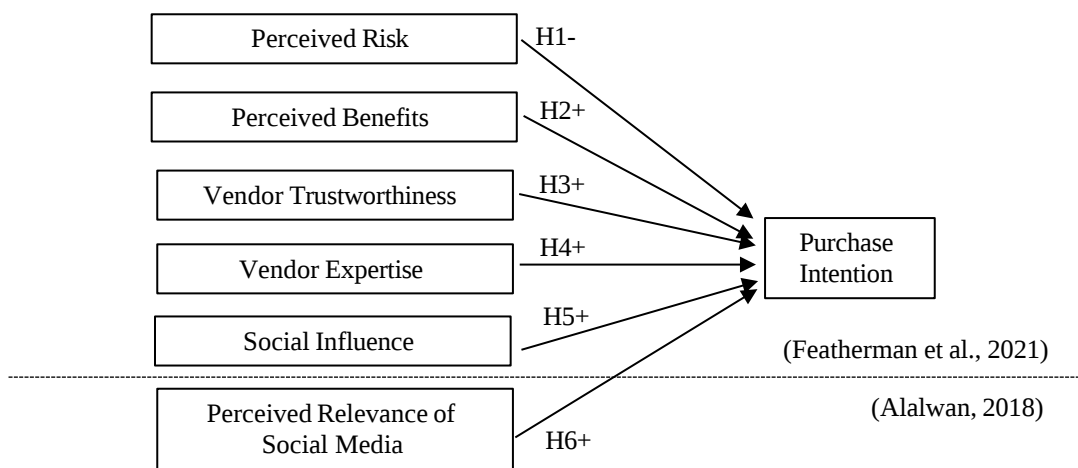
H1: Perceived risk influences the purchase intention of EVs negatively.

H2: Perceived benefit influences the purchase intention of EVs positively.

- H3: Belief of vendor trustworthiness influences the purchase intention of EVs positively.  
 H4: Belief of vendor expertise influences the purchase intention of EVs positively.  
 H5: Social influence has a positive impact on the purchase intention of EVs.  
 H6: Perceived relevance of social media ads has a positive impact on the purchase intention of EVs.

## METHOD

To achieve the objective of this study, by referring to the theory of reasoned action and risk-benefit model, the conceptual research model was developed (Figure 1). This study adopts the research model of Alalwan (2018) which used perceived relevance of social media ads to predict purchase intention as operational variables of social media ads engagement. This study also adopted the research model of Featherman et al. (2021) which used perceived benefit, perceived risk, vendor trustworthiness, vendor expertise and social influence as antecedents of EV purchase intention. Each construct was tested by using items adapted from previous studies and adjusted to electric cars context in Indonesian language. The measurement items for perceived relevance were adopted from Zeng et al. (2009), which were also used by Alalwan (2018). Perceived benefit was measured using items adopted from Forsythe et al. (2006), while perceived risk was measured using items from Featherman & Hajli (2016). Vendor expertise and trustworthiness measurement items were adapted from Featherman et al. (2010), Newell & Goldsmith (2001), and Ohanian (1990). All of the measurement items for perceived benefit, perceived risk, vendor trustworthiness, and vendor expertise were also used and modified from Featherman et al. (2021). While social influence's measurement items were adopted from Fishbein & Ajzen (1975), purchase intention's measurement items were adopted from both Featherman et al. (2021) and Alalwan (2018). A 7-point Likert scale was used to measure all of the main questionnaire items, from 1 (strongly disagree) to 7 (strongly agree).



**Figure 1. Research Model**

Source: Featherman et al. (2021) & Alalwan (2018)

The data was collected through convenience sampling (non-probability sampling, from people who were available and willing to take part) by online questionnaire survey. Before

conducting the main survey, a pilot study with 53 respondents was conducted, and it reported that the language used was clear. At the main survey, the sample was screened to ensure that they know about electric car existence in Indonesia and own minimum an account in social media platforms. Preliminary analysis consists of Kaiser-Mayer-Olkin and Bartlett's Test were conducted to know sample adequacy for conducting factor analysis. Exploratory Factor Analysis (EFA) was then conducted to ensure the factor's convergence and adequate level of validity is achieved (factor loading  $> 0.5$ ), also Cronbach's alpha test to ensure variable's reliability (Cronbach's alpha  $> 0.7$ ). After ensuring the questionnaire items were valid and reliable, Multiple Regression Analysis was conducted to examine the impact of independent variables (perceived relevance of social media, perceived risk, perceived benefit, vendor trustworthiness, vendor expertise, and social influence) on dependent variables (EV purchase intention) at 0.05 significance level.

## RESULT AND DISCUSSIONS

The respondents who participated in this study should know about electric vehicles existence in Indonesia and own minimum an account in social media platforms. Out of 315 respondents who filled out the questionnaire, 20 responses were categorized as invalid data. Therefore, 20 data were omitted (resulting 295 data) and then analyzed by using SPSS. The respondent's profile was summarized in Table 1.

**Table 1. Respondents' Profile**

| Information                                            |                               | Percentage |
|--------------------------------------------------------|-------------------------------|------------|
| Gender                                                 | Male                          | 73%        |
|                                                        | Female                        | 27%        |
| Age                                                    | 18-34 years old               | 31.9%      |
|                                                        | 35-44 years old               | 40.7%      |
|                                                        | 45-59 years old               | 27.5%      |
| Education                                              | High school                   | 15.6%      |
|                                                        | Diploma                       | 5.4%       |
|                                                        | Bachelor                      | 58%        |
|                                                        | Master                        | 18.6%      |
|                                                        | Doctoral                      | 2.4%       |
| Monthly expenses (excluding primary & secondary needs) | < Rp 2.000.000                | 21.4%      |
|                                                        | Rp 2.000.000 - Rp 5.999.999   | 38%        |
|                                                        | Rp 6.000.000 - Rp 9.999.999   | 14.2%      |
|                                                        | Rp 10.000.000 – Rp 19.999.999 | 13.9%      |
|                                                        | > Rp 20.000.000               | 12.5%      |
| Account ownership in social media platform             | Facebook                      | 80.3%      |
|                                                        | Instagram                     | 85.8%      |
|                                                        | Twitter                       | 43.4%      |
| Preferred vendor for EV                                | Hyundai                       | 36.9%      |
|                                                        | Nissan                        | 10.2%      |
|                                                        | Tesla                         | 36.6%      |
|                                                        | Honda                         | 37.6%      |
|                                                        | Toyota                        | 45.4%      |
|                                                        | Wuling                        | 10.8%      |
|                                                        | BMW                           | 15.3%      |
|                                                        | Mitsubishi                    | 13.9%      |
|                                                        | Chevrolet                     | 5.4%       |

Source: Data analysis result using SPSS, 2022

**Table 2. Validity and Reliability Test Result**

| <b>Variables</b>                                                |      | <b>Instruments</b>                                                                                                                              | <b>Factor Loading</b> |
|-----------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Perceived Risk<br>(Cronbach's Alpha 0.752)                      | PR1  | I may sometimes forget to charge my EV and then I would lose time having to find recharging stations that take at least an hour for a recharge. | 0.634                 |
|                                                                 | PR2  | There will be hidden costs with owning an EV.                                                                                                   | 0.714                 |
|                                                                 | PR3  | Driving outside of my town with my EV would add stress to my life if I have difficulty recharging (anxiety).                                    | 0.733                 |
|                                                                 | PR4  | Because of the advanced GPS and computer system, my personal driving information may no longer be private.                                      | 0.726                 |
|                                                                 | PR5  | EV price is expensive even after tax rebates, so there is the risk of losing money if it does not last many years.                              | 0.704                 |
| Perceived Benefit<br>(Cronbach's Alpha 0.686)                   | PB1  | A benefit from buying an EV would be the pride & satisfaction that I contribute to improve environment.                                         | 0.723                 |
|                                                                 | PB2  | I'd save my time by never again waiting for oil change.                                                                                         | 0.635                 |
|                                                                 | PB3  | If I purchase an EV and was the driver, my friends and I could share a fun, innovative new lifestyle together.                                  | 0.670                 |
| Vendor Trustworthiness<br>(Cronbach's Alpha 0.933)              | TR1  | The existing electric car vendor that I like is honest.                                                                                         | 0.748                 |
|                                                                 | TR2  | The existing electric car vendor that I like is reliable.                                                                                       | 0.780                 |
|                                                                 | TR3  | The existing electric car vendor that I like is sincere.                                                                                        | 0.785                 |
|                                                                 | TR4  | The existing electric car vendor that I like is trustworthy.                                                                                    | 0.740                 |
| Vendor Expertise<br>(Cronbach's Alpha 0.952)                    | EXP1 | The existing electric car vendor that I like is an expert.                                                                                      | 0.795                 |
|                                                                 | EXP2 | The existing electric car vendor that I like is knowledgeable.                                                                                  | 0.809                 |
|                                                                 | EXP3 | The existing electric car vendor that I like is innovative.                                                                                     | 0.818                 |
|                                                                 | EXP4 | The existing electric car vendor that I like has genius engineering.                                                                            | 0.770                 |
|                                                                 | EXP5 | The existing electric car vendor that I like is qualified.                                                                                      | 0.787                 |
|                                                                 | EXP6 | The existing electric car vendor that I like is skilled.                                                                                        | 0.770                 |
| Social Influence<br>(Cronbach's Alpha 0.763)                    | SI1  | I would discuss an EV purchasing decision with my parents or elders to seek their advice and approval.                                          | 0.772                 |
|                                                                 | SI2  | I would discuss an EV purchasing decision with important friends to seek their advice and approval.                                             | 0.790                 |
|                                                                 | SI3  | People who are important to me, would think that I should choose an EV for my next automobile.                                                  | 0.536                 |
| Perceived Relevance of social media<br>(Cronbach's Alpha 0.967) | RLV1 | Social media advertising of EV is relevant to me                                                                                                | 0.749                 |
|                                                                 | RLV2 | Social media advertising of EV is important to me.                                                                                              | 0.819                 |
|                                                                 | RLV3 | Social media advertising of EV means a lot to me.                                                                                               | 0.832                 |
|                                                                 | RLV4 | Social media advertising of EV fits to my interest.                                                                                             | 0.832                 |
|                                                                 | RLV5 | Social media advertising of EV fits to my preferences.                                                                                          | 0.816                 |
|                                                                 | RLV6 | Overall, I think social media advertising of EV fits me.                                                                                        | 0.790                 |
| Purchase Intention<br>(Cronbach's Alpha 0.947)                  | PI1  | I would be willing to buy an EV.                                                                                                                | 0.704                 |
|                                                                 | PI2  | I would recommend EVs to friends or relatives.                                                                                                  | 0.706                 |
|                                                                 | PI3  | I am already comfortable with EVs and have decided that owning an EV is in my future.                                                           | 0.644                 |
|                                                                 | PI4  | I will buy EV that is advertised on social media.                                                                                               | 0.799                 |
|                                                                 | PI5  | I desire to buy EV promoted in on social media ads.                                                                                             | 0.761                 |
|                                                                 | PI6  | I'm likely to buy EV that is promoted on social media.                                                                                          | 0.741                 |
|                                                                 | PI7  | I plan to purchase EV that is promoted on social media.                                                                                         | 0.735                 |

Source: Data analysis result using SPSS, 2022

Based on Table 1, the ratio of male and female respondents in this study was less balanced. However, based on Bannister et al. (2013) gender doesn't influence customer's attitude to the

purchase intention of products advertised in social media ads. In terms of age, the majority was from the age group of 35-44 years old (40.7%). Meanwhile, the respondents' educational level varies, from mostly bachelor degree (58%) and master degree (18.6%), which shows that the majority of respondents have a good educational level. As for expenses, the majority of respondents spend more than Rp 2.000.000/month for non-primary and non-secondary needs, which infers that the majority of respondents were from middle and upper economic class (according to the Indonesian Ministry of Finance (2015), the middle-class income society has income starting from Rp 2.600.000 – Rp 6.000.000). In terms of account ownership in social media platforms, most of the respondents have an Instagram account (85.8% of respondents) and Facebook (80.4% respondents), but only 43.4% of respondents have an account on Twitter. Lastly, the order of preferred electric car vendors from the highest to lowest is Toyota (45.4%), Honda (37.6%), Hyundai (36.9%), Tesla (36.6%), BMW (15.3%), Mitsubishi (13.9%), Wuling (10.8%), Nissan (10.2%), and Chevrolet (5.4%).

The Kaiser-Mayer-Olkin measure was found to be 0.944 (above the accepted value which is 0.5), indicating there was sufficient data for factor analysis. Barlett's test of sphericity was also conducted to check whether there was redundancy between variables, by testing the null hypothesis that the original correlation matrix is an identity matrix. The significance of Barlett's test was found  $p < 0.001$  (significant, below 0.05), which indicated that the correlation matrix is significantly different from an identity matrix. Then, factor analysis was conducted to ensure factor's convergence and validity (factor loading  $> 0.5$ ), also variable's reliability (Cronbach's alpha  $> 0.7$ ). Factor analysis results are shown in Table 2.

**Table 3. ANOVA Result**

|                                                                                                        | Model      | Sum of Squares | Df  | Mean Square | F      | Sig. |
|--------------------------------------------------------------------------------------------------------|------------|----------------|-----|-------------|--------|------|
| 1                                                                                                      | Regression | 226.408        | 6   | 37.735      | 84.496 | .000 |
|                                                                                                        | Residual   | 128.616        | 288 | .447        |        |      |
|                                                                                                        | Total      | 355.024        | 294 |             |        |      |
| a. Dependent Variable: Purchase_Intention                                                              |            |                |     |             |        |      |
| b. Predictors: (Constant), PRelevance, PRisk, Social_Influence, PBenefit, VExpertise, VTrustworthiness |            |                |     |             |        |      |

Source: Data analysis result using SPSS, 2022

The model found from multiple regression analysis was statistically significant with  $p < 0.001$  (Table 3). Based on Adjusted  $R^2$ , variables of perceived risk, perceived benefit, vendor trustworthiness, vendor expertise, social influence and perceived relevance were able to explain 63% of the variance of EV purchase intention in Indonesia (Table 4). Autocorrelation was also tested using Durbin-Watson and the value found was 1.970. As the Durbin-Watson value was almost 2, thus there was no autocorrelation in the model.

**Table 4. Summary of the Regression Model**

| Model                                                                                                  | R     | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|--------------------------------------------------------------------------------------------------------|-------|----------|-------------------|----------------------------|---------------|
| 1                                                                                                      | 0.799 | 0.638    | 0.630             | 0.66827                    | 1.970         |
| a. Predictors: (Constant), PRelevance, PRisk, Social_Influence, PBenefit, VExpertise, VTrustworthiness |       |          |                   |                            |               |
| b. Dependent Variable: Purchase_Intention                                                              |       |          |                   |                            |               |

Source: Data analysis result using SPSS, 2022

**Table 5. Multiple Regression Analysis Result**

| Model                   | Standardized Coefficients | t      | Sig.  | Collinearity Statistics |       |
|-------------------------|---------------------------|--------|-------|-------------------------|-------|
|                         | Beta                      |        |       | Tolerance               | VIF   |
| 1 (Constant)            |                           | 2.564  | 0.011 |                         |       |
| PRisk                   | -0.096                    | -2.659 | 0.008 | 0.961                   | 1.040 |
| PBenefit                | 0.209                     | 4.963  | 0.000 | 0.708                   | 1.412 |
| VTrustworthiness        | 0.028                     | 0.526  | 0.599 | 0.459                   | 2.179 |
| VExpertise              | 0.143                     | 2.592  | 0.010 | 0.412                   | 2.427 |
| Social_Influence        | 0.192                     | 4.356  | 0.000 | 0.644                   | 1.552 |
| PRelevance of soc media | 0.428                     | 8.434  | 0.000 | 0.487                   | 2.051 |

Source: Data analysis result using SPSS, 2022

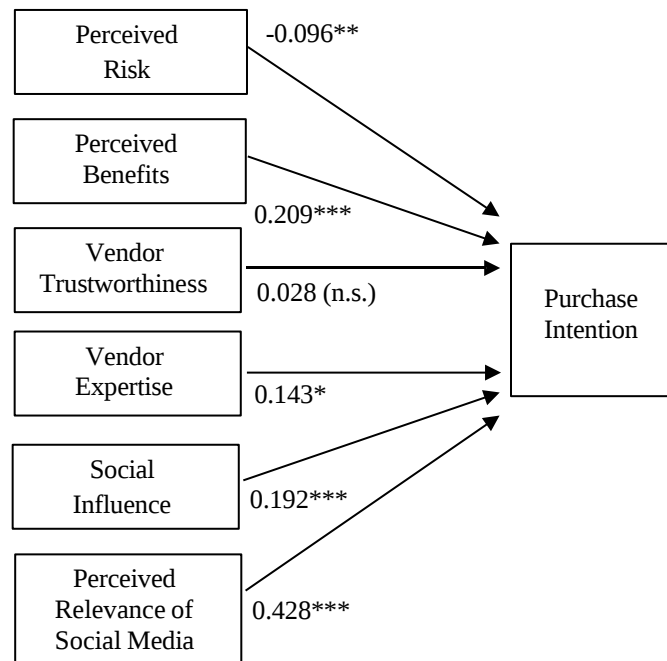
Multicollinearity was then tested using tolerance value and variance inflation factor (VIF). No multicollinearity will be indicated by a tolerance value of 0.1 or higher (Arrenberg, 2020), and VIF less than 3. Based on the result (Table 5), it was found that no multicollinearity problem exists in this study.

This study was conducted with the intention of examining social media ads engagement (which is measured by perceived relevance) that along with other factors which influence customer beliefs formation when facing new technologies (perceived risk, perceived benefit, vendor trustworthiness, vendor expertise, social influence) could shape the customer's purchase intention. Based on the theory of reasoned action, it's essential to understand factors that influence purchase intention to get people to actually purchase certain products (Fishbein & Ajzen, 1975), which in this study refers to factors that represent or affect the person's attitude and subjective norm of EV purchase. Social media platform as the new places where people, organizations, and governments interact with each other socially, politically, educationally and commercially, is believed to be useful for introducing technologically-innovative new products like electric car, due to its role in leading the exchange of thoughts, information, products and services (Alalwan, 2018). However, as promoting in social media ads requires a high cost and time, there's a concern whether social media ads really attract customers. The hypothesis test result of this study is shown in Table 6 and Figure 2.

**Table 6. Hypothesis Test Result**

| Hypothesis                                                                                          | Parameter Estimates | p-values | Status |
|-----------------------------------------------------------------------------------------------------|---------------------|----------|--------|
| H1: Perceived risk influences the purchase intention of EVs negatively.                             | -0.096              | 0.008    | Accept |
| H2: Perceived benefit influences the purchase intention of EVs positively.                          | 0.209               | 0.000    | Accept |
| H3: Belief of vendor trustworthiness influences the purchase intention of EVs positively            | 0.028               | 0.599    | Reject |
| H4: Belief of vendor expertise influences the purchase intention of EVs positively.                 | 0.143               | 0.010    | Accept |
| H5: Social influence has a positive impact on the purchase intention of EVs.                        | 0.192               | 0.000    | Accept |
| H6: Perceived relevance of social media ads has a positive impact on the purchase intention of EVs. | 0.428               | 0.000    | Accept |

Source: Data analysis result using SPSS, 2022



**Figure 2. Research Finding**

Source: Data analysis result using SPSS, 2022

Notes: n.s.: not significant; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

The results show support to the theory of reasoned action. Perceived risk, perceived benefit, belief of vendor expertise and perceived relevance of social media ads as factors influencing customer's belief and their subsequent attitude towards EV purchase is found to be significantly influencing EV purchase intention. Social influence which is a manifestation of subjective norm in the theory of reasoned action also show a significant impact to EV purchase intention. Only the belief of vendor trustworthiness which doesn't influence EV purchase intention significantly because it doesn't impact the purchase intention directly.

### Perceived risk

The perceived risks associated with EV adoption measured in this study was basically related to functional risk (difficulty in finding charging station), financial risk (hidden cost and depreciation), physical risk (security of personal information) and psychological risk (anxiety).

Based on the regression result, customer's purchase intention of electric car in Indonesia can be predicted by the perceived risk of EV adoption, as the p-value was found significant ( $p = 0.008$ ) at 0.05 level, with the effect of perceived risk demonstrating negative influence to purchase intention ( $\beta = -0.096$ ). It means that as perceived risk of adopting electric cars increases, customer's purchase intention towards electric cars decreases. Thus, H1 is accepted.

Perceived risks exist as there are uncertainties of the final outcome and consequences, which are likely to be undesirable. It relates to potential losses in various dimensions, such as performance, physical, financial, psychological, social and time risk (Dowling, 1986). The perceived risks of adapting a new technology leads to negative attitudes toward it, which causes individuals to be reluctant to adapt it (Ram & Sheth, 1989). These perceived risks in turn delay purchase decisions (Mitra et al., 1999), thus resulting in negative significant influence to EV purchase intention.

In order to be successful in accelerating EV adoption, companies in the EV industry in Indonesia should try to minimize customer's perceived risk by winning customer's confidence. Bhukya & Singh (2015) suggested that companies can focus on promoting the product performance to minimize functional risk, positioning product according to price-quality association to minimize perceived financial risk, educating customer of the product quality to minimize physical risk, and adopting better customer relationship management while providing better service to minimize psychological risks. Thus, in terms of marketing efforts, companies in the EV industry in Indonesia should promote more on the performance of the electric cars, such as possible mileage traveled in different traffic conditions to minimize the perceived functional risk. They should also align their market positioning better according to price-quality association while also considering the purchasing power of their targeted market to minimize perceived financial risk. Meanwhile, to minimize perceived physical risk, companies can educate customers of the product quality such as the security system they used in the product (to ensure personal information security). Companies can also convince customers by promoting better service that they provide, also educating customers of the government's support towards EV products (government plan related to national EV adoption target and benefit offered for adopting EV) to minimize psychological risks. In addition, Featherman et al. (2021) also found that customer's belief of vendor trustworthiness and expertise reduce customer's perceived risk, thus brand image should also be enhanced to reflect company's trustworthiness and expertise, by communicating company's skill and expertise further. Lastly, aside from marketing efforts, more importantly, companies also need to innovate EV products further to address customer's concern operationally, thus further minimize customer's functional, financial, physical and psychological risks.

#### **Perceived benefit**

Customer's purchase intention of electric cars in Indonesia can also be predicted by the perceived benefit of EV adoption, as the p-value was found significant ( $p = 0.000$ ) at 0.05 level. Perceived benefit was found to have a positive impact on the purchase intention ( $\beta = 0.209$ ). It means that as perceived benefit increases, customer's purchase intentions towards electric cars also increase. Therefore, H2 is accepted. This result is in accordance with the research of Schuitema et al. (2013) which demonstrated that customers' perceived instrumental (functionality of the new technology), hedonic (emotional experience such as pleasure) and symbolic (sense of self / social identity from owning a new technology) attributes have substantive impact on the intention to purchase EV products. As such, companies in the EV industry in Indonesia are encouraged to communicate more about EV benefits through their ads, such as the benefits associated with the product, benefits offered by the company, and also benefits offered by the government, covering the 3 attributes (instrumental, hedonic and symbolic). The benefits stated in the ads may also be customized according to the targeted market to enhance audience's engagement and generate purchase intention.

#### **Vendor trustworthiness**

Belief of vendor trustworthiness' influence to EV purchase intention was found to be positive but insignificant ( $\beta = 0.028$ ,  $p = 0.599$ ) at 0.05, thus it can't be used to predict EV purchase intention in Indonesia. Therefore, H3 is rejected. This result is different from the research result of Featherman et al. (2021) which demonstrated a positive significant influence of vendor trustworthiness towards EV purchase intention in the U.S, because reliable vendors were believed as being less risky, and customers are more inclined to purchase risky products from trustworthy vendors. A possible reason for the differences in trustworthiness significance

is that the vendors used in this study are relatively new in the EVs operation. Even though the vendors have operated for years in conventional vehicle, Indonesian consumers still do not know their performance in EVs.

Customers already feel that the vendors are reliable in conventional cars, but not in EVs as EVs are considered new in Indonesia. In addition, many infrastructures such as charging stations or EV repair shops are still limited provided by the vendors. This makes the customers have limited trust for EV. In addition, Lien et al. (2015) found that trustworthiness doesn't impact purchase intention directly. Instead, trustworthiness has a positive indirect impact on purchase intention, by being a mediator which enhances customers' perceived value or benefit. As such, vendors in the EV industry in Indonesia are encouraged to improve customer's belief of vendor trustworthiness.

#### **Vendor expertise**

Based on the regression result, the customer's purchase intention of electric cars in Indonesia can be predicted by the customer's belief of the vendor's expertise, as the p-value was significant ( $p = 0.010$ ) at 0.05 level. Customer's belief of the vendor expertise was found to influence customer's purchase intention in a positive way ( $\beta = 0.143$ ). It means that the more customers believe in the EV vendor expertise, the more likely they intend to purchase the EV product. Therefore, H4 is accepted. This result is in accordance with the research result of Aaker et al. (2012) which demonstrated that consumers desire products from brands they perceive as highly competent brands. The belief of high competence in a particular brand enhances consumer confidence / positive evaluation of the brand's product quality and performance, hence advancing brand trust and intention to purchase the product (Xue et al., 2020). As such, companies in the EV industry in Indonesia are suggested to convince customers by increasing brand image through communication about their skill and expertise especially in EV production.

#### **Social influence**

The positive effect of social influence to EV purchase intention in Indonesia was found to be significant ( $\beta = 0.192$ ,  $p = 0.000$  at 0.05). Therefore, H5 is accepted. It means that Indonesian customers ask for opinion and approval from references / important people for EV purchase decisions. According to AFS (2022), Indonesian people tend to ask opinion from parents or other important persons as a form of respects as they're considered to have more experiences in life, not as a form of dependency. The Cultural Atlas (2022) also stated that conservative conduct is the norm in Indonesian people as they don't want to risk losing face in their society by doing something inappropriate, so they usually act with restraint to protect their self-worth and peer perception. This result is in line with the research result of Featherman et al. (2021) which demonstrated that social influence has a positive significant impact on EV purchase intention in the U.S, especially on younger customers who were influenced by parents, elders and important friends. As such, companies in the EV industry in Indonesia are encouraged to attract not only the potential EV user customer but also attract those people who being their 'influencer' and 'decision maker' in their EV purchase decision making.

#### **Perceived relevance**

Customer's perceived relevance to social media ads of EV products was found to significantly affect EV purchase intention in Indonesia, as the p-value was found significant ( $p = 0.000$ ) at 0.05 level. Perceived relevance positively influences the purchase intention ( $\beta = 0.428$ ), and it has the largest value of coefficient in this model, which indicates that it is the most influencing factor affecting EV purchase intention. Therefore, H7 is accepted. This result

implies that customers tend to purchase EV products advertised in social media ads the more they feel the social media ads related to their own personal goals, values, preferences, and interest (Zhu & Chang, 2016). This result is also in accordance with the result of Alalwan (2018) that demonstrated a positive significant influence of perceived relevance to customer's purchase intention in Jordan. Hence, companies in the EV industry in Indonesia need to try to engage the potential customers by enhancing relevance in consumers' minds, as suggested by Watkins et al. (1991). Pavlou & Stewart (2000) suggested that enhancing relevance can be done by personalization of ads. Zhu & Chang (2016) further explained that companies should customize their ads to their targeted customer's lifestyle, needs, characteristics and interests to be more capable in delivering their message.

## CONCLUSION

This research examined the effect of social media ads engagement on electric car purchase intention in Indonesia, along with other factors that influence customer beliefs formation when facing new technologies (perceived risks, perceived benefits, vendor trustworthiness, vendor expertise, social influence). By using multiple regression analysis, it was found that customer's perceived relevance towards social media ads has the greatest effect to EV purchase intention in Indonesia, followed by perceived benefit, social influence and beliefs of vendor expertise, which also significantly influence purchase intention in a positive way. Perceived risk also significantly influences EV purchase intention. Meanwhile, vendor trustworthiness doesn't significantly influence EV purchase intention.

As such, EV practitioners in Indonesia are very encouraged to enhance EV relevance in consumers' minds through ads personalization according to target market's characteristics, preferences and interest. Companies in the EV industry are also encouraged to communicate more about EV benefits through their ads (benefits associated with the product, benefits offered by the company, and also benefits offered by the government), and try to attract not only the potential EV user customer but also attract their 'influencer' and 'decision maker' in purchasing EV products. Companies are also encouraged to increase their brand image through the communication of their skill and expertise in terms of EV production. Customer's belief of vendor expertise will reduce the perceived risks, however, companies are suggested to further reduce it through several marketing and operational efforts.

Although this study has provided a new insight of EV purchase intention driving factors in Indonesia related to EV social media ads, this study had some limitations. Firstly, this study didn't examine the effect of demography (e.g: gender, age, education, income), customer's personality traits (e.g: generational personality differences) and customer's characteristics in technology adoption (innovator, early adopter, early majority, late majority, laggard), which may also impact customers' formation of attitude and behavioral intention towards EV purchase as a green and radically-innovative product. Therefore, future research can be done by addressing these factors in the research model. This study also only examined the purchase intention of electric car products in general. As different types of electric vehicle products (e.g: electric motorcycle) may have different perceived benefits and risks, this study result couldn't be generalized into other electric vehicle products, thus future research is suggested to apply this model to other types of electric vehicle. Future research can also examine the purchase intention of various types of electric cars (Battery Electric Vehicle, Hybrid Electric Vehicle, Plug-in Hybrid Electric vehicle, and Fuel Cell Electric Vehicle). This study also only applied a

quantitative approach in examining the driving factors of EV purchase intention in Indonesia. Further research with a qualitative approach can be done to discover more about factors that drive customer's perceived relevance on EV ads, customer's expectations of EV product's value proposition, and Indonesian customer decision making process of purchasing risky products, to be able to better align company's marketing strategy in increasing customer's purchase intention. In addition, this study only used regression method to examine the relationships between the variables in such a complex model. Future research is suggested to use a more robust analytical methods such as covariance based structural models. Lastly, this study used convenience sampling for sample selection which may have limitation in the representativeness of the population. As such, future research is suggested to use sampling techniques that can better improve the representativeness of the population.

## REFERENCES

- Aaker, J. L., Garbinsky, E. N., & Vohs, K. D. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the "golden quadrant." *Journal of Consumer Psychology*, 22(2), 191–194. <https://doi.org/10.1016/j.jcps.2011.11.012>
- Abzari, M., Ghassemi, R. A., & Vosta, L. N. (2014). Analysing the effect of social media on brand attitude and purchase intention: the case of Iran Khodro Company. *Procedia - Social and Behavioral Sciences*, 143, 822–826. <https://doi.org/10.1016/j.sbspro.2014.07.483>
- AFS. (2022). *Exploring Indonesian culture*. <https://www.afsusa.org/countries/indonesia/#afs-nav-food>
- AHK Indonesien. (2021, December 1). *Indonesian electric vehicles industry development gains momentum*. <https://indonesien.ahk.de/en/infocenter/news/news-details/indonesian-electric-vehicles-industry-development-gains-momentum>
- Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65–77. <https://doi.org/10.1016/j.ijinfomgt.2018.06.001>
- Bannister, A., Kiefer, J., & Nellums, J. (2013). College students' perceptions of and behaviors regarding Facebook® advertising: an exploratory study. *The Catalyst*, 3(1). <https://doi.org/10.18785/cat.0301.02>
- Bearden, W. O., & Rose, R. L. (1990). Attention to social comparison information: an individual difference factor affecting consumer conformity. *Journal of Consumer Research*, 16(4), 461–471. <http://jcr.wisc.edu/>
- Bhukya, R., & Singh, S. (2015). The effect of perceived risk dimensions on purchase intention. *American Journal of Business*, 30(4), 218–230. <https://doi.org/10.1108/ajb-10-2014-0055>
- Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2022). Predicting consumer purchase intention toward hybrid vehicles: testing the moderating role of price sensitivity. *European Business Review*, 34(1), 62–84. <https://doi.org/10.1108/EBR-10-2019-0274>
- Bruhn, C. M. (2007). Enhancing consumer acceptance of new processing technologies. *Innovative Food Science and Emerging Technologies*, 8(4), 555–558. <https://doi.org/10.1016/j.ifset.2007.04.006>

- Bughin, J., Doogan, J., & Vetvik, O. J. (2010, April 1). *A new way to measure word-of-mouth marketing*. <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/a-new-way-to-measure-word-of-mouth-marketing#/>
- Dowling, G. R. (1986). Perceived risk: the concept and its measurement. *Psychology & Marketing*, 3, 193–210.
- Duffett, R. G. (2015). Facebook advertising's influence on intention-to-purchase and purchase amongst millennials. *Internet Research*, 25(4), 498–526. <https://doi.org/10.1108/IntR-01-2014-0020>
- Featherman, M., Jia, S. (Jasper), Califf, C. B., & Hajli, N. (2021). The impact of new technologies on consumers beliefs: Reducing the perceived risks of electric vehicle adoption. *Technological Forecasting and Social Change*, 169. <https://doi.org/10.1016/j.techfore.2021.120847>
- Featherman, M. S., & Hajli, N. (2016). Self-service technologies and e-services risks in social commerce era. *Journal of Business Ethics*, 139(2), 251–269. <https://doi.org/10.1007/s10551-015-2614-4>
- Featherman, M. S., Miyazaki, A. D., & Sprott, D. E. (2010). Reducing online privacy risk to facilitate e-service adoption: The influence of perceived ease of use and corporate credibility. *Journal of Services Marketing*, 24(3), 219–229. <https://doi.org/10.1108/08876041011040622>
- Febransyah, A. (2021). Predicting purchase intention towards battery electric vehicles: A case of indonesian market. *World Electric Vehicle Journal*, 12(4). <https://doi.org/10.3390/wevj12040240>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior : an introduction to theory and research*. Addison-Wesley. <https://people.umass.edu/aizen/f&a1975.html>
- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55–75. <https://doi.org/10.1002/dir.20061>
- Gefen, D. (2002). Reflections on the dimensions of trust and trustworthiness among online consumers. *Database for Advances in Information Systems*, 33(3), 38–53. <https://doi.org/10.1145/569905.569910>
- Gunawan, D. D., & Huarng, K.-H. (2015). Viral effects of social network and media on consumers' purchase intention. *Journal of Business Research*, 68(11), 2237–2241. <https://doi.org/10.1016/j.jbusres.2015.06.004>
- Gunawan, H. (2022, April 21). *Kemenhub: jumlah penggunaan kendaraan listrik di Indonesia sudah mencapai 17 ribu unit*. <https://www.tribunnews.com/bisnis/2022/04/21/kemenhub-jumlah-penggunaan-kendaraan-listrik-di-indonesia-sudah-mencapai-17-ribu-unit>
- Indonesian Ministry of Finance. (2015, April 29). *Penghasilan kelas menengah naik = potensi pajak?* <https://bppk.kemenkeu.go.id/pusdiklat-pajak/berita/penghasilan-kelas-menengah-naik-potensi-pajak-922473>
- Jarrett, C. (2017, April 13). *Different nationalities really have different personalities*. <https://www.bbc.com/future/article/20170413-different-nationalities-really-have-different-personalities>
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44(2), 544–564. <https://doi.org/10.1016/j.dss.2007.07.001>

- Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: the influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory and Practice*, 10(3), 1–12.
- Lai, P. (2017). The literature review of technology adoption models and theories for the novelty technology. *Journal of Information Systems and Technology Management*, 14(1), 21–38. <https://doi.org/10.4301/S1807-17752017000100002>
- Laura Yale, E. J., & Gilly, M. C. (1995). Dyadic perceptions information search in personal source. *Journal of Business Research*, 32, 225–237. [https://doi.org/10.1016/0148-2963\(94\)00048-J](https://doi.org/10.1016/0148-2963(94)00048-J)
- Lien, C. H., Wen, M. J., Huang, L. C., & Wu, K. L. (2015). Online hotel booking: The effects of brand image, price, trust and value on purchase intentions. *Asia Pacific Management Review*, 20(4), 210–218. <https://doi.org/10.1016/j.apmr.2015.03.005>
- Madden, T. J., Ellen, P. S., Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1):3-9. <https://doi.org/10.1177/0146167292181001>
- Miranda, J. L., & Delgado, C. J. M. (2020). Determinants of electric car purchase intention in Portugal. *Developments in Corporate Governance and Responsibility*, 15, 161–172. <https://doi.org/10.1108/S2043-052320200000015009>
- Mitra, K., Reiss, M. C., & Capella, L. M. (1999). An examination of perceived risk, information search and behavioral intentions in search, experience and credence services. *The Journal of Services Marketing*, 13(3), 208–228. <https://doi.org/10.1108/08876049910273763>
- Newell, S. J., & Goldsmith, R. E. (2001). The development of a scale to measure perceived corporate credibility. *Journal of Business Research*, 52, 235–247.
- Nguyen, H. T., & Chaudhuri, M. (2018). Making new products go viral and succeed. *International Journal of Research in Marketing*, 36(1), 39–62. <https://doi.org/10.1016/j.ijresmar.2018.09.007>
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39–52. <https://doi.org/10.1080/00913367.1990.10673191>
- Pavlou, P. A., & Stewart, D. W. (2000). Measuring the effects and effectiveness of interactive advertising: a research agenda. *Journal of Interactive Advertising*, 1(1), 62–78. <http://ssrn.com/abstract=2380734><https://ssrn.com/abstract=2380734>
- Porter, C. E., & Donthu, N. (2006). Using the technology acceptance model to explain how attitudes determine internet usage: the role of perceived access barriers and demographics. *Journal of Business Research*, 59(9), 999–1007. <https://doi.org/10.1016/j.jbusres.2006.06.003>
- Ram, S., & Sheth, J. N. (1989). Consumer resistance to innovations: the marketing problem and its solutions. *The Journal of Consumer Marketing*, 6(2), 5–14.
- Schuitema, G., Anable, J., Skippon, S., & Kinnear, N. (2013). The role of instrumental, hedonic and symbolic attributes in the intention to adopt electric vehicles. *Transportation Research Part A: Policy and Practice*, 48, 39–49. <https://doi.org/10.1016/j.tra.2012.10.004>
- Shofa, J. N. (2022, March 17). *Roadblocks to Indonesia's EV adoption*. <https://jakartaglobe.id/business/roadblocks-to-indonesias-ev-adoption>
- Sweeney, J. C., Soutar, G. N., Cowan, E., & Johnson, L. W. (1999). The role of perceived risk in the quality-value relationship: a study in a retail environment. *Journal of Retailing*, 75(1), 77–105.

- Taherdoost, H. (2018). A review of technology acceptance and adoption models and theories. *Procedia Manufacturing*, 22, 960–967. <https://doi.org/10.1016/j.promfg.2018.03.137>
- The Cultural Atlas. (2022). *Indonesian Culture*. <https://culturalatlas.sbs.com.au/indonesian-culture/indonesian-culture-core-concepts>
- Utami, M. W. Dela, Yuniaristanto, Y., & Sutopo, W. (2020). Adoption intention model of electric vehicle in Indonesia. *Jurnal Optimasi Sistem Industri*, 19(1), 70–81. <https://doi.org/10.25077/josi.v19.n1.p70-81.2020>
- Watkins, C. E., Tipton, R. M., Maims, M., & Hunton-Shoup, J. (1991). Role relevance and role engagement in contemporary school psychology. *Professional Psychology: Research and Practice*, 22(4), 328–332.
- Xue, J., Liang, X., Xie, T., & Wang, H. (2020). See now, act now: how to interact with customers to enhance social commerce engagement? *Information and Management*, 57(6). <https://doi.org/10.1016/j.im.2020.103324>
- Zeng, F., Huang, L., & Dou, W. (2009). Social factors in user perceptions and responses to advertising in online social networking communities. *Journal of Interactive Advertising*, 10(1), 1–13. <https://doi.org/10.1080/15252019.2009.10722159>
- Zhu, Y. Q., & Chang, J. H. (2016). The key role of relevance in personalized advertisement: examining its impact on perceptions of privacy invasion, self-awareness, and continuous use intentions. *Computers in Human Behavior*, 65, 442–447. <https://doi.org/10.1016/j.chb.2016.08.048>