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ANTECEDENTS OF PURCHASE DECISION OF VAPE USERS IN SAMARINDA

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ABSTRACT

Background: Vape, sometimes known as "electronic cigarettes," first made its way into Indonesia in 2012. As technology advances, vaping's popularity there is still rising. The vast number of people who traveled abroad for vacation is where it all began. They brought vaporizers with them when they went back to Indonesia. They introduced them to friends, family, and coworkers in their various communities, which led to many people switching from traditional cigarettes to vaping and raising the price of vape in Indonesia.

Aim: The purpose of this study was to analyze and prove the effect of perceived enjoyment, social influence, subjective norms, personal gratification on the attitude of vape users in Samarinda City.

Method: Researchers conducted quantitative research by providing questionnaires to residents of Samarinda who use vaping products. The questionnaire contains 26 indicators and 26 statements scores on a scale of 1 to 5, with one strongly disagreeing and five strongly agreeing. The sample size for the SEM (Structural Equation Modeling) analysis tool is 100-200 respondents to estimate interpretations with SEM performed on the IBM AMOS 23 software.

Findings: Perceived enjoyment, social influence, subjective norms, and personal gratification significantly effect the attitudes of vape users in Samarinda City. In addition, attitude and intention significantly affects purchase decisions for vape users in Samarinda City.

KEYWORDS

perceived enjoyment, social influence, subjective norms, personal gratification, purchase decision

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INTRODUCTION

In 2012, vape, or what is also called "electric cigarettes," began to enter Indonesia; with the development of the times, vape continues to grow in Indonesia. It started with the large number of people who went on vacation abroad. When they returned to Indonesia, they brought vaporizers. They introduced them to family, acquaintances, and associates in their respective areas, which caused many people to switch from conventional cigarettes to vape, thus increasing the demand for vape in the Indonesian market.

Vaping's glory began in 2015 when people felt it was part of their lifestyle. Switching from conventional cigarettes was initially created, but now even non-smokers use vape. According to Octavia (2022), there were 1.2 million registered vape users in 2018 increased to 83% in

2020, when registered vape users were 2.2 million, with the rise of vape shops and 5000 vape stores operating in Indonesia in 2020. Apart from the lifestyle reasoning, research by Fauzi and Areesantichai (2022) revealed that Indonesians believe that vape can reduce their cigarette smoking habit, less addictive, and less harmful.

With the development of vape in Indonesia, this research focuses on research on vape users and the factors that influence their purchasing decisions in Samarinda City. Even with the great success of vaping, there were a few pros and cons regarding this electric nicotine delivery device, as many offline and online media reported, saying that vaping is more dangerous than cigarettes. Some even say the opposite, so many vape shop owners and the community decided to provide socialization about the safety of using vape, such as the owner of the vape store D, who made a post about a guide to using vape for beginners.

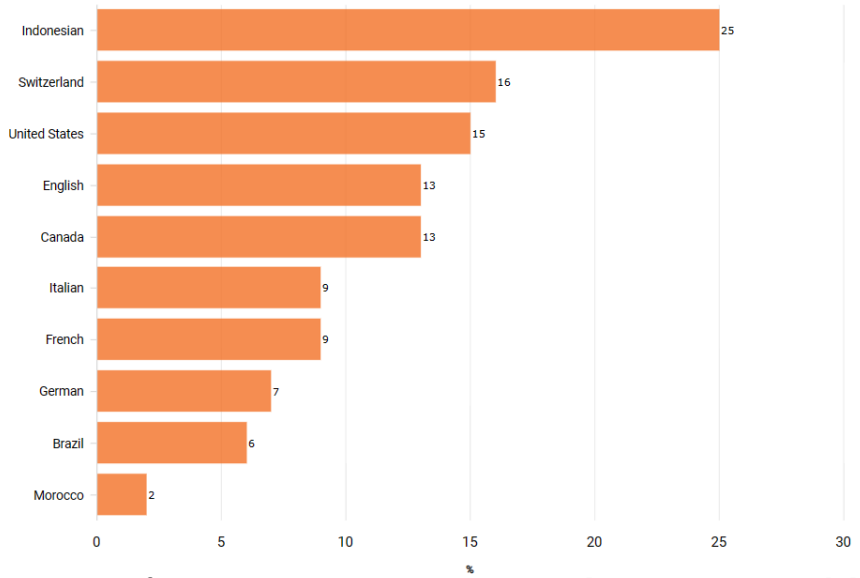


Figure 1. Percentage of E-cigarette/Vape Users in Several Countries Around the World
Source: Annur (2023)

From the graph, readers may see that Indonesia holds the highest vape user percentage globally. Compared to countries in different continents, Indonesian people use more vape daily with approximately 25% of them vape at least once a day. E-cigarettes are generally considered less harmful than smoking with tobacco and are often used as a tool to help quit smoking (Vasconcelos & Gilbert, 2018). However, the World Health Organization (WHO) warns that it is too early to say what the long-term effects of e-cigarette use could be or the impact of their exposure (WHO, 2020).

Perceived enjoyment is a condition in which the activity of using a specific system is considered enjoyable in and of itself, regardless of any performance consequences that result from using the system. When wholly immersed in certain activities, people experience a holistic awareness of sensations. Online shopping enjoyment is as important as in-store shopping enjoyment, significantly impacting customer intentions and behavior (Venkatesh et al., 2022). Perceived enjoyment is when a person uses technology while carrying out his or her activities and feels at ease (Barnard et al., 2013; Davis, 1989).

Eckhardt et al. (2009) defines "Social Influence" as "a change of mind in behavior, thoughts, or feelings from an individual's point of view caused by interaction with other individuals or groups" in his journal. As a result of interactions with other people, social influences play a role in changing behavior or attitudes. Social influences also influence individual and group communication behavior.

According to Hill et al. (1977), subjective norms are individual perceptions of whether people are vital to them and what behavior they should exhibit. People who are considered necessary for the individual (Significant person) and become a reference (referent) can motivate individuals to meet the expectations of these people, for example, parents, friends in groups, spouses, and others. When an individual believes that displaying a particular behavior is positive and that other people are vital to him, he will intend to do so. An individual's motivation for complying with the referral's wishes weighs the opinion contribution of each referral.

The uses and gratification theory created the hypodermic needle theory or model. Blumler and Katz (1974)'s introduced this theory in their research "The Uses of Mass Communication: Current Perspectives on Gratification Research". Furthermore, their theory states that media users actively participate in selecting and using a medium. In order to meet their needs, media consumers seek the best media sources. That is, the theory of uses and gratification assumes that users have multiple options for satisfying their needs. According to them, this theory investigates needs' psychological and social origins that lead to specific media expectations that cause different patterns of media exposure or participation in other activities and demand for fulfillment.

Hill et al. (1977) define attitude as an individual's positive or negative attitude toward a specific behavior. There are no significant differences between the three definitions. They appear mutually reinforcing, making them a more appropriate definition. Aside from that, it was evident that attitude is always directed at something or someone. There is no such thing as a single attitude without an object. This object may consist of objects, people, events, institutions, organizations, norms, values, or others.

Purchase intention is a mental attitude that characterizes a consumer's decision-making process (Manorek et al., 2016). Intention differs from psychological processes that include reference to or relation to an object as one of the struggles to achieve a goal. The intention is a subjective probability or possibility or someone's estimate of how likely they will do something.

According to Peter et al. (1999), Purchase Decision is a process carried out to combine all the knowledge obtained by consumers into a practical consideration value when choosing two or more alternatives so that they can decide on one product. A purchase decision is how consumers decide which brand to purchase. In general, consumers will buy the most preferred brand, but two factors are likely to influence their decision: the attitudes of others and unexpected situations. Purchase intentions can shift if consumers are hindered or forced to cancel purchases or switch to alternative options (Armstrong et al., 2014). The Purchase Decision is a stage where consumers make purchases based on the results of a combination of all the knowledge they have to determine a consideration value between two or more available product alternatives.

The purpose of this study was to analyze and prove the effect of perceived enjoyment, social influence, subjective norms, personal gratification on the attitude of vape users in Samarinda City. The researchers hope to contribute to a greater knowledge of vape usage in Indonesia, especially in Samarinda.

Hypotheses used here were:

1) H1: Perceived enjoyment has a significant effect on attitude;
2) H2: Perceived enjoyment has a significant effect on the intention;
3) H3: Social influence has a significant effect on attitude;
4) H4: Social influence has a significant effect on the intention;
5) H5: Subjective norms has a significant effect on attitude;
6) H6: Subjective norms have a significant effect on the intention;
7) H7: Personal gratification has a significant effect on attitude;
8) H8: Personal gratification has a significant effect on the intention;
9) H9: Attitude has a significant effect on purchase decision; and
10) H10: Intention has a significant effect on purchase decision.

METHOD

Researchers conducted quantitative research by providing questionnaires to residents of Samarinda who use vaping products. The questionnaire contains 26 indicators and 26 statements scores on a scale of 1 to 5, with one strongly disagreeing and five strongly agreeing. The sample size for the SEM (Structural Equation Modeling) analysis tool is 100-200 respondents to estimate interpretations with SEM performed on the IBM AMOS 23 software (Hair et al., 2018). In this study, a sample of 130 respondents was drawn from a total of 150 data points that had been sorted.

Several tests were conducted in this study, according to loading factor values with a range of ±0.30 to ±0.40 are considered to meet the minimum value for building structures. This study uses a structure to measure each variable to determine whether the loading factor value meets the requirements (Hair et al., 2018).

Table 1. Construct Indicator

Variable	Indicator	Notation
Perceived Enjoyment	I have fun	PE1
	I like using	PE2
	Using is a good idea	PE3
Social Influence	Confident when using	SI1
	Sure to buy	SI2
	Other consumers follow your behavior shopping	SI3
	Colleagues and family follow your behavior	SI4
Subjective Norms	(People) think using that is a wise idea	SN1
	(People) think using that is a good idea	SN2
	(People) think I should use	SN3
	(family) think using that is a wise idea	SN4
	(family) think using that is a good idea	SN5

	(family) think I should use	SN6
Personal Gratification	Pleasant	PG1
	Relax	PG2
	Makes Happy	PG3
Attitude	Is a good idea	ATT1
	I love the idea	ATT2
	important	ATT3
Intention	I would like to purchase	INT1
	I am happy with the purchase	INT2
	I am satisfied with the purchase	INT3
	I will continue purchasing	INT4
Purchase Decision	In selecting from many types and brands, I care to buy	PD1
	Make a right choice	PD2
	I am concerned about the outcome	PD3

Use the Structural Equation Modeling (SEM) analysis tool to put the model and hypothesis to the test. The condition is that seven steps must be completed following (Augusty, 2005): 1) Creation of a theory-based model. 2) Creation of path diagrams. 3) Create equations from path diagrams. 4) Input matrix selection and model estimation. 5) Evaluate problem identification. 6) Assess the goodness-of-fit criteria.

In fulfilling the requirements of the goodness-of-fit index criteria for evaluating the fit model (Augusty, 2005). 1) Chi-square statistics, with the smaller the Chi-Square, being better. 2) The Root Mean Square Error of Approximation (RMSEA) with a lower value criterion of 0.08. 3) GFI (Goodness of fit Index) with standards to meet the requirements, with values ranging from 0 (poor fit) to 1. (perfect fit). A high index value indicates a 'better fit,' A model is considered very good if the GFI value is greater than or equal to 0.90. 4) AGFI (Adjusted Goodness of Fit Index) cut of value greater than or equal to 0.95. CMIN/(DF 5) (The Minimum Sample Discrepancy Function Divided by the degree of Freedom), this requirement is usually the easiest to achieve in model fit testing, provided the number is below 2. Thus, it can be interpreted that the model fits the existing data. This test is the magnitude of the result between the statistic-chi-square value divided by the DF value. 6) TLI (Tucker Lewis Index) is stated to be eligible if the number/value is close to 1 or above 0.95. 7) CFI (Comparative Fit Index) with the same value as the TLI requirement, which is above 0.95, so it is a good fit.

According to Ferdinand (2005), to carry out hypothesis testing, it can be significant when the t-value or in IBM AMOS 23 is referred to as the Critical Ratio (CR) with a value above 1.96, with a probability level of 0.05. Therefore if the hypothesis relationship that has been tested meets these requirements, it can be significant.

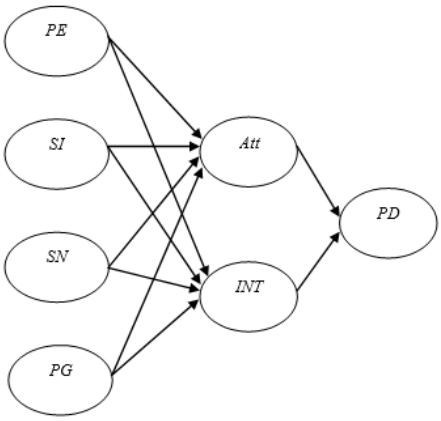


Figure 1. Research Model

RESULTS AND DISCUSSION

Table 2. Respondent's Profile

Criteria	Demographic Profile	Frequency	Percentage
Gender	Man	121	93.1%
	Woman	9	6.9%
Age	<21 Years Old	5	3.8%
	21-30 Years Old	113	87%
	31-40 Years Old	9	6.9%
	>40 Years Old	3	2.3%

It can be identified that vape is actually in demand by men. The characteristics of the respondents in this study were also dominated by respondents aged 21-30 years who, at this age, like to use electronic cigarettes.

After knowing the characteristics of the respondents, validity testing is then carried out to determine how vital the instrument is in measuring indicators that reflect variables. In order to test the validity, it can be seen in the output of IBM AMOS 23, seen from the value of the loading factor.

Table 3. Validity Result

Variable	Indicator	Coefficient Correlation	Description
Perceived Enjoyment	I have fun	0.867	Valid
	I like using	0.865	Valid
	Using is a good idea	0.932	Valid
Social Influence	Confident when using	0.760	Valid
	Sure to buy	0.772	Valid
	Other consumers follow your shopping behavior	0.805	Valid
	Colleagues and family follow your behavior	0.775	Valid
	(People) think using that is wise idea	0.712	Valid

Subjective Norms	(People) think using that is a good idea	0.722	Valid
	(People) think I should use	0.772	Valid
	(family) think using that is a wise idea	0.626	Valid
	(family) think using that is a good idea	0.710	Valid
	(family) think I should use	0.767	Valid
Personal Gratification	Pleasant	0.810	Valid
	Relax	0.908	Valid
	Makes Happy	0.854	Valid
Attitude	Is a good idea	0.888	Valid
	I love the idea	0.852	Valid
	important	0.832	Valid
Intention	I would like to purchase	0.806	Valid
	I am happy with the purchase	0.829	Valid
	I am satisfied with the purchase	0.877	Valid
	I will continue purchasing	0.744	Valid
Purchase Decision	In selecting from many types and brands I care to buy	0.865	Valid
	Make a right choice	0.890	Valid
	I am concerned about outcome	0.722	Valid

Table 4. Fit Model Result

Goodness of Fit Index	Model Result	Description
Chi-Square	280,4	Marginal Fit
Significance Probability	0.091	Good Fit
RMR	0.142	Marginal Fit
RMSEA	0.031	Good Fit
GFI	0.861	Marginal Fit
AGFI	0.805	Marginal Fit
CMIN/DF	1.122	Good Fit
TLI	0.971	Good Fit
CFI	0.978	Good Fit

Table 5. Hypothesis Result

Relationship Path	Standardized Path Coefficient	Critical Ratio	Probability	Description*
H1 (PE – ATT)	.388	3.149	.002	Significant
H2 (PE – INT)	.275	2.726	.006	Significant
H3 (SI – ATT)	.300	2.778	.005	Significant
H4 (SI – INT)	.410	3.667	***	Significant
H5 (SN – ATT)	.551	4.235	***	Significant
H6 (SN – INT)	.585	4.429	***	Significant
H7 (PG – ATT)	.276	2.968	.003	Significant

H8 (PG – INT)	.452	3.962	***	Significant
H9(ATT – PD)	.437	2.878	.004	Significant
H10 (INT – PD)	.484	3.072	.002	Significant

Based on the table, all of the ten relationships are significant. Because all CR values are above 1.96.

CONCLUSION

Perceived enjoyment has a significant effect on the attitudes of vape users in Samarinda City. The hypothesis can be accepted because the results obtained have met the requirements, which means that the higher the comfort consumers receive, the more favorable the attitude toward vaping will be among Samarinda City vape users. Perceived Enjoyment significantly affects the intention of vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met the requirements. The higher the convenience consumers receive, the higher the intention to use vaping among users in Samarinda City.

Social influence significantly affects the attitude of vape users in Samarinda City. The hypothesis can be accepted because the results obtained have met the requirements, which means that the greater the social influence consumers receive, the more favorable the attitude toward vaping will be for Samarinda City users. Social influence significantly affects the intention of vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met the requirements. The greater the social influence consumers receive, the greater their intention to use vaping in Samarinda City vape users.

Subjective Norms significantly affect the Attitude of Vape users in Samarinda City. The hypothesis can be accepted because the results obtained have met the requirements, which means that the higher the subjective norm that consumers accept, the more favorable the attitude toward using Vape among Vape users in Samarinda City. Subjective Norms significantly affect the Intention of Vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met the requirements. The higher the subjective norm consumers receive, the higher the intention to use Vape among Vape users in Samarinda City.

Personal gratification significantly affects the Attitude of Vape users in Samarinda City. The hypothesis can be accepted because the results obtained have met the requirement, thus the higher the personal. The pleasure consumers feel, the higher the attitude when using vaporizers for Vape users in Samarinda City. Personal gratification significantly affects the Intention of Vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met the requirements. The greater the personal pleasure consumers receive, the greater their intention to use vaping among Samarinda City vape users.

Attitude significantly affects Purchase Decisions for Vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met the requirements. The more positive the consumers' attitude, the more likely Vape users in Samarinda City will purchase vapes.

Purchase Intention significantly affects Purchase Decisions for Vape users in Samarinda City. The result is that the hypothesis can be accepted because the results obtained have met

the requirements. The higher the consumer's intention, the more likely they will buy vape in Samarinda City.

REFERENCES

Annur, C. M. (2023, June 5). *Indonesia jadi negara pengguna vape terbanyak di dunia, kalahkan negara-negara Eropa hingga AS*. Databoks.

Armstrong, G., Adam, S., Denize, S., & Kotler, P. (2014). *Principles of marketing*. Pearson Australia.

Augusty, F. (2005). *Pedoman penelitian untuk penulisan skripsi, tesis, dan disertasi ilmu manajemen*. Badan Penerbit Universitas Diponegoro.

Barnard, Y., Bradley, M. D., Hodgson, F., & Lloyd, A. D. (2013). Learning to use new technologies by older adults: Perceived difficulties, experimentation behaviour and usability. *Computers in Human Behavior*, *29*(4). https://doi.org/10.1016/j.chb.2013.02.006

Blumler, J. G., & Katz, E. (1974). The uses of mass communications: current perspectives on gratifications research. *Sage Annual Reviews of Communication Research*, *3*.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, *13*(3). https://doi.org/10.2307/249008

Eckhardt, A., Laumer, S., & Weitzel, T. (2009). Who influences whom analyzing workplace referents' social influence on IT adoption and non-adoption. *Journal of Information Technology*, *24*(1). https://doi.org/10.1057/jit.2008.31

Fauzi, R., & Areesantichai, C. (2022). Factors associated with electronic cigarettes use among adolescents in Jakarta, Indonesia. *Journal of Health Research*, *36*(1). https://doi.org/10.1108/JHR-01-2020-0008

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). Multivariate data analysis. In *Harlow: Cengage Learning*. Cengage Learning.

Hill, R. J., Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention and behavior: An introduction to theory and research. *Contemporary Sociology*, *6*(2). https://doi.org/10.2307/2065853

Manorek, S. L., Pangemanan, S. S., & Rumokoy, F. (2016). the influence of brand image, advertising, perceived price toward consumer purchase intention at Samsung smartphone. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *3*(4).

Octavia, W. (2022, July 7). *Industri vape di Indonesia: Berapa jumlah pengguna vape di distributor, agen, maupun produsen*. Sampai Jauh.

Peter, J. P., Olson, J. C., & Grunert, K. G. (1999). *Consumer behavior and marketing strategy*. McGraw-Hill London.

Vasconcelos, V., & Gilbert, H. (2018). Smokers' knowledge and perception of electronic cigarettes (e-cigarettes): a qualitative study of non-quitting smokers in a North London general practice. *Primary Health Care Research and Development*. https://doi.org/10.1017/S1463423618000439

Venkatesh, V., Speier-Pero, C., & Schuetz, S. (2022). Why do people shop online? A comprehensive framework of consumers' online shopping intentions and behaviors. *Information Technology and People*, *35*(5). https://doi.org/10.1108/ITP-12-2020-0867

WHO. (2020, February 5). *E-cigarettes are harmful to health*. WHO.