

Self-Determination Theory for Predicting Intention to Buy Recycled Products in The Era of Society 5.0

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Abstract: *Recycling is an industry opportunity to utilize used materials for new marketable products. This product is an opportunity along with the campaign to tackle waste. This industrial opportunity must be followed by the development of public interest in using recycled products. People's motivation to have the intention to buy the product is studied by self-determination theory as a theory that assumes humans as active organisms to always grow and develop both physically and psychologically. This theory explains that humans have autonomy over the decisions they make. This research is built with a quantitative approach that examines the influence of self-determination theory with motivation, external regulation, introduced regulation, identified regulation, integrated regulation, and intrinsic motivation in predicting the purchase intention of recycled products by society in the era of society 5.0. Methods Analysis of multiple linear regression data using SPSS 25. The results of the study explain the significant effect of self-determination theory to predict the intention to buy recycled products. The dominant influence of intrinsic motivation is that it is known to create industrial opportunities in the future, public environmental awareness campaigns must be intensified so that people are aware of and enjoy recycling products.*

Keywords: *Self-determination, Recycled, Intention*

Abstrak: *Daur ulang merupakan peluang industri untuk memanfaatkan bahan bekas menjadi produk baru yang dapat dipasarkan. Produk ini menjadi peluang seiring dengan kampanye untuk mengatasi limbah. Peluang industri tersebut harus diikuti dengan perkembangan minat masyarakat untuk menggunakan produk daur ulang. Motivasi orang untuk memiliki niat membeli produk kami teliti menggunakan self-determination theory sebagai teori yang menganggap manusia sebagai organisme aktif untuk selalu tumbuh dan berkembang baik secara fisik maupun psikologis. Teori ini menjelaskan bahwa manusia memiliki otonomi atas keputusan yang diambilnya. Penelitian dibangun dengan pendekatan kuantitatif mengkaji pengaruh teori penentuan nasib sendiri dengan variabel amotivasi, regulasi eksternal, regulasi introjeksi, regulasi yang diidentifikasi, regulasi terintegrasi dan motivasi intrinsik dalam memprediksi niat beli produk daur ulang oleh masyarakat di era masyarakat 5.0. Metode*

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Analisis data regresi linier berganda menggunakan SPSS 25. Hasil penelitian menjelaskan pengaruh signifikan teori penentuan nasib sendiri terhadap prediksi niat membeli produk daur ulang. Pengaruh dominan dengan motivasi intrinsik yaitu motivasi terbangun dengan menciptakan peluang industri di masa depan, kampanye kesadaran lingkungan masyarakat harus digencarkan agar masyarakat sadar dan menikmati produk daur ulang.

Kata kunci: *Self-determination, Daur-ulang, Niat*

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INTRODUCTION

Self-determination theory is a psychological theory that explains human autonomy with intrinsic motivation from within humans describing the active and synthetic nature of making decisions. The spontaneous human tendency to engage, interact, master or understand (Krettenauer & Curren, 2020). Today humans are faced with massive changes in all aspects of life. Technology as a potential catalyst for world development which is the cause of the birth of the era of society 5.0 as a counterweight to the pace of technology called the industrial era 4.0. The era of society is an era that is echoed to continue to prioritize humans as the main resource for industrial pilot projects. Humans will determine the ecosystem and maintain its sustainability in the economic, social, or industrial world. Technological developments must still adhere to the principle of maintaining a sustainable environment for the continuation of a healthy life. The growth of the human population and their goods, the convenience of the people towards single-use products. One concern is also growing about textile waste worldwide because of the carbon emitted by factories accelerating global warming due to mass production and overconsumption (H. Yoo, 2021).

Recycled products are an opportunity for the industry to develop products. That has significant potential economic benefits as well as ecological benefits. Recycled products as products designed for environmental awareness and saving the earth are future business opportunities. Recycled product business opportunities in the future industry are also due to the growing and developing public awareness about the environment (Guo & Ya, 2015). Public awareness about various environmental problems, about greenhouse emissions, the accumulated waste is a source of problems. Products designed to overcome environmental problems are one of the concerns of consumers. Consumer concern about the problems of the energy crisis, climate change, and environmental problems is growing (Skogen et al., 2018).

However, research that explores community social responsibility for this is still open, to study further consumer responsibility for green consumption (Yue et al., 2020) and how people's motivation to support green consumption is by purchasing products that can save green nature, especially recycled products. From the background above, the researcher is interested in studying the effect of self-determination theory as measured by motivation, external regulation, interjected regulation, identified regulation, integrated regulation, and intrinsic motivation in predicting the purchase intention of recycled products made by the community in the era of society 5.0. The era of society 5.0 where the customer is the center of the business. Products that meet the expectations and desires of customers are the choices. The campaign for using recycled products has started the high waste problem. Research on the extent to which consumers' motivation towards recycled products is interesting to study.

The use of this theory in marketing still needs to be researched because many marketing researchers look at the motivation of purchase intentions from external sources such as promotions and services, even though the SDT theory is more promising. After all, it presents a complete motivation (Gilal et al., 2019b). The problem studied is how the influence of self-determination theory as measured by motivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation in predicting the intention to purchase recycled products in the era of society 5.0. This study aimed to analyze the effect of self-determination theory as measured by amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation in predicting the purchase intention of recycled products in the era of society 5.0.

LITERATURE REVIEW

Motivation Theory

A very well-known motivation theory is the hierarchy of needs theory from Abraham Maslow (Kotler, Philip., Keller, 2008). Human needs have a hierarchy starting from basic needs both psychological and physiological humans need food, drink, health, and also sex needs. Basic human needs must be met to be able to move to the next need, namely the need for security. The need to always be confident that a safe life is a human priority if the basic needs have been met. Furthermore, if humans feel that their lives are safe, then motivation will move to social needs, namely love, a sense of wanting to have something and being owned and becoming a person who is bound in social life. Needs at a further level are human needs to be rewarded to needs at the highest hierarchy, namely human actualization.

The desire to fulfill these needs is what drives people to have the power to fulfill them under certain circumstances and at certain times (Kotler, Philip., Keller, 2008). Motivation comes from humans so the things needed are achieved with various efforts. All human efforts are based on the needs to be achieved. From this theory as a basis for seeking business opportunities, starts with various human needs that always develop according to certain circumstances and times.

Self Determination Theory

As a theory that describes behavior based on autonomy (Ryan & Deci, 2019). SDT focuses on the "nature" of motivation, i.e., "why it behaves." This theory gives assumptions about humans as active organisms oriented to always grow and develop both physically and psychologically. They combine these two elements into themselves to later become unique individuals and will blend into the larger social structure (Paulin et al., 2014). Self Determination theory is the main theory of human motivation which has been proven effective to identify the possibilities that influence motivation and behavior (Gilal et al., 2019b).

Motivation in SDT covers the human continuum of autonomy and the relative placements of external, introjected, identified, and intrinsic regulations along it (Ryan & Deci, 2017). Intrinsic motivation leads to personal pleasure, challenge, and self-autonomous self-power in determining something leads to personal satisfaction. Intrinsic motivation leads to personal pleasure, challenge, and self-autonomous self-power in determining something leads to personal satisfaction. While extrinsic motivation is built from various factors from outside the individual (Ryan & Deci, 2019). SDT describes the autonomy of every human being that influences behavior (Ryan & Patrick, 2009). Someone does an action, for example buying expensive clothes, not because of prestige but because the autonomous value is because the clothes are comfortable to wear, the cutting is comfortable, so humans have strong potential in determining behavior (Paul & Gilal, 2018).

This theory is interesting because of several differences from the theory that has developed in explaining consumer purchase intentions. Theories such as the theory of planned behavior from Fishbein and Ajzen 1975, which have been widely developed in consumer behavior emphasize the strong influence of the environment, different from that theory. Self-determination theory states that the strong influence comes from self-motivation as human autonomous motivation (Gilal et al., 2019b). So the interest in using this theory as theory to predict people's buying intentions for recycled products in the era of society 5.0 is getting higher. Because the era of society is the era of humans as industrial controllers, they must be able to increase their capacity to be able to compete in finding new opportunities.

SDT theory is the most comprehensive theory about the complexity of human motivation (Van den Broeck et al., 2021). The range of complexity is the recognition that someone has motivation starting from amotivation or someone who does not have motivation to someone who has intrinsic motivation within himself. Exposure to motivation according to SDT are:

The first is amotivation, which is someone who has no motivation, lacks motivation (Van den Broeck et al., 2021) or does not think about it (C. R. France et al., 2017). Someone who has no motivation can do an activity, they may appreciate the activity (Van den Broeck et al., 2021).

Second, external regulation is motivation caused by rewards or punishments given (Paul & Gilal, 2018) punishments such as losses for not doing it, and punishment from superiors for not doing it. This motivation is the influence or pressure from outside the human self. Today's marketing methods use a lot of methods of giving gifts and bonuses.

The third is introjected regulation, which is the motivation caused by the power of the ego. The shame of not doing it is caused by the environment around doing it. An example of this motivation is choosing to be silent in a seminar rather than speaking but losing face (Van den Broeck et al., 2021) the motivation from introjected regulation is a motivation that gives pressure but the pressure comes from internal itself.

Fourth, identified regulation is motivation because it is considered important and has values that suit him (C. R. France et al., 2017). involvement with these activities because of the significance with self-interest. (Van den Broeck et al., 2021c) A person who makes a purchase because the item is valued according to the importance and value he has. Someone who buys a Muslim dress model because it is in accordance with the value he has.

The fifth is integrated regulation, namely assimilating new things with their own values and needs (Engström & Elg, 2015). This motivation is because it is in accordance with the purpose of life, someone who does something certainly has an integrated purpose and goals from himself. One example of people donating because it is in accordance with their life goals to help others (C. R. France et al., 2017).

The sixth is intrinsic motivation, namely motivation arises because of pleasure. The concept of intrinsic motivation describes a person's natural tendency, pleasure is fundamental to cognitive and social development, and becomes a source of enjoyment throughout life (Engström & Elg, 2015). Motivation that arises because of satisfaction, comfort (C. R. France et al., 2017). All of these motivations will develop according to environmental conditions that underlie the development of human needs.

Recycled Products

Humans and the environment are two inseparable things (Deci & Ryan, 1980). Humans are formed from the environment and the environment is damaged or good is strongly influenced by human actions. Various research results show the worsening environmental conditions caused by waste (F. Yoo et al., 2021). This problem is triggered by population growth causing the population to increase. Convenience of using disposable products thereby increasing market demand. Due to economic factors, population development, and the ease of global communication, technological advancements, the rapid development of fashion in the world triggers higher waste (F. Yoo et al., 2021). There are many production lines that have large and definite waste, such as vehicles that will surely end their life. This product will become industrial waste if the product handling does not provide benefits. a composition that takes into account environmental factors, definitely worsens environmental conditions (Van Schaik & Reuter, 2004).

Recycled products are built from recycled used products into 'like new' products (Bigliardi et al., 2020). People in the era of society have a great opportunity to be able to reproduce with various skills they have. Manufacturing can be through remanufacturing or recycling processes that involve recovering or creating new products that can be thrown back into the market. Recycling or remanufacturing processes can also come from failed

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final production so that they do not become waste and have economic value. (Guo & Ya, 2015). The stretch of society to carry out recycled production must be balanced with the desire of consumers to support green consumption by buying recycled products. The decision to buy recycled products is an important step taken by consumers.

Kotler & Keller explain the purpose of marketing is to always look for emerging customer trends that indicate new opportunities (Kotler, Philip., Keller, 2008). Consumer motivation to meet needs that can be influenced by internal and external factors (Hidayah & Marlana, 2019). People's motivation to accept recycled products and then have the intention to buy is interesting to study. One of the motivational theories used is the self-determination theory developed by Ryan and Deci. Self Determination Theory (SDT) is a very broad theory of motivation that has been successfully applied in various fields including marketing, parenting, education, health care, exercise and physical activity, psychotherapy, and cyberspace, as well as the areas of motivation and work management. Self-determination theory (Ryan & Deci, 2017).

METHOD

Research Framework

Description analysis for research variables aims to interpret the meaning of each research variable, variable indicator and research statement items based on the distribution of frequency, percentage and mean (mean) of respondents' answers. Based on the data measurement scale used (likert), the range of the respondent's statement scale starts from strongly disagreeing to strongly agreeing. The variables analyzed in this study consisted of: amotivation (X1), external regulation (X2), introjected regulation (X3), identified regulation (X4), integrated regulation (X5), intrinsic regulation (X5) and purchase intention (Y). In assessing the mean, there is an approach that can be used, namely a range-based approach on a scale of 1 – 5, which means above 3 is high. This research is built with a research framework model from Self Determination Theory on the intention to buy recycled products.

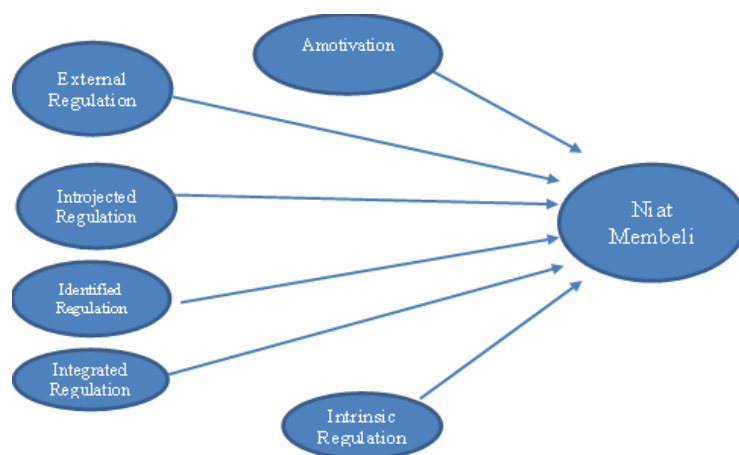


Figure 1. Research Framework

According to the results of previous research which produced a relationship between amotivation and intention, namely (Gilal et al., 2019a), (Rosli & Saleh, 2022) and (L. A. Williams et al., 2019), (Manger et al., 2020), concluded that amotivation has relationship with behavioral. (C. France, 2014) concluded that amotivation affects behavioral intentions. Based on the results of the research above, the hypothesis can be drawn:

H1 : Amotivation can be used to predict the purchase intention of recycled products

Research results from (Rahi & Abd. Ghani, 2019), (Widyarini & Gunawan, 2018) explain that external motivation marked by gifts has an influence on repeated intentions (Gilal et al., 2019a), (Manger et al., 2020), (Rosli & Saleh, 2022), (C. France, 2014) provide research results that external regulation has a significant effect on behavior. Previous research from (L. A. Williams et al., 2019) showed the result that external regulation has a positive effect on donor behavior. Based on the results of the research above, the hypothesis can be drawn:

H2 : External regulations can be used to predict the purchase intention of recycled products

(Gilal et al., 2019a), (Manger et al., 2020), (Azizah, 2022), (Rahi & Abd. Ghani, 2019), (C. France, 2014) and (Rosli & Saleh, 2022) gave the result that introjected regulation has an effect on consumer behavioral intentions. (C. France, 2014) concluded that introjected regulation affects behavioral intentions. Based on the results of the research above, the hypothesis can be drawn:

H3 : Introjected regulations can be used to predict the purchase intention of recycled products

The results of the study explain that identified regulation has an influence on intentions and behavior, namely research by Van den Broeck et al., (2021), (Widyarini & Gunawan, 2018), (Gilal et al., 2019a), (Rosli & Saleh, 2022), (Rahi & Abd. Ghani, 2019), (Manger et al., 2020), (C. France, 2014) provides research results identified regulation has a significant effect on behavior. Based on the results of the research above, the hypothesis can be drawn:

H4 : Identified regulations can be used to predict the purchase intention of recycled products

The results of the study describe Integreted regulation, namely assimilating new things with their own values and needs that affect behavior (Engström & Elg, 2015), (Widyarini & Gunawan, 2018), (Rosli & Saleh, 2022), (Rahi & Abd. Ghani, 2019), (C. France, 2014). Jolanta explained that integrated regulation is a life goal that results from values influencing behavior (Zycinska & Januszek, 2021). Based on the results of the research above, the hypothesis can be drawn:

H5: Regulatory integration can be used to predict the purchase intention of recycled products

The results of research from L.A William explained that intrinsic motivation which is characterized by joy, happiness has an influence on the intention to donate (L. A. Williams et al., 2019). (Gilal et al., 2019a), (Azizah,

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2022), (Widyarini & Gunawan, 2018) and (Rosli & Saleh, 2022), (Rahi & Abd. Ghani, 2019), (C. France, 2014) explain the intrinsic effect of regulation on purchase behavior intentions. Based on the results of the research above, the hypothesis can be drawn:

H6 : Intrinsic regulation can be used to predict the purchase intention of recycled products

Research Population and Sample

The research uses a quantitative approach with a survey method the influence of self-determination theory as a theory to predict people's purchase intention of recycled products. The sampling technique uses a probability sampling technique, which provides equal opportunities for all elements of the population to be sampled in this study. The sample distribution method uses a snowball sample through WhatsApp groups, and Facebook social media and spreads to other individuals randomly. And some were sent through a questionnaire that was filled in directly which was also provided by the researcher. Data collection techniques using questionnaires or questionnaires with closed questions and answers from alternatives given by researchers (Uma, 2006). An alternative to using a Likert scale is the range used 1 = Strongly disagree, 2 = Disagree, 3 = Neutral / Disagree, 4 = Agree, 5 = Strongly agree.

Validity and Reliability Test

Validity test can be done by calculating the correlation between the scores of each question item with the total score. The value of r obtained is compared with the value of r table with degrees of freedom ($n-2$). The calculated r value is greater than the r table value of 0.396, thus explaining that all question items are significant and valid. Reliability testing was carried out with the help of the SPSS release 25 programs where decision making is done if the reliability number $\text{Alpha} > 0.6$ then the item variable is declared reliable, and vice versa $\text{Alpha} < 0.6$ stated not reliable l. (Uma, 2006).

Classic Assumption Test

Classical assumption test using: Normality test aims to determine whether the data in the regression model between the independent variable and the dependent variable are both normally or not normally distributed. The normal distribution will form a straight diagonal line, then the data meet the normal assumptions. Detection Multicollinearity Test multicollinearity by looking at tolerance and its opposite VIF. The same low tolerance value with a high VIF value ($\text{VIF} = 1 / \text{tolerance}$) and indicates a high collinearity. The commonly used cutoff value is the tolerance value below 0.10 or equal to the VIF. value above 10. The tolerable collinearity level is a tolerance value of 0.10 which is equal to the multicollinearity level 0.95 (Ghozali, 2005). Heteroscedasticity test tests whether the regression model occurs there is an inequality of variance from the residual of one observation to another observation. If variance from the residual of one observation to another observation is not fixed, it is suspected that there is heteroscedasticity problem. In this study, a graph plot is used between the predictive value of the

independent variable (ZPRED) and the residual (SRESID). Decision-making criteria are carried out if there is a certain pattern, such as the existing dots form a certain regular pattern (wavy, then widens) narrows) then in the regression model it is suspected that there is a heteroscedasticity problem, and if there is no clear pattern and the dots spread above and below the number 0 on the Y axis then there is no heteroscedasticity.

RESULT

The questionnaires received were 115 questionnaires and 109 which could be turned into a proper questionnaire. The study was conducted by taking respondents selected 109 respondents with the following description:

Judging from the table above, it can be seen that the respondents' characteristics are that concern for the recycling process does not depend on gender. The analysis of respondents from this gender explains that recycled products have a broad segment that is not limited to gender. Likewise with the characteristics of respondents from age, all ages have a concern for recycled products as products to be able to help solve the waste problem in the world.

Based on research data from 25 respondents, it was found that all the question items developed from the research variables were all valid and reliable with the following description, the following results were obtained.

Table 1. Description of Respondents

LK-lk	Gender	Amount	Age				Amount
	Woman		15-24	25-34	35-44	>=45	
49	60	109	74	14	17	4	109
45%	65%	100%	68%	13%	15%	4%	100%

Validity tests on the variables Amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation showed that all questions related to the status were valid. This can be seen from the entire value of $r_{count} > r_{table}$. In accordance with table 2 above, it shows that the question items for measuring variables are declared valid more than r_{table} of 0.396 and reliable because Cronbach's alpha value is more than 0.6 for all question items.

Table 2. Validity and Reliability of Question Items

Variable	Items	Valid	Reliable	
Amotivation (X1)	I really don't think about recycled products	X1.1	0.828	0.818
	Recycled products are products I really don't understand	X1.2	0.892	0.802
	Recycled products products I never knew about	X1.3	0.852	0.796
External regulation (X2)	Purchasing recycled products if forced to no longer have other products	X2.1	0.860	0.816
	Purchasing recycled products because I got the product I wanted as a gift	X2.2	0.911	0.814
	If you don't buy, then my points/bonuses are lost	X2.3	0.899	0.814
Introjected regulation (X3)	Purchasing recycled products because they don't feel good with friends	X3.1	0.621	0.718
	Feel guilty if you don't buy	X3.2	0.609	0.715
	Feel embarrassed if you don't participate	X3.3	1.00	0.693
Identified regulation (X4)	Buying recycled products will help the lungs of the world	X4.1	0.874	0.731
	Recycled products make the earth healthier	X4.2	0.891	0.731
	Recycled products reduce waste	X4.3	0.603	0.857
Integrated regulation (X5)	Purchasing recycled according to my life's goal to always be useful	X5.1	0.898	0.770
	Purchasing recycling is an important thing to do	X5.2	0.830	0.804
	For me recycling is the first step to solving world pollution	X5.3	0.823	0.831
Intrinsic motivation (X6)	I love recycled products	X6.1	0.826	0.678
	Recycling creates something useful from waste	X6.2	0.542	0.818
	Fun creative recycling products	X6.3	0.793	0.736

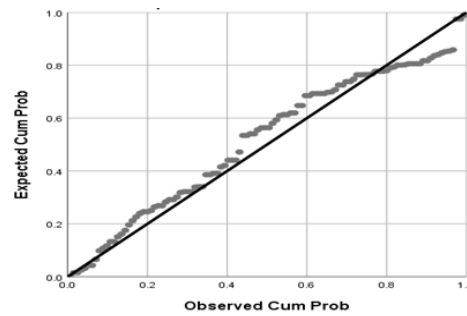


Figure 2. Shows the scatter plot graph of the normality test

Based on the graph above, it shows that all existing data are distributed normal, because all the data spread to form a straight diagonal line then the data meet the normal assumptions or follow the normality line. This proves that the model The regression used is feasible to examine self-determination theory in predicting people's intention to buy recycled.

The results of the calculation of the tolerance value show that there is not variable independent which has a tolerance value of less than 0.10, it means that there is no correlation between independent variables whose value is more than 0.95. Based on the scatterplot graph below, it can be seen that the distribution of the data is irregular and does not form a certain pattern, for example forming clumps or forming a pattern like waves, and is spread above and below the number 0 on the Y axis, so it can be concluded that in this regression model there is no problem. Heteroscedasticity.

Analysis

The linear equation obtained in equation (1). From the regression equation (1), it can be interpreted that: The constant/intercept of 0.624 mathematically states that if the value of the independent variable self-determination theory is equal to zero, then the purchase intention value of Y is 0.642. In other words, the community already has the desire to buy recycled products, so the existence of a recycling product campaign must be increased so that people are moved to support recycled products.

$$Y = 0,624 - 0,054(X_1) - 0,019(X_2) - 0,006(X_3) - 0,354(X_4) + 0,466(X_5) + 0,696(X_6) + \epsilon \quad (1)$$

Amotivation variable coefficient (X1) of 0.054 means that if the amotivation variable (X1) increases while the other independent variables are constant, the purchase intention will increase. Amotivation is people who do not have motivation for environmental campaign programs, namely recycled products. Raising awareness for the whole community will be a process of raising public awareness so that recycled production will be accepted by the market. External regulation variable regression coefficient (X2) of -0.019 means that if the external regulation variable (X2) decreases while the other independent variables are constant, the intention to buy recycled products will decrease. External motivation that is categorized as giving rewards,

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punishments or developing promotions using gifts, bonuses is not effective for recycled products. The community's genuine desire to support nature conservation is the main campaign, not giving big bonuses or crazy promotions to get products.

Table 3. Results of Data Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.624	.501		1,245	.216		
Amotivation	-.054	.074	-.055	-.729	.467	.806	1,241
External	-.019	.075	-.020	-.246	.806	.699	1,431
Introjected	-.006	.072	-.006	-.083	.934	.886	1,129
Identified	-.354	.147	-.305	-2.403	.018	.289	3,464
Integrated	.466	.150	.425	3.111	.002	.249	4,017
Intrinsic	.696	.160	.562	4.356	.000	.279	3,589

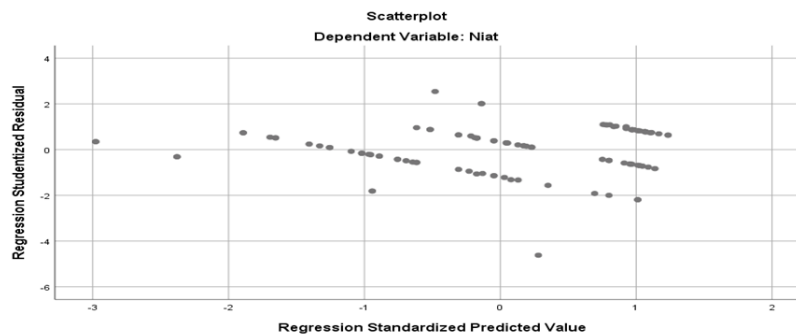


Figure 3. Graph of Heteroscedasticity Test Plot

The coefficient of the introjected regulation variable (X 3) is 0.006, meaning that if the introjected regulation variable (X 3) increases while the other independent variables are constant, the purchase intention will also experience a very slight increase. Things that match the indicators of purchasing recycled products because they are forced to not feel good with friends, feel guilty if they don't buy, feel ashamed if they don't participate in environmental awareness campaigns are indicators of community togetherness because humans have a need for existence in their environment.

The coefficient of the variable identified regulation (X 4) is - 0.354 This means that if the identified regulation variable (X4) decreases while the other independent variables are constant, the purchase intention will decrease. The indicators buying recycled products will help the lungs of the world, recycled products make the earth healthier, recycled products reduce waste are strong reasons to buy recycled products. The coefficient of the integrated regulation variable (X 5) is 0.466, meaning that if the integrated regulation variable (X5) increases while the other independent variables are constant, the intention to buy recycled products will increase. Purchasing recycling is according to my life's purpose to always be useful, buying recycling is an important thing to do for me recycling is the first step to solving world pollution. Intrinsic

motivation variable coefficient (X 6) of 0.696 means that if the intrinsic motivation variable (X6) increases while the other independent variables are constant, the purchase intention will increase. Indicators I like recycled products, recycling creates something useful from waste, fun creative recycling products are important factors in increasing motivation to increase purchase intention of recycled products.

Simultaneous Significance Test (F Statistics Test)

The F test can be seen in table 4, significant 0.00 is intended to determine the effect of self-determination theory together (simultaneously) can be measured by independent variables (amotivation, external regulation, introjected regulation, identified regulation and integrated regulation and intrinsic motivation) on variables dependent (purchase intention). In this test also uses the level of significance or the level of significance of is (α) 5% or 0.05, the criteria for testing the F statistic test is if the significance value (Sig) is output from the ANOVA if the Sig value. <0.05, then all independent variables simultaneously affect the dependent variable

Table 4. Simultaneous Test Results (Test F)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48,842	6	8.140	18,925	.000 ^b
	Residual	43,873	102	.430		
	Total	92.716	108			

a. Dependent Variable: Intention

b. Predictors: (Constant), Intrinsic, Introjected, Amotivation, External, Identified, Integreted

Table 5. Determinant Test Results (R Test)

Model	R	R Square	Adjusted R Square	Sig. F Change	Durbin-Watson
1	.726 ^a	.527	.499	.000	1,827

a. Predictors: (Constant), Intrinsic, Introjected, Amotivation, External, Identified, Integreted

b. Dependent Variable: Intention

From table 4, self-determination theory as measured by the variables amotivation, external regulation, introjected regulation, identified regulation and integrated regulation and intrinsic motivation can be used to see its effect on the intention to buy recycled products. After the F test is done, we can examine the R2 test in table 5 to get the results of 0.527 which explains that self-determination theory as measured by amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation can predict intention of 52.7 % and the rest is influenced by other factors not examined in the study.

Partial Parameter Significance Test (Test Statistical t)

The t-test is intended to partially determine the effect of the independent variables (amotivation, external regulation, introjected regulation, identified regulation and integrated regulation and intrinsic motivation). on the dependent variable (purchase intention). In this test also uses the level of significance or the level of significance of is (α) 5% or 0.05, the test criteria for the t statistic test is if the significance value (Sig) is output from the ANOVA if the Sig value. <0.05 , then all independent variables (amotivation, external regulation, introjected regulation, identified regulation and integrated regulation and intrinsic motivation) partially affect the dependent variable, namely purchase intention, and vice versa.

Table 6 : Hypothesis Testing Results

Hypothesis	t Test	Result
Amotivation can be used to predict the purchase intention of recycled products	0,467	Not Significant
External regulations can be used to predict the purchase intention of recycled products	0,806	Not Significant
Introjected regulations can be used to predict the purchase intention of recycled products	0,934	Not Significant
Identified regulations can be used to predict the purchase intention of recycled products	0,018	Significant
Regulatory integration can be used to predict the purchase intention of recycled products	0,002	Significant
Intrinsic regulation can be used to predict the purchase intention of recycled products	0,000	Significant

The results of the analysis based on Table 6 obtained are as follows: Variable Amotivation the significance probability value of 0.467 is greater than 0.05, thus it can be concluded that partial variable motivation has no effect on purchase intention variable.

Variable external regulation of 0.806 is not significant (see table 6) it means external regulation variable has no effect on the intention to buy recycled products. Not significant is also found in the introjected regulation variable of 0.934. There is a significant strong influence on the influence of the variable identified regulation is 0.018. Significant strong influence on of the integrated regulation variable is 0.002, meaning that if the integrated regulation variable. Significant 0.00 intrinsic motivation variable is the dominant variable that influences the intention to buy recycled products. Someone who likes and supports saving the environment, likes recycled products, recycling creates something useful from waste, fun creative recycled products will convincingly be motivated to buy recycled products.

From the results above, we can see that intrinsic motivation will be a

strong influence on the intention to buy recycled products. Someone who cares about the environment and likes things that are created out of concern for green nature will have a strong purchase intention. This awareness campaign will help develop the recycling product processing industry. The marketing strategy used is more appropriate using a niche market strategy. The market niche deals with narrower customers with a different marketing mix by identifying the niche and then the segments that work on the market for environmentalists, both organized and scattered individually in the community.

DISCUSSION

The results of research simultaneously is self-determination theory as measured by amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, intrinsic regulation will have influence predicting the purchase intention of recycled products in the era of society 5.0. This means the working hypothesis is accepted. Motivation can be a driving force in the intention to purchase recycled products. Whether the need is utilitarian or hedonic, the magnitude of the tension it creates determines the urgency the consumer feels providing the level of arousal as a boost. Products that are able to create an urge to buy become an attraction (Solomon, 2018). The results of the simultaneous analysis are different from the partial analysis because several variables do not affect the purchase intention variable.

Someone who is not motivated to protect the environment because they don't think about product recycling, don't really understand product recycling, nor understand green natural products will not be interested in product recycling. This is in accordance with the theory of motivation put forward by Abraham Maslow (Maslow, 1991) motivation can be described as a driving force within individuals that encourages them to take an action. According to this, the results of of Gagn, et.all, 2014 in (Van den Broeck et al., 2016) that people who carry out activities have at least one type of motivation. This is also in accordance with the results of research from (Ntoumanis et al., 2021) (L. Williams, 2019), (C. France, 2017) that amotivation has no effect on one's activities. In accordance with the above, according to the results of this study on self-determination theory to predict people's intentions to buy recycled products, it was found that someone who is not motivated and does not care about the environment has no interest in product recycling. So that the marketing strategy is to provide motivation for environmental care.

External regulation variables do not have a significant effect on the intention to buy recycled products. According to what Solomon explained, consumers decide to try a product because we want to learn more about the experience and in some ways grow personally (Solomon, 2018). Promotions with various strategies that are commonly used in product marketing such as discounted prices, prizes according to this theory are not effective for product recycling (Ntoumanis et al., 2021), (L. Williams, 2019). Motivation due to social involvement or social sanctions has no effect on the intention to

purchase recycled products. Motivation because they are forced to feel uncomfortable with friends, feel guilty if they don't buy, feel ashamed if they don't participate in environmental awareness campaigns, have no effect. Social motivation has changed because of technology and massive use of social media. Changes in social relations have an impact on the pattern of making friends in the community in the era of society. The attachment of emotional closeness is also reduced (Anthonysamy et al., 2021).

A significant strong influence is found in the influence of the identified regulation. Self-determination theory explains that humans have a specification of important values that they understand. This will motivate their behavior to get what they believe to be the truth (Ryan et al., 2008). Motivation arises according to the desired behavior of consumers. This happens because of the needs that want to be satisfied (Solomon, 2018). The results of research on the effect of regulation on intentions are in accordance with previous studies from various fields (C. France, 2017) (Kritz et al., n.d.) Indicators of buying recycled products will help the lungs of the world, recycled products make the earth healthier, recycled products reduce waste are strong reasons to buy recycled products. The regulation variable (X5) is significantly 0.002 giving a strong influence to predict the intention to buy recycled products. Purchasing recycling is according to my life purpose to always be useful, buying recycling is an important thing to do for me recycling is the first step to solving world pollution. Significantly 0.00 intrinsic motivation variable (X6) is the dominant variable that affects the intention to buy recycled products. Someone who likes and supports the environment, likes recycled products, recycles creates something useful from waste, recycles products that are fun and has fun buying recycled products.

CONCLUSION

The era of society 5.0 is the era of humans being the captain of the industry. Self-determination theory predicts that the intention to buy recycled products as a green nature campaign product is a business that has opportunities in the future. After conducting a study, self-determination theory was measured by amotivation, external regulation, introjected regulation, identified regulation and integrated regulation and intrinsic motivation influenced predicting the intention to buy recycled products.

The most influential variable is intrinsic motivation, so the most significant thing for people to have an intention to purchase recycled products is because they likes and supports the campaign to save the environment. Recycled products according to this variable have useful values and all creativity to process them will increase the intention to buy these products.

This article was researched using a broad respondent, namely the community randomly gave limited answers according to the questionnaire provided by the researcher. Researchers assume that research will be better if researching on recycled products that have developed so that respondents are more focused in providing an assessment of research questionnaires.

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