

Five -Factor Model (FFM) of Personality Toward Adoption of Innovative Purchasing Indonesia Consumer Across Generation

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Abstract

Purpose – This paper seeks to test the impact of the five personality factors on innovative behaviour in purchasing Indonesian consumers across generations. **Methodology/approach** – Quantitative methods were used in this research and used survey techniques. The survey was carried out by distributing questionnaires to 1000 Indonesian consumer respondents from 34 provinces. The response rate was 878 people/questionnaire analysed. **Findings** – It was found that the personality traits Openness to Experience and Extraversion have a positive and significant effect on the adoption of purchasing innovations among Gen Z, Y consumers and total consumers. The Conscientiousness characteristic has a positive effect and Neuroticism has a significant negative effect on the Adoption of purchasing innovations in generation. **Novelty/value** – Therefore, understanding the characteristics of innovators is important for companies because this group of consumers determines the success of the diffusion of product innovation.

Keywords: Consumer, Personality, Adoption, Innovation, Buying

INTRODUCTION

Global competition encourages marketers to implement dramatic changes in marketing strategy innovation. Innovation in all aspects of business, operations, marketing, technology and information systems encourages companies to implement the diffusion of different innovations into the market (Bendotti, 2017). Adoption of innovation by consumers is important for companies because it determines the success of innovation diffusion (Askarany, 2009).

Studies on innovation adoption processes have developed various profiles of consumer innovators (Dobre, Dragomir, & Preda, 2009). One of the most widely researched results of research on the characteristics of innovators is the Big Five Characteristic Model of personality (Five-Factor Model/FFM) (Vannella, 2017; Guhathakurta, 2016; Novikova, 2013). FFM is a contemporary personality model and is a basic dimension of human personality structure (Novikova, 2013). Character or personal characteristics are patterns of thinking, feeling, or behaving that tend to be consistent over time and relevant in various situations (Soto, 2018). Personality traits are key indicators in an individual's life, including innovativeness (Imran, 2019).

FFM has been widely proven to be relevant to consumer behaviour and marketing (Roos & Kasemi, 2022). The Big Five—Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience—is a set of bipolar trait dimensions that constitute the most widely used model of personality structure (Soto, 2018). Extraversion is a character characterized by a tendency to be open to social environments, express oneself, and have enthusiastic energy. Innovators have the characteristics of being highly extroverted (Vannella, 2017). Agreeableness is a character that shows an individual's tendency to comply with the social environment. Neuroticism is a personality that is related to emotional stability

(Vannella, 2017). Openness extent shows the extent of intellectual curiosity, self-awareness, and individualism/nonconformance (Imran, 2019). Conscientiousness is the propensity of an individual to have the character of self-responsible, organized, persistent, and motivated to pursue the goal accomplishment (Vannella, 2017).

Each personality trait in the Big Five is related to behaviour and can predict life outcomes (Soto, 2018). From several studies, the Big Five or FFM has been linked to aspects of individual psychology (Imran, 2019), inventors (Vannella, 2017), and the characteristics of innovativeness in relation to satisfaction in life (Imran, 2019). In this research, FFM will be analysed in relation to the characteristics of consumer innovators and how they adopt innovation in purchasing.

The first concept of consumer innovators in the context of innovation adoption is consumers who adopt or purchase products in the early stages of launching or diffusion of product innovation (Robertson, 1967; Rogers, 2003; Guhathakurta, 2016). Consumers who buy products in this first stage are driven by cognitive and sensorial motivation to try new things (Dobre, et al., 2009). A new concept about consumer innovators has also been developed by (Hippel, et al., 2011) that consumer innovators are consumers who participate in creating new creations/ideas for the products they consume, for example consumers modify the products they consume into new products.

Vannella (2017) stated that through FFM, it is possible for researchers to analyse the innovator's personality in a structured and precise manner. Individual consumers with an innovator personality tend to complete all stages of innovation adoption (Stock, von Hippel, & Gillert, 2016). Innovative consumer behaviour is implemented, among other things, in purchasing innovations (Karaarslan & Akdoğan, 2015).

Stock, von Hippel, & Gillert (2016) in their research stated that further research is needed on the impact of 5 personalities on actual adoption. Dobre, et al. (2009) argue that consumer innovators are important in marketing strategies at the purchasing decision stage. This research is useful for providing valuable information for marketers in implementing consumer personality-based communication strategies. Dobre, et al. (2009) stated that it is important to identify consumer innovators because they are the determinants of the success of innovation diffusion. Consumer innovators are the key to business development based on the synergy of consumer creativity as input for new product innovation (Nikolč & Miladinović, 2012).

This research aims to establish a set of hypotheses on the impact of the five personality factors on innovative behaviour in purchasing Indonesian consumers across generations. Through cross-generational analysis, namely Generation X, Y, and Z, a comprehensive explanation can be obtained of how prepared Indonesian consumers are in purchasing innovation.

LITERATURE REVIEW

Consumer innovators and adoption of purchasing innovation

Various marketing literature finds a relationship between innovativeness and personality traits and consumer behaviour (Roos & Kasemi, 2022). Consumer innovators are said to have the characteristics of venturesome who are very obsessed with being innovators, eager to try new ideas, opinion leaders, and taking risks (Rogers, Diffusion of innovation, 2003). In many subsequent studies, the characteristics of consumer innovators began to be identified. Research by Dobre, et al. (2009) and Guhathakurta (2016) identify consumer innovators as follows:

- a. Innovativeness is related to the tendency to seek novelty and creativity, the need for knowledge and the need for change.
- b. Consumer innovators buy products according to their standards.
- c. Innovator consumers are less dogmatic, which means they are not anxious, not afraid of risk, not afraid of change.
- d. Consumer innovators are individuals who are creative, rational, intelligent, and be motivated for achievement.

Innovators are referred to as individuals who are the first group of people to buy new product innovations. Consumer innovators are a cluster of consumers who are in the product innovation diffusion process so that it is also related to time and is called 'the first adopter'. First adopter refers to the grouping of consumer categories based on the classic writings of Rogers (1962) and Robertson (1967) where there are 5 consumer groups, namely Innovators (2.5% of the population), Early adopters (13.5%), Early majority (34%), Late Majority (34%), and Laggard (16%). Some researchers say that the number of innovators is

approximately 2.5% of consumer adopters, and other researchers say they are buyers in the product introduction phase (approximately up to 3 months after launch) (Guhathakurta, 2016).

The five-factor model of personality

There are two concepts in identifying the personalization characteristics of consumer innovators. Consumer innovators in the context of innovation adoption have an opinion leader personality, dare to take risks, inner orientation, are independent of group norms, and are open to ideas and change (Dobre, et al., 2009). The second context is the innovator of FFM. In this model, individuals are considered to have 5 main personality characteristics that are stable, situational, and in the context of social roles (Stock, von Hippel, & Gillert, 2016). This character has been around all the time since childhood and is also influenced by genetics and environmental factors (Soto, 2018).

a. Openness to experience.

Soto (2018) states that the character of openness to experience refers to differences in intellectual curiosity, aesthetic sensitivity, and imagination. Openness to experience is the characteristic of individuals who are always curious and looking for new experiences. Individuals who have the character of Openness to experience show creative, imaginative, untraditional, curious, adventurous, and analytical characteristics (Stock, von Hippel, & Gillert, 2016; Novikova, 2013).

b. Extraversion

The characteristics of Extraversion are characterized by people who are assertive, dominant, energetic, enthusiastic, talkative, enjoy socialization activities, prefer to be with other people than alone (Stock, von Hippel, & Gillert, 2016). Individuals with extraverted characteristics are characterized by comfort in expressing themselves in social environments (Soto, 2018).

c. Conscientiousness.

This character has the characteristics of an individual who is well organized, a good planner, persistent, motivated to achieve goals, hard worker, free will/independent, disciplined, systematic, not impulsive/spontaneous (Stock, von Hippel, & Gillert, 2016). On the other hand, unconscientious individuals are comfortable with non-compliance, disorder and less motivated to complete tasks (Soto, 2018).

d. Agreeableness.

Individuals with the character of Agreeableness have a positive individual's interpersonal and cooperative orientation. Agreeable individuals are associated with individuals who are also in harmony with the characters of conforming to social conventions, compliant, trusting, forgiving, modest, soft-hearted, and tolerant (Stock, von Hippel, & Gillert, 2016). Soto (2018) states that Agreeable individuals are sensitive to others' well-being, treat people with respect, and hold generally positive beliefs; On the contrary, disagreeable individuals tend to have less regard for others, and for social norms of politeness.

e. Neuroticism.

This character is shown by poor emotional factors such as anxiety, insecurity, and hostility. Individuals with high scores on this character aspect tend to express negative attitudes and lower quality interactions with others in social situations. On the other hand, low scores on Neuroticism are emotionally stable, tend to be calm, patient, secure, and adjusted (Stock, von Hippel, & Gillert, 2016). Individuals with high Neuroticism show sadness and mood swings (Soto, 2018). In Vannella's (2017) research, innovation was negatively related to Neuroticism.

The Five-Factor Model of personality and generation

Personality develops in early childhood. Personality tends to grow towards stability with age and slopes towards the end of middle age (maturity principal pattern) (Soto, 2018). Negative patterns or declines in personality development occur from mid-childhood to adulthood, including decreasing Extraversion, Agreeableness, Conscientiousness, and Openness to Experience (Soto, 2018).

The empirical studies have also shown that innovators are young people (Dobre, et al., 2009). Many innovations in purchasing behaviour are currently carried out by young consumers, for example online purchasing, bank cards, answering machines, communications, and IT.

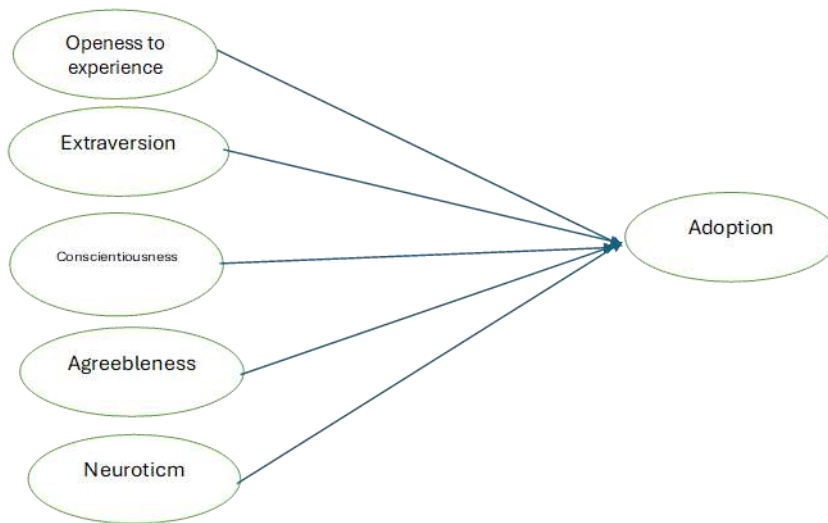


Figure 1. Research model

Hypothesis

- H1: There is an influence of the Five-Factor Model of personality of consumer innovators on the adoption of innovation in purchasing in Generation Z
- H2: There is an influence of the Five-Factor Model of personality of consumer innovators on the adoption of innovation in purchasing in generation Y
- H3: There is an influence of the Five-Factor Model of personality of consumer innovators on the adoption of innovation in purchasing in Generation X
- H4: There is an influence of the Five-Factor Model of personality of consumer innovators on the adoption of innovation in purchasing among Indonesian consumers.

METHOD

This research uses a quantitative causal comparative method. Researchers tested the Five-Factor Model of personality of consumer innovator variables on the adoption of purchasing innovations. The five independent variables were taken from research by Stock, von Hippel, & Gillert (2016) and Soto (2018) with indicators that have been developed by researchers from previous research.

Table 1. Independent variable indicators

Code	Number	Indicators
Openness to Experience		
RVS	6	Open to input
LOV	17	Live passionately
LAW	30	Think and act conservatively/traditionally
LAW	31	Positive thinking
LAW	35	Ease of getting information

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Code	Number	Indicators
SHA	43	Modern life
Extraversion		
RVS	1	Life full of freedom
RVS	5	Ambition
LOV	19	Your own safety and comfort
LOV	20	Respect/respect yourself
LAW	33	Value free (no conflict of interest)
LAW	34	Easy to adapt
SIH	55	Individualism
Conscientiousness		
RVS	7	Competency/ability
RVS	11	Intellectual
LOV	21	The desire to achieve achievements/dreams/hopes
LAW	32	Responsible individual
KAR	47	Discipline
KAR	49	Hard work
HAC	69	Punctuality
HAC	73	Be firm in saying 'YES' and 'NO'
Agreeableness		
RVS	9	Forgive
RVS	10	Honest and trustworthy
RVS	14	Politeness
LOV	16	Sense of belonging/participation
LOV	18	Respect others
MCK	22	Family oriented
LAW	37	Appreciate differences/diversity
INA	40	Tolerance
INA	41	Harmonization
SHA	42	Harmony with nature

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Code	Number	Indicators
KAR	50	Joint agreement/deliberation
SIH	53	Friendliness
ELI	58	Understanding
KAD	63	Apologize
HAC	68	Friendship
HAC	72	Be careful in speaking and interacting
Neuroticism		
RVS	4	Wisdom
RVS	8	Firm in principle
RVS	12	Logical and rational
RVS	15	Self-control
KAR	48	Hopeful
SIH	51	A religious norm
ELI	56	Vigilance
ELI	57	Sensitivity (sensitivity)
ELI	61	Patience
ELI	62	'lila/rila/sincerity'
TRI	64	'nerimo' (accepting what God gives)
TRI	65	'Aja ngege mangsa' (not forcing circumstances/time)
TRI	66	'Gemi, nastiti, ati-ati' (frugal, careful, careful in managing money)
HAC	71	Fear of embarrassment
HAC	74	Don't embarrass others in public

Table 2. Indicators of the dependent variable Adoption innovation in purchasing

Code	Number	Indicators
MCK	23	Courage to take risks
MCK	25	Be the first to buy new products
MCK	26	Open with credit offer
MCK	27	Trust in internet purchase

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In this indicators of variable (Table 1 and Table 2), the Neuroticism variable is designed with positive questions, so it is actually called Low Neurocitism. The scale used is a Likert scale. The population in this research is individual consumers in Indonesia. Samples were taken using convenience sampling techniques. Data was obtained from distributing questionnaires to 1000 consumers from 34 provinces in Indonesia. The response rate for filling out all questionnaires was 878 respondents, consisting of:

Gen 1 = Gen Z (1997-2012) - but only 17-25 years old were taken.

Gen 2 = Gen Y (1981-1996) – 26-45 years old

Gen 3 = Gen X and Baby Boomer (1946-1980) - >46

Data were analyzed using Multiple Regression analysis. Before analysis, the instrument was tested for validity and reliability using Pearson item-to-total correlation and Cronbach Alpha. Following are the results of the validity and reliability tests.

Table 3. Validity test results

Code	Number	Indicators	Koefisien	Valid
Openess to Experience				
RVS	6	Open to input	.658**	Valid
LOV	17	Live passionately	.716**	Valid
LAW	30	Think and act conservatively/traditionally	.522**	Valid
LAW	31	Positive thinking	.710**	Valid
LAW	35	Ease of getting information	.697**	Valid
SHA	43	Modern life	.661**	Valid
Extraversion				
RVS	1	Life full of freedom	.569**	Valid
RVS	5	Ambition	.499**	Valid
LOV	19	Your own safety and comfort	.434**	Valid
LOV	20	Respect/respect yourself	.428**	Valid
LAW	33	Value free (no conflict of interest)	.496**	Valid
LAW	34	Easy to adapt	.359**	Valid
SIH	55	Individualism	.516**	Valid
Conscientiousness				
RVS	7	Competency/ability	.742**	Valid
RVS	11	Intellectual	.562**	Valid
LOV	21	The desire to achieve achievements/dreams/hopes	.697**	Valid
LAW	32	Responsible individual	.731**	Valid

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Code	Number	Indicators	Koefisien	Valid
KAR	47	Discipline	.768**	Valid
KAR	49	Hard work	.785**	Valid
HAC	69	Punctuality	.780**	Valid
HAC	73	Be firm in saying 'YES' and 'NO'	.741**	Valid
Agreeableness				
RVS	9	Forgive	.670**	Valid
RVS	10	Honest and trustworthy	.689**	Valid
RVS	13	Politeness	.668**	Valid
RVS	14	Sense of belonging/participation	.710**	Valid
LOV	16	Respect others	.712**	Valid
LOV	18	Family oriented	.758**	Valid
MCK	22	Appreciate differences/diversity	.662**	Valid
LAW	37	Tolerance	.730**	Valid
INA	40	Harmonization	.738**	Valid
INA	41	Harmony with nature	.703**	Valid
SHA	42	Joint agreement/deliberation	.626**	Valid
KAR	50	Friendliness	.742**	Valid
SIH	53	Understanding	.665**	Valid
ELI	58	Apologize	.654**	Valid
KAD	63	Friendship	.746**	Valid
HAC	68	Be careful in speaking and interacting	.764**	Valid
HAC	72	Forgive	.724**	Valid
Neuroticism				
RVS	4	Wisdom	.621**	Valid
RVS	8	Firm in principle	.668**	Valid
RVS	12	Logical and rational	.533**	Valid
RVS	15	Self-control	.736**	Valid
KAR	48	Hopeful	.680**	Valid
SIH	51	A religious norm	.657**	Valid

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Code	Number	Indicators	Koefisien	Valid
ELI	56	Vigilance	.574**	Valid
ELI	57	Sensitivity (sensitivity)	.657**	Valid
ELI	61	Patience	.726**	Valid
ELI	62	'lila/rila/sincerity'	.748**	Valid
TRI	64	'nerimo' (accepting what God gives)	.674**	Valid
TRI	65	'Aja ngege mangsa' (not forcing circumstances/time)	.749**	Valid
TRI	66	'Gemi, nastiti, ati-ati' (frugal, careful, careful in managing money)	.740**	Valid
HAC	71	Fear of embarrassment	.474**	Valid
HAC	74	Don't embarrass others in public	.671**	Valid
Adoption innovation in purchasing				
MCK	23	Courage to take risks	.473**	Valid
MCK	25	Be the first to buy new products	.696**	Valid
MCK	26	Open with credit offer	.752**	Valid
MCK	27	Trust in internet purchase	.671**	Valid

Table 4. Reliability test result

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Openess	236.1379	492.455	.808	.675	.829
Extraversion	234.6862	541.224	.389	.171	.866
Consc.	225.1402	451.605	.847	.737	.813
Agreeble	187.6172	327.065	.884	.851	.801
Neuro.	191.5839	325.380	.857	.811	.810
Adoption	249.3494	561.772	.296	.175	.873

All indicators of validity test results on the research instruments in Table 3 are valid. Likewise, in Table 4, all variables tested for reliability are declared reliable.

RESULT AND DISCUSSION

Data description

Table 5 describes a description data of research respondents. Most of the respondents (55.1%) were women. In terms of age category, most respondents (50.8%) were Generation Y, while in terms of social class, the majority (56.9%) were from the lower social class. The description of the Gen Z, Y, X variable data in Indonesia is as follows:

Table 5. Data Description

Indicator	Sub indicators	Percentage
Gender/Sex	Male	44.9
	Female	55.1
Age	17-25 Yo (Z)	28.5
	26-45 Yo (Y)	50.8
	>46-55 Yo (X)	20.7
Social Class	Upper	2.2
	Middle	40,9
	Lower	56.9

Table 6. Descriptive Statistics of Variables

Variable	Gen Z		Gen Y		Gen X		Total	
	Mean	N	Mean	N	Mean	N	Mean	N
Adoption (Y)	3.0752	256	3.0455	445	3.0249	181	3.0485	878
Openess to Experience	4.0417	256	4.3273	445	4.2956	181	4.2376	878
Extraversion	3.8878	256	3.8353	445	3.7782	181	3.8393	878
Conscientiousnes	4.3955	256	4.6239	445	4.6050	181	4,5526	878
Agreebleness	4.2004	256	4.4066	445	4.4267	181	4.3510	878
Neuroticism	4.2007	256	4.4416	445	4.4651	181	4,4583	878

Table 6 describes the mean of each variable tested. There was a total of 878 respondents, of which 256 respondents were Generation Z, 445 respondents were Generation Y, and 181 respondents were Generation Z. Based on this data in Table 6, it is known that the mean adoption of purchase innovation for each generation is approximately the same, with a total consumer mean of 3.0 (on a scale of 5). This means that Indonesian consumers are quite good at accepting or adopting innovations in purchasing/consumption. From consumer personality characteristics:

1. Openness to experience. The mean for Gen Y is the highest compared to Gen
2. Extraversion. Gen Z's personality characteristics are slightly higher than other Gens, namely 3.8.
3. Conscientiousness. Gen Y's personality characteristics in Conscientiousness are higher than other Gen.
4. Agreebleness. Gen X's personality characteristics in Agreebleness are higher than other Gen.
5. Neuroticism. The mean personality characteristics of Gen In this case, this means that Gen X has the lowest level of Neuroticism or is said to have the highest emotional stability. Meanwhile, Gen Z has the lowest emotional stability.

From the mean personality results of all consumers, the highest mean score is Conscientiousness. Meanwhile, the lowest mean value is for the Extraversion personality element.

R Value (Multiple Correlation Coefficient)

The largest multiple correlation coefficient is in the equation for Generation Z, with a value of $R=.543a$ and a multiple determination coefficient value of $R^2=.295$. This means that the relationship between all 5 personality characteristics variables of generation Z consumers and the adoption of purchasing innovation is quite strong. Meanwhile, for other generations and for all consumers, it is relatively low (R value around 0.3).

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Table 7. Multiple Correlation Coefficient

a. Generation Z

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.543 ^a	.295	.281		.61723	.295	20.931	5	250	.000

b. Generation Y

1	.316 ^a	.100	.089	.65861	.100	9.725	5	439	.000
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c. Generation X

1	.352 ^a	.124	.099	.83797	.124	4.950	5	175	.000
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d. Total Consumer

1	.348 ^a	.121	.116	.70310	.121	24.147	5	875	.000
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F value

The F values in all four equations are significant. The highest F value is in the Generation Z equation, namely $F=20.931$, but it is still below the F value in the fourth equation (all consumers), namely $F=23.274$.

Regression Equations

Table 8. Regression equation of Generation Z

		Coefficients ^a			t	Sig.
Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients		
	B			Beta		
1	(Constant)	.548	.341		1.605	.110
	Openess	.708	.134	.553	5.278	.000
	Extraversion	.405	.095	.301	4.260	.000
	Consc.	-.053	.140	-.044	-.378	.705
	Agreeble	-.448	.197	-.312	-2.269	.024
	Neuro.	.049	.175	.036	.281	.779

a. Dependent Variable: meanadop

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

$$Y = 0.548 + 0.708 X_1^* + 0.405 X_2^* - 0.053 X_3 - 0.448 X_4^* + 0.049 X_5 + e$$

In Table 8, for Generation Z consumers, the personality characteristics of Openness, Extraversion, and Agreeableness have a significant influence on Adoption of purchasing/consuming innovations. Conscientiousness and Neuroticism variables are not significant. The Agreeableness variable has a negative and significant effect, which means that the higher the Agreeableness characteristic, the lower the adoption of consumer purchasing innovation.

Table 9. Regression equation Generation Y

		Coefficients ^a			t	Sig.
Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients		
	B			Beta		
1	(Constant)	.267	.436		.612	.541
	Openness	.291	.105	.95	2.770	.006
	Extraversion	.215	.074	.136	2.900	.004
	Consc.	.080	.124	.049	.640	.522
	Agreeble	.242	.197	.128	1.226	.221
	Neuro.	-.166	.156	-.102	-1.067	.287

a. Dependent Variable: meanadop

$$Y = 0.267 + 0.291 X_1^* + 0.215 X_2^* + 0.080 X_3 + 0.242 X_4 - 0.166 X_5 + e$$

Table 9 explain that for Generation Y consumers, only the variables Openness to Experience and Extraversion have a significant effect on the adoption of purchasing/consumption innovations. Meanwhile, the other three characteristics, namely Conscientiousness, Agreeableness, and Neuroticism is not significant.

Table 10. Regression equation Generation X

		Coefficients ^a		t	Sig.
		Unstandardized Coefficients	Standardized Coefficients		
Model		B	Std. Error	Beta	
1	(Constant)	1.715	.801		.034
	Openness	.128	.215	.069	.552
	Extraversion	-.090	.144	-.047	.532
	Consc.	.720	.255	.371	.005
	Agreeable	.843	.433	.370	.053
	Neuro.	-1.31	.376	-.607	.001

a. Dependent Variable: meanadop

$$Y = 1.715 + 0.128 X_1 - 0.090 X_2 + 0.720 X_3 + 0.843 X_4 - 1.331 X_5 + e$$

From Table 10, in Generation X, the variables Conscientiousness and Neuroticism have a significant effect on the adoption of purchasing innovation. Meanwhile, the Neuroticism variable has a negative and significant effect, which means that the higher the Neuroticism characteristic, the lower the adoption of consumer purchasing innovation. Neuroticism is related to emotional stability, so for Generation X the more unstable emotions, will encourage the adoption of purchasing innovations.

Table 11. Regression equation Indonesia Consumer

		Coefficients ^a		t	Sig.
		Unstandardized Coefficients	Standardized Coefficients		
Model		B	Std. Error	Beta	
1	(Constant)	.629	.270		.020
	Openness	.453	.081	.311	.000
	Extraversion	.212	.054	.135	.000
	Consc.	.172	.093	.115	.065
	Agreeable	.023	.138	.013	.866
	Neuro.	-.269	.112	-.183	.017

a. Dependent Variable: meanadop

$$Y = 0.629 + 0.453 X_1 + 0.212 X_2 - 0.172 X_3 - 0.023 X_4 - 0.269 X_5 + e$$

In Indonesian consumers (Table 11), the personality characteristics of Openness, Extraversion, and Neuroticism have a significant influence. Meanwhile, other characteristics, namely Conscientiousness and Agreeableness, do not have a significant effect. Meanwhile, the Neuroticism variable has a negative and significant effect, which means that the higher the Neuroticism characteristic, the lower the adoption of consumer purchasing innovation. Neuroticism is related to emotional stability, so for Indonesian consumers, the more unstable their emotions, the more they will encourage the adoption of purchasing innovations.

Discussion

This research aims to examine how the influence of FFM, namely Extraversion, Conscientiousness, Agreeableness, and Neuroticism, influences the adoption of purchasing innovations across consumers. In several studies, FFM is related to the level of consumer adoption of innovations in new products or ideas from companies. In this research, the results for each personality trait are as follows:

1. The variable Openness to Experience has a positive and significant effect on the adoption of purchasing innovations among Gen Z, Y consumers and total consumers.
2. The Extraversion variable has a positive and significant effect on the adoption of purchasing innovations among Gen Z, Y consumers and total consumers.
3. The Conscientiousness variable has a positive and significant effect on the adoption of purchasing innovation among Generation X consumers.
4. The Agreeableness variable has a negative and significant effect on the adoption of purchasing innovation among Generation Z consumers.
5. The Neuroticism variable has a negative and significant effect on the adoption of purchasing innovation among Generation X consumers and total consumers.

In Stock, von Hippel, & Gillert (2016), Openness to experiences is related to individual creativity in generating ideas. It is possible that the younger Generation Z and Y, they have many ideas in creating new techniques (von Hippel, Ogawa, & De Jong, 2011; Nikolić & Miladinović, 2012). In adulthood, Soto (2018) stated that there is a decline in the characteristics of Openness to experience.

The Extraversion variable has a positive and significant effect on the adoption of purchasing innovations among Gen Z, Y consumers and total consumers. One personality characteristic whose development pattern decreases with age is Extraversion (Soto, 2018). Because most of the respondents in this study are young consumers, the characteristic of Extraversion influences the adoption of purchasing innovations. Vannella (2017) states that innovator consumers are consumers who have Extraversion characteristics.

In the research of von Hippel, Ogawa, & De Jong (2011), Conscientiousness relates to the prototyping creation stage of products adopted by consumers. In this research, the well-planned/organized character of Generation X influences the adoption of purchasing innovation. Conscientiousness characteristics are being debated regarding their relationship with the innovator trait and influencing adoption (Vannella, 2017). However, this character will decrease/not grow as the individual ages and becomes an adult (Soto, 2018).

The Agreeableness variable has a negative and significant effect on the adoption of purchasing innovations among Generation Z consumers. This means that the more Agreeableness Character Generation Z has, the lower the behavioral tendency to adopt purchasing innovations. In accordance with the pattern of maturity principles, most individuals become more agreeable in late adulthood towards middle age (Soto, 2018).

The Neuroticism variable has a negative and significant effect on the adoption of purchasing innovations among Generation X consumers and overall consumers. Most individuals will be emotionally stable in late adulthood towards late adulthood (Soto, 2018). The negative direction of this variable is in line with research from Imran (2019).

In the future, consumer innovators will not only be passive consumers but will actively share knowledge with peers and companies. Therefore, understanding the characteristics of innovators is important for companies because this group of consumers determines the success of the diffusion of product innovation. Consumer innovators can become company partners to become ambassadors or influencers of new products or innovations (Rogers, 2003; von Hippel, Ogawa, & De Jong, 2011).

CONCLUSION

There is a general portrait of consumer innovators from various studies. Consumer innovators are motivated by innovation in marketing and products that have never been purchased (Karaarslan & Akdoğan, 2015). This research produced findings for each personality trait. The personality traits of

Openness to experience and Extraversion have a positive and significant effect on the Adoption of purchasing innovations among Gen Z, Y consumers and total consumers. Conscientiousness characteristics have a positive effect and Neuroticism has a significant negative effect on the adoption of purchasing innovations among Generation X consumers. Agreeableness has a negative and significant effect on the adoption of purchasing innovation among Generation Z consumers. Meanwhile, Neuroticism has a negative and significant effect on the adoption of purchasing innovation among Indonesian consumers.

The practical implications of this research are directed at the adoption of purchasing innovations. The results show that the personality traits of Openness to experience and Extraversion have a positive and significant effect on the adoption of purchasing innovations by the younger generation and Indonesian consumers. From these results, marketing strategies must focus on providing a pleasant purchasing experience and continuous innovation (Roos & Kasemi, 2022). The Conscientiousness variable has a positive and significant effect on the adoption of purchasing innovations among Generation X consumers (senior individuals). The implications that can be given to marketing strategies are a focus on honest information, marketing platforms that are trustworthy, safe, and pay attention to consumer privacy and security. The Agreeableness variable has a negative and significant effect on the younger generation and Neuroticism has a negative and significant effect on the senior generation. Marketers must create marketing innovations and encourage creative and innovative purchasing methods, for example with various conveniences, trialability, observability and compatibility in products, payment modes and purchases (Rogers, Diffusion of innovation, 2003).

Theoretically, this research needs to be developed into applicable research, especially for consumers in Indonesia. As stated by Saaksjarv (2003), it is important to research the application of innovation adoption in various aspects, especially technology-based innovation. Ozgur, et al. (2017) in their literature review stated that further research needs to also be directed at various empirical aspects of innovation and sociodemographic. This research has limitations in applying consumer FFM without linking it to the concept of innovation diffusion. Research on consumer innovators usually cannot be separated from the concept of Rogers' Theory of Diffusion in 1962 (Mack, 2018). Therefore, further research needs to be directed at the diffusion and adoption of innovations.

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