Model Of Adolescent Ethics In Mobile Diffusion On The Use Of Cellphones And Social Media In Semarang City

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Abstract

The Central Statistics Agency (BPS) notes that in 2022 as many as 67.88% of Indonesia's population aged over 5th years have a mobile phone. Meanwhile, in the same year, it was recorded that 65.15% of the people of Central Java Province owned cell phones. Some factors play an essential role in shaping adolescents' ethical views regarding mobile phones and social media use. This study aimed to analyze the factors that influence ethics by using mobile phones and social media in adolescents aged 13-15 years in Semarang. This study uses a quantitative method with Partial Least Squares (PLS) analysis. The theory used in this study is the theory of Uses and Gratification, Diffusion Innovation of Technology, and Ethical Systems. Primary data was obtained by distributing questionnaires to 100 respondents. The sampling technique used with the method of accidental sampling. The study results show a relationship between adolescents' mobile phone use and social media use by adolescents with the social interaction they receive. Active involvement in online interactions can have an impact on adolescent ethics, this is reflected in aspects of self-satisfaction. Besides that, emotional satisfaction factors such as feelings of pleasure and satisfaction in online interactions affect the formation of adolescent ethics. This study also reveals that the ethical model of adolescents is influenced by two main dimensions, namely fairness and utilitarian ethics. The implications of these findings can be used for the development of better educational approaches in teaching youth about ethics and responsibility in using technology and interacting in a digital environment.

Model Etika Remaja Dalam Difusi Mobile Pada Penggunaan Ponsel Dan Media Sosial Di Kota Semarang

Abstrak

Badan Pusat Statistik (BPS) mencatat bahwa pada tahun 2022 sebanyak 67,88% penduduk Indonesia yang berusia di atas 5 tahun memiliki ponsel. Sementara itu, di tahun yang sama, tercatat 65,15% masyarakat Provinsi Jawa Tengah memiliki ponsel. Beberapa faktor memainkan peran penting dalam membentuk pandangan etis remaja terkait penggunaan ponsel dan media sosial. Penelitian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi etika penggunaan telepon genggam dan media sosial pada remaja usia 13-15 tahun di Semarang. Penelitian ini menggunakan metode kuantitatif dengan analisis Partial Least Squares (PLS). Teori yang digunakan

dalam penelitian ini adalah teori Uses and Gratification, Difusi Inovasi Teknologi, dan Sistem Etika. Data primer diperoleh dengan menyebarkan kuesioner kepada 100 responden. Teknik pengambilan sampel yang digunakan dengan metode accidental sampling. Hasil penelitian menunjukkan adanya hubungan antara penggunaan telepon genggam remaja dan penggunaan media sosial oleh remaja dengan interaksi sosial yang diterimanya. Keterlibatan aktif dalam interaksi online dapat berdampak pada etika remaja, hal ini tercermin dari aspek kepuasan diri. Selain itu, faktor kepuasan emosional seperti perasaan senang dan puas dalam interaksi online mempengaruhi pembentukan etika remaja. Penelitian ini juga mengungkapkan bahwa model etika remaja dipengaruhi oleh dua dimensi utama, yaitu keadilan dan etika utilitarian. Implikasi dari temuan ini dapat digunakan untuk pengembangan pendekatan pendidikan yang lebih baik dalam mengajarkan remaja tentang etika dan tanggung jawab dalam menggunakan teknologi dan berinteraksi di lingkungan digital.

Kata kunci: *Anak Muda; Difusi Teknologi; Etika, Media Sosial; Uses and Gratification*

INTRODUCTION

In 2021, the Indonesian people were shocked by the results of the Digital Civility Index (DCI) survey conducted by the Microsoft research team which measured the level of civility of internet users throughout 2020. The survey results state that Indonesia is the country with the lowest level of civility in Southeast Asia, this indicates that Indonesia is 29th out of 32 countries that have been surveyed (CNN Indonesia, 2021). Furthermore, the survey results were followed by 16,000 respondents in 32 countries with a scoring system ranging from a scale of zero to 100, so the higher the score, the lower the online politeness in a country. Indonesia's online politeness score increased by eight points, from 67 in 2019 to 76 in 2020. The survey report also stated that Singapore is the fourth-best country globally and the first in Southeast Asia for politeness. Meanwhile, Vietnam ranked 24th, Thailand ranked 19th, and the Philippines ranked 13th.

In 2021, Microsoft again conducted the Digital Civility Index (DCI) Research 2021 with the result that people are becoming increasingly disrespectful during the COVID-19 pandemic in cyberspace. Microsoft surveyed 22 countries with an age range of teenagers aged 13 - 17 years and adults aged 18 - 74. After the COVID-19 pandemic, the perception of online civility among teenagers and adults worsened one year after the pandemic, including respondents from Poland, the Philippines, Italy, Germany, and Hungary (CNN Indonesia, 2021b). The Digital Civility Index (DCI) research looks at 21 online risks in four categories: reputational, behavioral, sexual, and personal/intrusive. Furthermore, based on the results of Microsoft's Global Online Safety Survey, there is a wide range of users around the world who experience online risks including misinformation and disinformation at 51%; personal attacks at 42% which include hate speech at 35%; cyberbullying, harassment, abuse at 20%, and threats of violence at 16%; violent content at 39% which includes real-world graphic violence and gore at 28%, and terrorist and violent extremist content at 12%; sexual at 25% which includes 16% Sexual solicitation, 11% Release of intimate images, without your consent, 9% Child sexual exploitation and abuse; self-harm at 15% which includes Suicide and self-harm content.

This indicates that in various parts of the world, problems related to online

civilization are still a global problem that must be considered for every country, including Indonesia. From 2016 to 2019 the number of children experiencing bullying on social media increased and decreased in 2020. According to the Indonesian Child Protection Commission (KPAI), 361 children were victims of bullying on social media during the period 2016-2020 (Pahlevi, 2022). Furthermore, according to the Ministry of Communication and Information, 3,640 contents caused hatred or hostility based on ethnicity, religion, race, and intergroup (SARA) from 2018 to 2021. There has been an increase in racist, homophobic, transphobic, and antisemitic hate speech on social media platforms (Cooldige, 2023). Furthermore, according to research conducted by the Anti-Defamation League (ADL) in 2023, 52% of all adult respondents in the United States have experienced hatred or harassment online. Meanwhile, 51% of adolescents aged 13-17 have experienced some form of online harassment in the past twelve months compared to only 36% in 2022. This shows that online hate and harassment are on the rise for both adults and teens in the 13 - 17 age range (Center For Technology & Society, 2023).

Racist, discriminatory, and violent content is increasing because when users of social media platforms see posts and advertisements that contain hatred, users will be algorithmically directed to content that contains similar elements of hatred. This is a negative thing because the features that should be applied in curating viewer experience according to interests and favorite references will further expand the reach of racist, discriminatory, and violent

content in the world of social media. Hate speech, online harassment, and bullying have become global problems that are still rooted in various social media platforms. The rapid development of technology has made people, especially teenagers, exposed to violence, bullying, harassment, and hate speech through social media platforms. This certainly affects how teenagers view the ethics of using social media and mobile usage.

According to the results of a study conducted Swenson-Lepper & Kerby (2019) showed that most students observed violations of ethical norms on social media and mapped the most common ethical issues on social media in the form of inappropriate images, privacy issues, and abuse of others. Furthermore, the study also showed that men were more likely to engage in malicious arguments on social media than women. The study found that 23% of participants admitted to engaging in malicious arguments over facts, and men were more likely to engage in such arguments than women. Two of the most common ethical issues identified by students were that someone else had shared something of theirs on social media without their permission or they had been tagged in something that the student deemed inappropriate. Students defined cyberbullying with the keywords harassing, demeaning others, putting people down, and making people feel bad. The most popular definition among students was making fun of people who are cruel, hurtful, and offensive. Besides cyberbullying, racism is also an ethical issue that arises on social media, and it even extends to unethical acts related to

sex (e.g. pornography, posts about sexual interactions, etc.).

Social media is a digital platform that provides features for various videos, images, and stories to other users. So it is not uncommon for social media to be one of the platforms for sharing thoughts and expressing the concerns and interests of each individual to others for what they consider important to themselves. Some people from social media users share posts on social media very often related to the causes and problems that occur both in the individual scope and in the scope of society. So it is not uncommon for social media to be a medium or means for each individual to channel their freedom of opinion because everyone has the right to post content in the form of videos, pictures, and stories on various topics without clear rules. So that not a few contents uploaded on social media violate the law or violate someone's rights. Internet users in Indonesia in the period 2022 - 2023 based on the survey results of the Indonesian Internet Service Providers Association (APJII) reached 215.63 with the majority of the Indonesian population aged 25 years and over increasingly internet literate. Furthermore, internet users from 19 - 24 years old were 14.69% in 2022, 15.26% in 2021, and 17.13% in 2020. Meanwhile, for the age of 16 - 18 years in 2022 as much as 7.47%, in 2021 as much as 8.12%, and in 2020 as much as 8.83% (Indonesian Information Portal, 2023). This shows that internet users among teenagers are also relatively large. So that teenagers, especially Indonesian teenagers, have a high vulnerability in experiencing discomfort in ethical matters on social media platforms.

Perceptions related to ethics and privacy in social media are formed inseparably from the culture of each region. According to Barrett-Maitland & Lynch (2020) privacy protects against anti-social behavior such as deceit, disinformation, and fraud, but privacy is also considered relative because privacy rules will vary based on several factors, namely climate, religion, technological advances, and political arrangements. This will certainly affect people's views, especially teenagers who are the most active users of social media among other age groups. Teenagers who grew up in the digital era such as Generation Y and Generation Z are very familiar with the internet, giving them different characteristics from the baby boomers and Generation X generation. Generation Y and Z are generations that grew up with the development of technology and social media, making it easier to get information quickly. Generation Z is characterized by ambitiousness, broad-mindedness, and a tendency to think instantly. This character that tends to think instantly is something that needs to be considered, of course, in the use of social media. Furthermore, generation Z also craves recognition, loves freedom, appreciates differences, and is meticulous about details (Itaar, 2019). Based on the description above, it is important to analyze the factors that influence ethics in the use of social media in adolescents.

LITERATURE REVIEW
Uses and Gratification Theory

Uses and Gratifications theory is an approach in communication studies that leads to understanding why people consume media and how it fulfills their needs and wants. The main idea behind the Uses and Gratifications theory is

that audiences are not simply passive in receiving messages from the media. Instead, they are active in selecting, using, and seeking media to fulfill their various needs, such as entertainment, information, identity, and social interaction. The theory identifies several key functions of the media in meeting individual needs, and these can vary from one person to another (Karunia H et al., 2021). The Active Audience theory posits that audiences are not passive recipients of media messages but active participants who exercise control over the selection, use, and interpretation of media. This perspective asserts that individuals play an integral role in the communication process. In tandem, the Audience Rationality assumption suggests that audiences make decisions about media consumption based on specific goals and motives, engaging in a rational selection process guided by personal needs and preferences.

Acknowledging the Diversity of Needs, this theory recognizes the multifaceted nature of individuals ' requirements, encompassing entertainment, information, self-development, social interaction, and more. The Differentiation Effect underscores the audience 's ability to discern and identify media that aligns with their specific needs, allowing them to choose different sources for distinct purposes. Linked to this, the Satisfaction and Gratification theory contends that audiences actively seek fulfillment and contentment through media consumption, experiencing satisfaction when their needs or desires are met. With a plethora of Media Choices available, audiences exercise their agency by selecting the media that provides the most gratification, a decision influenced by individual personalities, values, and preferences. Despite the emphasis on active audience agency, the theory also acknowledges Media Dependence, recognizing that audiences can develop a dependence on certain media sources, particularly when these outlets consistently satisfy their needs. This nuanced perspective highlights the dynamic interplay between audience autonomy and the potential for media dependence in the broader landscape of communication theory.

Metaethics

Metaethics is a branch of ethical philosophy that focuses on questions about ethics itself. Rather than trying to answer specific ethical questions such as "Is action X right or wrong?", metaethics seeks an understanding of the nature, origin, language, and concept of ethics itself. Metaethics helps to understand the foundations of ethics and how to talk about ethical issues. It approaches moral questions better and understands the differences in ethical views between individuals and different cultures.

Deontological Ethics

In deontological ethics, actions are judged as good or bad based on the extent to which they comply with or violate obligations. In other words, an action is considered good if it is consistent with an obligation that must be fulfilled, while an action is considered morally bad if it violates an obligation and, therefore, is not considered an obligatory action (Ratnawati & Keraf, 2016). In the deontological ethical

framework, the consequences of an action are not considered at all to assess the moral quality of the action. This means that whether an action is good or bad is not determined by its consequences. This approach avoids subjectivity and rationalization that can lead to violations of moral obligations. Immanuel Kant (1734-1804) rejected using consequences as the basis for judging actions because he argued that consequences do not guarantee universality and consistency in our behavior and moral judgments. In Kant's view of deontological ethics, three main principles must be considered. First, for an action to have moral value, it must be carried out based on absolute moral obligation. Second, the moral judgment of an action is not related to the achievement of its goal, but rather depends on the good intention that drives the individual to carry it out; even if the result does not match the expected goal, the action can still be considered good if it is based on goodwill. Third, as a consequence of the previous two principles, there is a strict moral obligation to abide by the universal moral law, which is an essential element in any action that is considered moral in Kant's view.

Utilitarianism Ethics

Essentially, utilitarianism is an ethical framework that considers good actions as those that are beneficial, gainful, and useful, while bad actions are those that cause suffering and harm. Furthermore, utilitarianism assumes that the concept of happiness is a neutral parameter of morality, applied fairly to promote the well-being of all people. Since individuals generally desire happiness rather than suffering,

utilitarianism emphasizes the "impartial promotion of well-being". This also provides the reason why Jeremy Bentham called happiness "the greatest number," as actions that are considered ethical or moral can be felt by everyone through the achievement of happiness, which should be impartial and can be felt by anyone (Pratiwi et al., 2022). Benefit is always connected to the theory of utilitarianism proposed by Jeremy Bentham. The phrase "The greatest happiness of the greatest number" is consistently associated with the idea of happiness determined by a large number of people, so that the level of happiness of the majority becomes decisive in the formation of law.

Fairness Ethics

John Rawls (1921-2002) is a figure who developed the concept of justice as fairness. In his work entitled "Theory of Justice," Rawls argues that every individual always has a personal interest and cannot possibly get everything they want (Weruin, 2019). Therefore, cooperation in society becomes a necessity to achieve mutual benefits. In this context, it is important to balance conflicts of interest and attempt to ensure that the benefits or gains obtained outweigh the burdens that must be borne by individuals in society. The principles of justice serve as guidelines for determining fair allocations. The concept of justice as equality means that whatever is agreed upon in the initial conditions will be regarded as fair by all parties.

John Rawls introduced two principles of justice that are believed to be chosen by free and rational individuals under the condition of ignorance of the social position, class, or potential of other individuals,

known as the "veil of ignorance". The first principle is the principle of difference, and the second is the principle of equality. The principle of difference underscores that social and economic inequalities should benefit the most disadvantaged in society. The principle of equality emphasizes that opportunities to achieve such inequalities should be available to all individuals. This means that the principle of difference recognizes that natural distribution is unequal; some individuals are born with excessive wealth, while others may be born in conditions of poverty. Some may have exceptional talents, while others do not. Rawls argues that this is considered an injustice. However, according to the principle of justice as equality, what is right and just is if the social and economic inequality is beneficial to the whole society and accessible to everyone. Thus, Rawls views that natural luck should benefit all individuals regardless of their origins, and the opportunity to achieve inequality should be open to all individuals.

Diffusion of Technological Innovation

The diffusion of innovation theory (IDT) according to Rogers (2003) is one of the two main theories in innovation adoption that is often used in research on information technology (IT) adoption in general and mobile service adoption (Ariana, 2023). The technology adoption model and the diffusion of innovation theory are recognized as suitable models for predicting user interest in adopting new technologies. However, in research regarding mobile service adoption, the technology adoption model is often preferred due to its ease of use and simplicity. Related to the four elements of Diffusion of Innovations: (1) Innovation: Refers to an idea, concept, message, or meaning that is perceived as new by the adopting individual or other unit. (2) Communication Channel: This is the medium used to transmit a message from one person to another. (3) Timing: Refers to the decision-making process in which individuals move from initial knowledge of an innovation to the decision to adopt it or reject it. (4) Social System: This represents a group of interconnected units that work together to solve problems and achieve common goals (Muntaha & Amin, 2023).

RESEARCH METHOD

This research uses quantitative research methods with Correlational Quantitative Research Design. The data analysis method in this study uses Partial Least Squares (PLS) version 4.0. The advantage of Partial Least Square can handle many independent variables even though there is multicollinearity between the independent variables (Evi & Rachbini, 2022.) Respondents in this study were 100 respondents. The sampling technique in this study used an accidental sampling technique. The research instrument used was a questionnaire distributed directly to 100 respondents with an age range of 13-15 years. The questionnaire uses a Likert scale with a score range of 1 - 5 (Strongly disagree, Disagree. Moderately agree, Agree, Strongly agree). The following is the operational definition of each research variable:

Table 1. Operational definition of research variables

Variable	Dimensions	Indicator	Scale	Code
Social Media Diffusion	Information seeking (Bae et al., 2021)	You use handphone to learn about unknown things	Likert	IS1
		You use handphone to do research	Likert	IS2
		You use handphone to learn useful things	Likert	IS3
		You use handphone to get new ideas	Likert	IS4
	Social support (Bae et al., 2021)	You use handphone to express my emotions easily to others	Likert	DS1
		Using your handphone to express my emotions to others who will sympathize with me	Likert	DS2
		Using phone to talk about my problems and get advice	Likert	DS3
		Using phone to let others know that I care about their feelings	Likert	DS4
	Social interaction (Smock, 2011)	To keep in touch with friends and family	Likert	IS1
		to communicate with friends who live far away	Likert	IS2
		to speak with my friends from real life	Likert	IS3
	Habitual pass time (Leiner et al., 2018)	because it is a habit, it is just something I do	Likert	KML1
		when I have nothing better to do	Likert	KML 2
		to pass time, particularly when I am bored	Likert	KML 3
		because I just like to play around on it	Likert	KML 4
Metaethics	Deontologi	Understand what is good and bad	Likert	MD1
		my obligations as a teenager, student, child	Likert	MD2
		An action is good not because of its outcome, but rather because it is good willed.	Likert	MD3
	Utilitarianism	Results are what matter from an action	Likert	MU1
		More people get good benefits	Likert	MU2
	Fairness Ethics	That justice is something important	Likert	EK1
		for all people to be treated equally; no preferences and discrimination	Likert	EK2
		It 's self-interested and no one can get everything they want.	Likert	EK3
Satisfaction (Bae et al., 2021)		I was satisfied with my experience of ( ) use	Likert	K1
		I was pleased with my experience of ( ) use	Likert	K2
		I was content with my experience of ( ) use	Likert	K3

Source: Personal processed data

RESULTS AND DISCUSSION

Validity and Reliability

In the data presented, the data is normally distributed with a bell-shaped curve. The normal distribution assumption is relevant in the context of PLS analysis. In statistical inference, a normal distribution makes it possible to calculate confidence intervals and perform hypothesis tests more precisely it also indicates the presence of a normal distribution mean in the sample. In statistics, the concept of "normally distributed" (or "normal distribution") refers to a probability distribution that follows a certain pattern, also known as a Gaussian distribution. In the data presented, it can be seen that the data is symmetrical, peaking at the mean value. There is half of the data on the left side of the distribution peak and half on the right side. In addition, it can be seen that the curve is unimodal or this distribution has only one peak. The normal distribution can be fully described by two parameters: the mean and the standard deviation. These parameters govern the location and spread of data in the distribution.
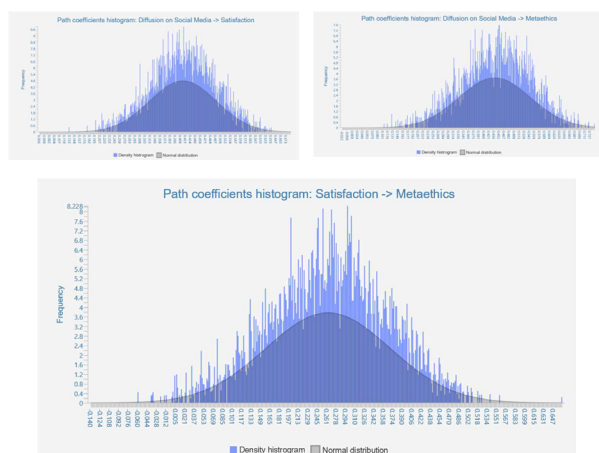

Figure 1. Normal distribution curve

Source: Personal processed data

This model of ethics in adolescents has gone through validity testing with PLS 4.0 (four point zero). The validity test consists of composite reliability (rho_a), average variance extracted (AVE), Cronbach's alpha, and composite reliability (rho_c). Composite reliability varies between 0 and 1, the higher the value, the higher the reliability (Sholihin, 2021).

Table 2. Validity and reliability constructs

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Diffusion on Social Media	0.576	0.579	0.777	0.538
Metaethics	0.747	0.749	0.840	0.567
Satisfaction	0.848	0.855	0.929	0.868

Source: Personal processed data

Cronbach's alpha is a reliability evaluation method that examines the covariance between the various items that make up an evaluation tool and the total number of variables. In PLS, reliability testing is enhanced through the use of Cronbach Alpha, which measures the consistency between the answers tested. Cronbach Alpha is considered good if the value is $\alpha \geq 0.5$ and sufficient if $\alpha \geq 0.3$. The reliability of the instrument is considered fulfilled when there is significant covariance between all items about the variance. In this study, it can be seen that Cronbach's alpha in social diffusion is moderate, namely, 0.576, while for social media satisfaction and metaethics has a higher value, namely 0.848 and 0.747 respectively. Meanwhile, the composite reliability (rho_c) in social media diffusion is 0.777 reliable. As for social media satisfaction, it appears to have very good reliability, namely, 0.929 and metaethics has a reliability of 0.840. In evaluating the internal consistency of a construct, Composite Reliability is considered more reliable. If the Composite

Reliability (CR) value exceeds 0.8, it indicates that the construct has high reliability and can be considered "reliable." If the CR value is above 0.6 but less than 0.8, then it still indicates a fairly good level of reliability, although not as high as the CR value > 0.8 (Irwan & Adam, 2015).

Composite Reliability (rho a) is a newer and more rigorous metric. The main difference between rho_a and rho_c is that rho_a subtracts the sum of error variances from the total variance. This can result in a lower rho_a value compared to rho_c, which means it is more rigorous in measuring construct reliability. Rho_a in this study appears to be higher at 0.579 for social diffusion, 0.855 for social satisfaction, and 0.749 for metaethics, respectively. Another metric used to measure construct reliability is the AVE measurement. This measures the extent to which the variables within a construct can explain their variance within the construct. A high AVE value indicates that the variables are collectively very good at measuring the same construct. If the Average Variance Extracted (AVE) value is higher than the correlation value between constructs, it can be considered that good discriminant validity has been achieved. that an AVE value greater than 0.5 is strongly recommended as a standard for achieving adequate discriminant validity (Irwan & Adam, 2015). The highest AVE in the study was social media satisfaction of 0.868, social diffusion of 0.538, and metaethics of 0.567. Thus it can be concluded that this study has good validity and reliability.

Fit Model of Social Media Diffusion to Teen Ethics

Model fit for adolescent social media diffusion consists of 3 variables, social media

diffusion, social media satisfaction, and metaethics. With PLS 4.0, the model fit for the social media diffusion variable is obtained with 3 constructs, including social interaction, while the social media satisfaction variable consists of 2 constructs and the metaethics variable consists of 4 constructs. It can be seen that each outer-loading > 0.6 or 0.7 indicates that the model is fit.
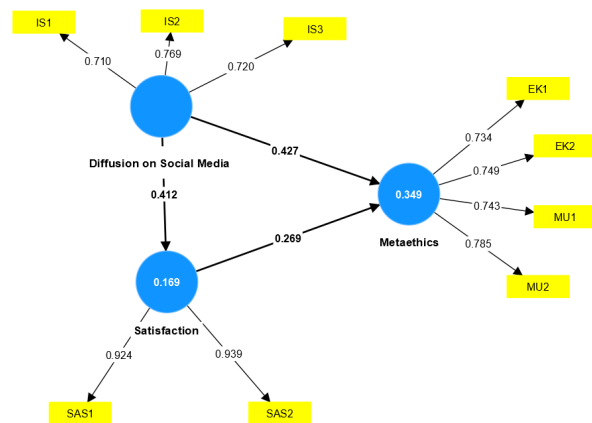

Figure 2. Path diagram model of metaethics of adolescent social media users
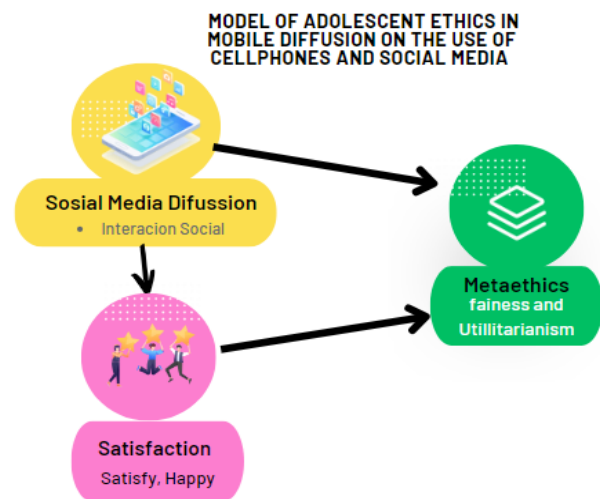
Source: Personal processed data

Figure 3 : Model of Adolescent Ethics in mobile diffusion

Source : personal processed data

The p-value is a measure used to assess whether the observed relationship is random or statistically significant. The researcher set a P-value of 5% (0.05). The p-value is compared with the predetermined significance level, from each construct seen <0.05. So it can be concluded that the model is significant. This means that there is a significant relationship between the variables of social media diffusion, satisfaction, and metaethics among teenagers in Semarang City. The direct effect of social media diffusion on social media satisfaction is 41.2% while the direct effect of social media diffusion on metaethics is 42.7% and social media satisfaction on metaethics is the smallest direct effect, which is 26.9%.

Table 3. Path coefficients - mean, STDEV, T-value, p-value

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Diffusion on Social Media -> Metaethics	0.427	0.439	0.108	3.954	0.000
Diffusion on Social Media -> Satisfaction	0.412	0.415	0.083	4.945	0.000
Satisfaction -> Metaethics	0.269	0.284	0.106	2.542	0.011

Source: Personal processed data

For the model to meet the model fit standard, the SRMR value must be less than 0.05 (Cangur & Ercan, 2015). However, on the SMARTPLS website, the limitations or criteria for model fit include SRMR or Standardized Root Mean Square value <0.10 or <0.08. Thus the existing model is fit.

Table 4. Model fit

Model fit	Saturated model	Estimated model
SRMR	0.096	0.096
d_ULS	0.418	0.418
d_G	0.165	0.165
Chi-square	100.807	100.807
NFI	0.632	0.632

Source: Personal processed data

The R Square value of the joint or simultaneous influence of Social Media Diffusion (DFM) on Social Media Satisfaction (KSM) is 0.169 with an adjusted r square value of 0.161. So, it can be explained that all exogenous constructs (DFM) affect (KSM) by 0.161 or 16.1%. Because Adjusted R Square is less than 33%, the influence of all exogenous constructs (DFM) on (KSM) is low. The R Square value of the joint or simultaneous influence of Social Media Diffusion (DFM) and Social Media Satisfaction (KSM) on metaethics (ME) is 0.349 with an adjusted r square value of 0.335. So, it can be explained that all exogenous constructs (DFM) and (ME) on (KSM) are 0.335 or 33.5%. Because Adjusted R Square is more than 33%, the influence of all exogenous constructs (DFM) on (KSM) is moderate.

Table 5. R-square-overview

	R-square	R-square adjusted
Metaethics	0.349	0.335
Satisfaction	0.169	0.161

Source: Personal processed data

In the PLS fit model, the Variance Inflation Factor (VIF) value must be less than 5. If the value exceeds 5, this indicates an indication of collinearity between constructs (Khan et al., 2019)institutions, countries and co-citation networks, and discloses trending developments in the field. Design/methodology/approach: Based on bibliometric data downloaded from the Web of Science, the authors apply various social network analysis (SNA. Based on these provisions, it can be seen that the collinearity in this model is all

constructs < 5. It can be concluded that there is no problem with multicollinearity. In the context of "no multicollinearity problem," this means that the independent variables in the analysis are not strongly correlated with each other or there is not a high enough correlation that could interfere with the analysis results or make the regression coefficients unstable. This is a desirable condition in statistical analysis as it makes it possible to understand the impact of each variable independently and better.

Tabel 6. Collinearity statistics (VIF) – outer model – list

Collinearity statistics (VIF) - Outer model - List

	VIF
EK1	1.545
EK2	1.496
IS1	1.234
IS2	1.185
IS3	1.136
MU1	1.361
MU2	1.535
SAS1	2.183
SAS2	2.183

Source: Personal processed data

Social Media Diffusion with Social Media Satisfaction (H1)

The model shows that social media diffusion has a positive relationship with social media satisfaction with a path coefficient of 0.412. So when the diffusion of social media increases, satisfaction will also increase. In the F square table, social media diffusion on social media satisfaction has a moderate influence. The f square value

of 0.02 is considered small, 0.15 medium influence, and the value of 0.35 is large. Values less than 0.02 can be ignored or considered no effect (Khan et al., 2019).

Tabel 7. F-square-matrix

	Diffusion on Social Media	Metaethics	Satisfaction
Diffusion on Social Media		0.232	0.204
Metaethics			
Satisfaction		0.092	

Source: Personal processed data

Next is the hypothesis test using 2 criteria, namely the path coefficient value and the t-statistic value (Imam Ghozali, 2006)"title":"Structural equation modeling : metode altenatif dengan partial least square (PLS. The criterion for the path coefficient value is that if the value is positive, then the effect of a variable on the variable it affects is unidirectional. If the path coefficient value is negative, then the effect of a variable on other variables is in the opposite direction. The criterion for the t-statistic value is > 1.96 and a hypothesis can be said to be significant if the probability/significance value (P Value) is < 0.05. The first hypothesis shows that the results of data processing show that the path coefficient value is 0.412 (positive), the t-statistic value is 4.945 (>1.96), and the p values meet the requirements of 0.000 (<0.05). So H1 in this study is accepted. The diffusion of social media affects the satisfaction of using social media among teenagers in Semarang City 0.204 or 20.4%.

Diffusion of Social Media on Metaethics (H2)

In the model that has been made, it can be seen that the path coefficient value

is 0.427 (positive), the t-statistic value is 3.954 (>1.96), and the p-values meet the requirements of 0.000 (<0.05). So H2 in this study is accepted. Social media diffusion affects metaethics in Semarang City teenagers. The f square of this variable is 0.232 or 23.2%. This means that there is an increase in influence by 23.2% each time the diffusion of social media on metaethics in teenagers in Semarang.

Social Media Satisfaction on Metaethics (H3)

This study wants to find out how metaethics in adolescents with variable satisfaction with social media. In the model, the path coefficient value is 0.269 (positive), the t-statistic value is 2.542 (>1.96), and the p-values meet the requirements of 0.011 (<0.05). So H3 in this study is accepted. Social media satisfaction affects metaethics in Semarang City teenagers. The F square of this variable is 0.092 or 9.2%. This means that there is an increase in influence by 9.2% every time Semarang City teenagers feel social media satisfaction on metaethics.

Diffusion of Social Media and Mobile Phones among Semarang City Teenagers

The diffusion of social media in this study is not only about the use of social media but also about the use of cell phones in the daily lives of students and teenagers. The diffusion of technology experienced by students today is the presence of many new social media. Teenagers have been born as a digital generation since they were young. So they become agents with a fast speed of adoption, early recipients of the use of social media and mobile phones.

One study said that the indicators the assessment of Facebook's consumption indicates high capability, while critical consumption, functional prosumption, and critical prosumption on Facebook are also deemed capable (Hidayat & Ginting, 2020).

As in the assumption of the Uses and Gratification theory, today's teenagers are faced with many media selection options. The diffusion of social media for teenagers is used as a channel for personal and a channel for mass media. Personal communication channels are mediums used to interact directly between a person and another individual or with a limited group of people. Teenagers' activities for mass channels are such as Instagram, Facebook, Twitter, TikTok, and even threads. This provides many choices to as many users as possible to fulfill psychological and social needs. Teenagers actively use social media as seen from their daily activities that carry cellphones even to school. During informal interviews, they used social media, and cellphones and mostly used Instagram and TikTok.

In this study, it can be seen from 15 questions related to the use of cellphones and/or social media ranging from information seeking, social support, social interaction, and past habits. Individuals often use media to build their social identity. They share information about themselves, their interests, values, and relationships to shape their social image in the eyes of others. This is one-way individuals fulfill the need for social interaction and social recognition. The media also facilitates social interaction with public figures and celebrities through interviews, live

broadcasts, social media accounts, and more. This allows individuals to feel connected to these figures and engage in social conversations about them. Uses and Gratifications theory recognizes that social interaction is one of the many needs that media can fulfill. Individuals use media to build, maintain, and strengthen their social relationships, as well as to feel involved in online communities and fulfill the need for social interaction that is so important in their daily lives.

In the fit model, there are only 3 constructs that fit in this model, namely social interaction. Social interaction is used by adolescents, namely, social interaction with friends and family, social interaction to communicate with friends who live far away, and social interaction to talk with friends from real life. Of the many activities carried out by teenagers, they significantly use it more as social interaction than to seek information, get social support, or habits from the past. In the assumption of uses and gratification theory where users have the authority to determine their use of social media, teenagers use it for interaction, and social interaction to create relationships with others. Instead of using social media, and cellphones for things like information seeking or researching something, teenagers in Semarang City use it more for social interaction. The strongest construct, at 0.769, is social interaction to connect with friends who live far away.

The second construct of 0.720 is social interaction to talk to their friends from real life while the last construct of 0.710 is teenagers' interaction with their

families. This provides a picture of how teenagers use social media or cell phones for their needs. Some of the ways teens use social media to connect with friends who are not geographically nearby are interactions: 1) through social media which is currently widely used, namely TikTok and Instagram. 2) Social Information Search: teens search for social information through the media, such as news about their friends, status updates, and social events. Social media such as Facebook, Instagram, Twitter, and others can fulfill teens' needs to stay connected with others. 3) Engagement in online communities: through online forums, discussion groups, and other platforms, people can participate in communities relevant to their interests.

Some of the activities they engage in include: (1) video calls with WhatsApp and social media such as Instagram allow teenagers to communicate through video calls. This medium allows them to see and hear their friends in real time, creating an experience that is closer to talking face-to-face. (2) Playing online games together, many teens like to play online games with their distant friends. Online multiplayer games allow them to collaborate or compete in a fun virtual environment. (3) Sharing multimedia content where teens often share photos and videos depicting their daily lives with far-flung friends. This allows them to participate in each other's lives even if they are not in the same place. (4) Organizing virtual meetings: teenagers can organize virtual meetings with distant friends through platforms such as Zoom, whatsapp video this has happened since the

pandemic. These activities form a network and social system for teenagers. With technology and social media, teenagers have more options than ever to maintain and strengthen relationships with friends who are far apart. Social media allows them to feel connected and share important moments in their lives with friends, even though they may be in distant geographical locations. Teenagers have thus gained a differentiation effect by choosing which media they need and want.

Social Media Satisfaction Among Semarang City Teenagers

Individuals seek satisfaction and gratification by consuming media. They feel satisfied when the media fulfills their needs or wants. Satisfaction with interacting and socializing through social media can vary from individual to individual. This is also one of the important aspects of the use of social media or mobile phones in adolescents. In the fit model, it can be seen that teenagers get satisfaction from social media they feel happy and satisfied, namely constructs 1 and 2 in satisfaction. These interactions can be in the form of chatting, commenting, "liking," or sharing messages. They find satisfaction in building and maintaining relationships with friends and feeling connected to others. Social media can also be a source of entertainment. Teens enjoy the funny content, short videos, memes, and various other entertainment provided by social media. They can linger for a long time doing social media scrolling activities opening TikTok and Instagram. However, in modeling the 3rd construct of

calmness is not present in this study. This may indicate that the use of social media/cell phones does not provide peace in the lives of adolescents.

Metaethics of Social Media and Mobile Phone Use in Teenagers

The diffusion fit model shows that two ethics become ethics in the use of social media and mobile phones in adolescents, namely fairness ethics and utilitarianism ethics. The largest construct is utilitarianism 2, which is about how the use of social media and mobile phones provides many benefits to many people. In utilitarianism, this is known as the greatest happiness for the greatest number. The second construct of 0.743 is that results are important from an action. Something is said to be good and bad if it provides results. The next construct is fairness ethics 2 of 0.749 so that all people are treated equally; there is no preference or discrimination. While the last construct is fairness 1 at 0.734 that justice is something important. It can be seen that the important themes of ethics for teenagers in Semarang City are happiness for as many people as possible, results are important from an action, justice without discrimination and fairness is something they consider important. Justice being highlighted by teenagers indicates a duality, whether they have seen justice or not. Procedural justice requires that all individuals are treated fairly, without preference or discrimination based on factors such as group, ethnicity, religion, race, or social status. In this model, the eliminated ethical construct is deontology which focuses on

duty. Goodwill is the intention to carry out what one considers to be a moral obligation. Other research the utilitarian and hedonic aspects of information systems play a vital role in shaping users ‹ eSAT (electronic satisfaction) of Social Networking Sites (SNSs), particularly among younger users. This research highlighting the importance of pleasure orientation in using Facebok (Ariff et al., 2014).

CONCLUSION

The metaethics fit model of social media diffusion of Semarang City teenagers consists of variables of social media diffusion, social media satisfaction, and metaethics. In the diffusion of social media, teenagers are the first adopters born in the digital age. The use of social media in Semarang City teenagers is for social interaction. Social interaction with friends who live far apart, interaction with family, and interaction with friends from the real world. This shows that the use of social media and mobile phones provides a media channel, forming a social system. Semarang City teenagers are active audiences who choose media according to their needs and desires, such as TikTok and Instagram. This shows the differentiation effect and gratification of teenagers' satisfaction in using social media and mobile phones. While the satisfaction they feel is feeling pleasure and satisfaction. The metaethical reflection of social media diffusion and satisfaction is utilitarianism and fairness ethics. The description of the right and wrong ethics of Semarang City teenagers is that the more people are happy, the better it is. For them, goodness is the

absence of discrimination such as group, ethnicity, religion, race, or social status. All variables influence each other with different magnitudes. The biggest influence in this study is the diffusion of social media on the metaethics of teenagers in Semarang City, and secondly the diffusion of social media on social media satisfaction. The last with the least influence is the satisfaction of social media on teenagers' metaethics. It can be indicated that social interaction has a reflective influence on the ethics of teenagers in Semarang City rather than the satisfaction that is born from within themselves.

ACKNOWLEDGMENT

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