



UNVEILING ONLINE SELF-DISCLOSURE: A COMPARATIVE STUDY OF ADOLESCENTS AND YOUNG ADULTS IN THE DIGITAL AGE

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Abstrak

Tingginya penggunaan media sosial mendorong pergeseran aktivitas pengungkapan diri dari *offline* ke *online*. Padahal, perilaku pengungkapan diri *online* memiliki beragam risiko yang rentan dialami pengguna yang mayoritas berada di tahap perkembangan remaja dan dewasa awal. Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan tingkat pengungkapan diri *online* di media sosial antara pengguna remaja dengan dewasa awal. Desain penelitian survei kuantitatif digunakan dengan *convenience sampling* sebagai teknik pengambilan sampel. Sebanyak 532 pengguna media sosial remaja dan dewasa awal, baik dari Pulau Jawa maupun dari luar Pulau Jawa terlibat dalam penelitian ini. Hasil analisis *independent t-test* menunjukkan tidak ada perbedaan yang signifikan pada pengungkapan diri *online* remaja dan dewasa awal. Akan tetapi, ditemukan perbedaan pengungkapan diri *online* ditinjau dari wilayah domisili dan durasi akses media sosial. Pengguna dari Pulau Jawa dan pengguna yang mengakses media sosial selama 6-8 jam perhari memiliki tingkat pengungkapan diri *online* yang lebih tinggi. Temuan ini memperkaya pemahaman mengenai perilaku pengguna media sosial di Indonesia. Masyarakat perlu berkolaborasi untuk mengelola perilaku bermedia sosial guna menghindari risiko penggunaan media sosial yang tidak terkontrol.

Abstract

The high use of social media encourages a shift in offline and online self-disclosure activities. Whereas online self-disclosure behavior has various risks that are prone to be experienced by users, most of whom are in the developmental stages of adolescence and early adulthood. This study aims to determine whether there is a difference in the level of online self-disclosure on social media between adolescent and early adult users. The quantitative survey research design was used with convenience sampling as the sampling technique. This research has 532 adolescent and early adult social media users, both from Java and outside Java, who were involved in this study. The results of the independent t-test analysis showed that there was no significant difference in online self-disclosure of adolescents and early adults. However, differences in online self-disclosure were found regarding the domicile area and duration of social media access. Users from Java and users accessing social media for 6-8 hours daily have higher online self-disclosure levels. These findings enrich the understanding of the behavior of social media users in Indonesia. Communities need to collaborate to manage social media behavior to avoid the risks of uncontrolled use of social media.

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INTRODUCTION

Self-disclosure is the process of communicating all information about oneself that is usually hidden to at least one other person (Wheeles & Grotz, 1976; DeVito, 2011) so that the process of self-disclosure makes us more recognizable to ourselves and others (Jourard & Lasakow, 1958; Helmi, 1995). At first, self-disclosure through face-to-face communication was the primary choice of society in meeting social needs. This habit is increasingly shifting with the widespread use of various social media platforms.

Based on data compiled by the We Are Social website (2022), of around 7.91 billion world internet users, 4.62 billion are actively using social media in 2022. Indonesia is in the top 10 with the highest average social media users in the world, with users dominated by the age range of 13-34 years (We Are Social, 2022). The increasing activity of the world's population, including Indonesia, on the internet also influences their behavior on social media. The same survey's results stated that Indonesians spend an average of 8 hours 36 minutes daily accessing the internet (We Are Social, 2022). Meanwhile, 3 hours and 17 minutes are used to access social media. This data is above the average duration of the world's social media use (2 hours 27 minutes) and makes Indonesia ranked 10th in the country with the highest duration of daily social media use in the world in 2022 (We Are Social, 2022).

In addition to facilitating various forms of message sharing, interaction patterns on social media timelines facilitate social rewards in the form of likes, shares, and comments that provide a different atmosphere from face-to-face interactions. This atmosphere makes a person feel more compelled to share personal information to build identity, express themselves, build relationships, and gain social validation in popularity (Bazarova & Choi, 2014; Ma, Hancock, & Naaman, 2016). The high time spent surfing social media (We Are Social, 2022) causes a shift in self-disclosure activities from offline to online. Therefore, a new concept of self-disclosure emerged. According to Chen et al. (2017), online self-disclosure is a variety of behaviors that aim to convey information and maintain communication or meet social needs in cyberspace, for example, uploading photos, expressing feelings and thoughts with status features, giving likes and comments, and so on. Thus, online self-disclosure can be aimed at a broader and unlimited audience, thus increasingly supporting this behavior.

Another difference lies in the lack of non-verbal aspects of online self-disclosure communication patterns, which are replaced by easier verbal communication (Kisilevich, Chee, & Last, 2012). Furthermore, Hyperpersonal theory (Walther, 1996) explains that the lack of verbal communication and the asynchronicity of social media allows users to manipulate their self-presentation. The disinhibition effect of social media interactions also encourages users to feel free from external influences to express themselves more freely (Suler, 2004). Thus, online communication is perceived as more convenient and intimate and can potentially exceed face-to-face information (Walther, 1996; Christofides, et al., 2009; Kim & Dindia, 2011).

Although it is easy and fun, the behavior of self-disclosure on social media also has various risks that are often overlooked, such as being vulnerable to crime, loss of privacy, social rejection, to cyberbullying (DeVito, 2011; Ostendorf, Muller, & Brand, 2020). Extreme self-disclosure, for example, high and low, can trigger difficulties in social life (Walker, 2016). This is prone to occur in adolescent users. Because in Jakarta itself, the tendency for internet addiction in adolescents reaches 31.4% (Siste, 2019). Moreover, adolescent social media users are more likely to engage in risky behavior, seek sensations, and are more oriented toward short-term gains, such as getting lots of followers and likes (Borca et al., 2015; Christofides, Muise, & Desmarais, 2009). Meanwhile, based on previous research, adult users have a more mature understanding of

privacy. Hence, they can better set boundaries in self-disclosure on social media (Christofides, Muise, & Desmarais, 2009).

The stage of development itself is indeed one of the main factors for self-disclosure online. According to Walrave, Vanwesenbeeck & Heirman (2012), the frequency of using social media, stage of development, motivation for using social media, trust, privacy awareness, and peers are several factors that influence online self-disclosure. Of the several factors, the stage of development is the most crucial factor. Because according to Buhrmester and Prager (1995), differences in biological to cognitive aspects that shape developmental tasks at each stage will influence individual relational needs, including how individuals express themselves.

The difference in the pattern of self-disclosure is seen in the two developmental stages that dominate the social media demographic: adolescence and early adulthood (We Are Social, 2022; Walrave, Vanwesenbeeck, & Heirman, 2012). According to Erikson (1968), the adolescent stage, which begins at the age of 10-12 years and ends around the age of 18-21, has the task of developing identity versus role confusion. During this developmental task, adolescents focus on freedom to experiment with different roles, characters, and environments, including increased time with peers (Santrock, 2017). Meanwhile, in early adulthood, which lasts from around the 20s to 30s, identity development has generally reached a more stable stage. It focuses more on emotional changes and attachments. (Santrock, 2017).

Adolescents generally go through a moratorium stage, in which they try to understand themselves and achieve identity commitment through experimentation and exploring various roles and values (Marcia, 2002). However, based on the theory of the MAMA (Moratorium-Achievement) cycle, early adulthood individuals can also return to the moratorium stage (Stephen, Fraser, & Marcia, 1992) in the emerging adulthood phase where someone who is growing up is still pursuing identity exploration. However, their expressions are more stable and focused on intimate relationships and careers than in adolescence. This is because early adulthood individuals are going through the developmental task of intimacy versus isolation (Erikson, 1968; Van den Broeck, Poels, & Walrave, 2015). In addition, from a cognitive standpoint, early adults can think more realistically to focus more on developing educational independence, careers, and intimate relationships (Santrock, 2017).

Based on the explanation above, adolescence and early adulthood appear to have some similarities, but each has unique differences. There are differences in behavior patterns between adolescents and early adults in comparing online and offline behavior. According to Boyd (2008), the expression of adolescent identity in online communication tends to be aligned with offline identity as a representation of efforts to achieve developmental tasks. The intensity of this behavior can vary; equal, redundant, or otherwise. Therefore, adolescents have ample opportunities to explore developmental challenges in online contexts. Meanwhile, early adult individuals need to regulate privacy on social media related to their efforts to get a job. One way to do this is by separating one's online identity from their identity in front of the company owner, for example, by having more than one account (Steijn, 2014). So, early adult behavior in the online environment tends to be different from that in offline life.

According to the behavior patterns of these developmental stages, adolescents self-disclose on social media to fulfill their developmental tasks: exploring identity, developing autonomy, and forming friendships (Borca et al., 2015). In addition, adolescents are experiencing an increase in risk-taking and thrill-seeking behavior and are more oriented toward short-term gains (Borca et al., 2015; Chen et al., 2017). The asynchronous anonymity offered by social media also makes it easier for adolescents to control self-disclosure and self-presentation on social media

(Walther, 1996; Kim & Dindia, 2011). Thus, adolescents are potentially more comfortable, more likely to engage in online self-disclosure, and more at risk of excessive online communication (Ostendorf, Muller, & Brand, 2020).

Meanwhile, in early adulthood, identity achievement indicates that early-adult individuals have a more stable self-identity and are more focused and balanced (Van den Broeck, Poels, & Walrave, 2015). In addition, early adulthood has the developmental task of intimacy versus isolation (Erikson, 1968), emphasizing more intimate interpersonal relationships (Santrock, 2017). These developmental patterns influence how early-adult individuals use self-disclosure as a facility to establish social relationships with others.

Several previous studies have attempted to analyze differences in online self-disclosure behavior in adolescents and adults. Christofides (2012) states that adolescents are more likely to disclose personal information on social media than adult users. Similar to this statement, according to Walrave et al. (2012), adolescents have a higher online self-disclosure rate than adults. However, according to Christofides et al. (2012), adolescent and adult self-disclosure are similar because they have similar predictors.

The gap between theory and the results of previous research makes this research necessary. Adolescence and early adulthood have some similarities in aspects of development. However, these two stages of development still have their uniqueness. However, adolescents and early adults feel that the information disclosed on social media is confidential (Santrock, 2011). With the various risks of cybercrime that have the potential to occur from online self-disclosure (DeVito, 2011; Ostendorf, Muller, & Brand, 2020), it is necessary to review more about adolescent and early adult online self-disclosure.

On the other hand, research on online self-disclosure is still dominated by research from Western countries with cultural differences from Indonesia. According to Ardi and Maison (2014), online self-disclosure of Indonesians with a culture of collectivism differs from users from a culture of individualism. Indonesia, with its diverse cultures and characteristics between regions, is also interested in studying the differences in self-disclosure patterns on social media. Seeing the fact that internet users in Indonesia are vulnerable to internet addiction, especially on the island of Java, with the most significant contribution of internet users in Indonesia (Pahlevi, 2022; Siste, 2019), which has an impact on the imbalance between online and offline life, the authors feel the need to carry out this research in the context of Indonesian social media users. Therefore, this research was conducted to know the differences in online self-disclosure on social media between adolescent and early adult users in Indonesia. The hypothesis proposed from this study is that adolescent social media users have significantly higher levels of online self-disclosure than early adult social media users.

Theoretically, this research is expected to contribute to scientific knowledge in psychology, especially Social Psychology, concerning online self-disclosure on social media. While practically, the results of this study are expected to be a source of information and knowledge for social media users related to online self-disclosure behavior. In addition, it is hoped that this research will increase users' self-awareness regarding self-disclosure behavior on social media and become input for their self-development.

METHOD

Online self-disclosure as the dependent variable in this study is the accumulated score on filling out Suryani's (2014) Online Self-Disclosure Scale, which measures conscious desire (intention), openness (honesty), and the perceived positive-negative tendency of the information

disclosed by individuals (valence) when performing online self-disclosure (Mital, Israel, & Agarwal, 2010). The scale contains 24 Likert scale items with responses ranging from 1 (very unlikely) to 5 (very likely). The developmental stages of adolescents and early adults were obtained from the age data entered by the subjects in the survey form. The developmental stages of adolescents are individuals aged 13-21 years, and the stages of early adult development are individuals aged 22-34 years, based on the opinion of Santrock (2011) and data from We Are Social (2022).

The instrument used to measure the dependent variable in this study is Suryani's (2014) Online Self-Disclosure Scale, which formulates online self-disclosure into three aspects: intention, honesty, and valence. The survey was conducted by distributing the research questionnaire online using Google Forms through various social media platforms like Instagram and Twitter. Involvement in filling out the form is voluntary. Suppose the subject is unwilling to fill in the scale. In that case, the subject has the right not to continue filling out the online questionnaire. Before the subject filled out the research scale, the subject was asked to fill in personal data containing demographic questions and supporting data such as the type of social media owned, the type of account owned, and the duration of access to social media in a day.

Before data collection, a scale trial was conducted to re-analyze the scale's reliability. Based on the analysis of the item discrimination index carried out on the data from the scale trial results, it is obtained that the item discrimination index r_{ix} moves from -0.284 to 0.726. Therefore, ten items had to be dropped so that the remaining 14 items were used in the study ($r_{ix} = 0.302$ to 0.781). The Cronbach's Alpha reliability estimation results show this scale has good reliability ($\alpha = 0.882$).

The subjects in this study were adolescents (13-21 years) and adults (22-34 years) with active social media accounts who were willing to be involved in the research. Sampling was done by convenience sampling method. In this study, samples were taken from adolescent and early adult social media users who, by chance, got access to posts regarding research implementation and were willing to be involved in the research. In the trial process, 100 subjects were found who filled out the scale entirely. The trial subjects consisted of 73 women subjects and 27 men subjects. Meanwhile, the main subjects of this study consisted of 532 adolescent and early adult users of social media.

The data analysis method used in this study is the Independent Sample t-Test analysis to determine whether there are differences in online self-disclosure on social media between adolescent and early adult subjects. Before testing the hypothesis, the researchers conducted a descriptive analysis to see the overall picture of the research data. In addition, an assumption test in the form of a normality test and homogeneity test is also applied to determine whether the data obtained is normally distributed and comes from a homogeneous population variation.

RESULT AND DISCUSSION

A descriptive analysis was first conducted based on research data involving 532 subjects. Table 1 presents the demographic data of research subjects.

Table 1.
Subject characteristics

Subject characteristics	N	%	Adolescents	Early Adults
Gender				
Men	68	12.8%		
Women	464	87.2%		
Age				
13-21	362	68%		
22-34	170	32%		
Occupation				
College student	256	48.1%		
Senior high school student	135	25.4%		
Junior high school student	24	4.5%		
Employee	56	10.5%		
Entrepreneur	14	2.6%		
Fresh graduate	8	1.5%		
Government employee	5	0.9%		
Others	34	6.4%		
Domicile				
Java Island	442	83.1%		
Outside of Java Island	90	16.9%		
Social Media Access Duration				
0-2 hours	12	2.3%	1.7%	3.5%
2-4 hours	132	24.8%	22.4%	30%
4-6 hours	185	34.8%	35.9%	32.4%
6-8 hours	203	38.2%	40.1%	34.1%
Social Media Account Type				
Anonymous and non-anonymous accounts	335	63%	68.2%	51.8%
Non-anonymous account	172	32.3%	26%	45.9%
Anonymous account	25	4.7%	5.8%	2.4%
Social Media Application				
Instagram	503	94.5%		
Facebook	303	56.9%		
Twitter	490	92.1%		
Tiktok	138	25.9%		
Whatsapp	517	97.2%		
Line	345	64.8%		
Telegram	50	9.4%		

It was done to compare the hypothetical and empirical scores of the data. The results of the descriptive analysis are presented in Table 2.

Table 2.
Description of research data

Variables	Hypothetical Score				Empirical Score			
	Mean	Max	Min	SD	Mean	Max	Min	SD
Online Self-Disclosure	42	70	14	9.33	43.36	68	18	9.35

Statistical calculation shows that the score of online self-disclosure by the research subjects is slightly higher than the average online self-disclosure (\bar{x} Empirical = 43.36 > \bar{x} Hypothetical = 42).

After knowing the average score of the research subjects, score categorization was carried out to determine the high and low scores. The score categorization in this study was divided into five categories: deficient, low, moderate, high, and very high. In addition to categorizing the subjects' scores in general, categorization was also carried out based on the subject's developmental stage, the adolescent and early adult stages. The results of the data categorization are presented in Table 3.

Table 3.
General data categorization and developmental stage-based categorization (N= 532)

Categories / Variables	N	%
Online Self-Disclosure		
Very Low	27	5.1%
Low	126	23.7%
Moderate	180	33.8%
High	157	29.5%
Very High	42	7.9%
Adolescent		
Very Low	19	5.2%
Low	88	24.3%
Moderate	121	33.4%
High	105	29.0%
Very High	29	8.0%
Early Adults		
Very Low	8	4.7%
Low	38	22.4%
Moderate	59	34.7%
High	52	30.6%
Very High	13	7.6%

According to the categorization results in Table 3, subjects generally tend to have moderate levels of online self-disclosure (33.8%). Meanwhile, based on the development stage, most adolescent subjects (33.8%) and early adults (34.7%) had moderate levels of online self-disclosure. However, the percentage of adolescents with very high online self-disclosure (8.0%) was higher than that of early adult subjects (7.6%). Likewise, in the deficient score category, the percentage of adolescents (5.2%) was higher than that of early adult subjects (4.7%).

Before testing the hypothesis, an assumption test is first carried out, namely the normality test and data homogeneity test. The normality test was applied using the *Skewness-Kurtosis* method (table 4) and the histogram chart (figure 1).

Table 4.
Skewness-Kurtosis normality test

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Online Self-Disclosure	.166	.106	-.373	.211

$$Z_{skewness} = \frac{\text{Nilai Skewness}}{\text{Std.Error Skewness}} = \frac{.166}{.106} = 1.57 \quad (1)$$

$$Z_{kurtosis} = \frac{\text{Nilai Kurtosis}}{\text{Std.Error Kurtosis}} = \frac{-.373}{.211} = -1.77 \quad (2)$$

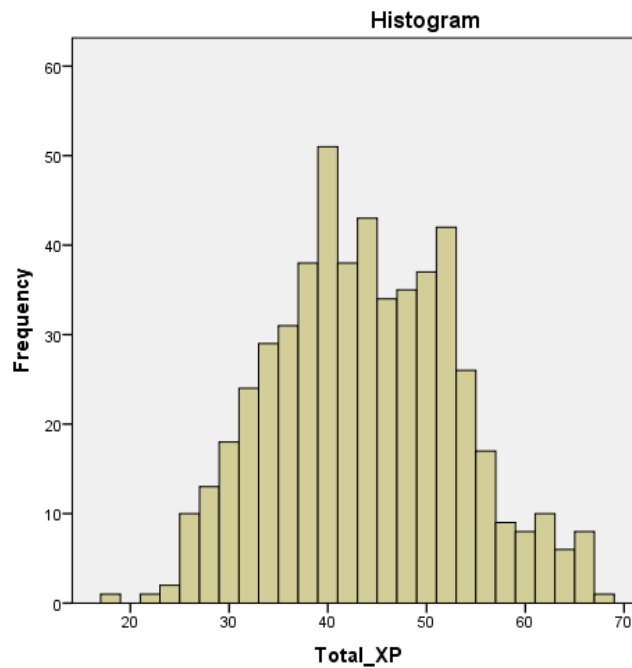


Figure 1. Histogram Normality Chart

From the normality test *Skewness-Kurtosis* results (table 4) and the histogram chart (figure 1), statistical calculations show that online self-disclosure scores are normally distributed ($Z_{skewness} = 1.57$ dan $Z_{kurtosis} = -1.77$, normal curve, *Skewness-Kurtosis* ratio $-1.96 < Z < 1.96$).

Table 5.
Independent t-test results based on developmental stages

Aspects	Mean	F	Sig.	t	Sig. (2-tailed)
Online Self-Disclosure	43.33	.057	.811	-.139	.889
Adolescents	43.45				
Early Adults					
Valence					
Adolescents	23.74	.449	.503	.558	.577
Early Adults	23.50				
Honesty					
Adolescents	11.12	.061	.805	-.444	.658
Early Adults	11.26				
Intention					
Adolescents	8.46	.004	.950	-.892	.373
Early Adults	8.68				

This study hypothesizes that adolescent social media users have significantly higher levels of online self-disclosure than early adult social media users. To test this hypothesis, an Independent t-test was performed, preceded by a homogeneity test. The results of the data homogeneity test are homogeneous if $p > .05$. The comparison results are significant if the significance test of $t p < .05$. Based on Table 5, statistical calculations show that the data is homogeneous. The results are insignificant between adolescent and early adult subjects (*Levene's test* $F = .057$, $p = .811$; $t = -.139$, $p = .889$). Therefore, H_a is rejected, and H_o is accepted.

The Independent t-test was also applied to the accumulated score of each aspect of online self-disclosure based on the stage of development. Based on the results in Table 5, there was no significant difference between adolescent and early adult subjects in the scores of the three aspects, valence, honesty, and intention ($p = .577$; $p = .658$; $p = .373$).

Table 6.
Independent t-test results based on gender and domicile area

Demographic	Mean	F	Sig.	t	Sig. (2-tailed)
Gender					
Men	44.13	.849	.357	.724	.469
Women	43.25				
Domicile					
Java Island	43.76	.598	.440	2.169	.031
Outside of Java Island	41.42				

Furthermore, the researchers conducted an additional analysis to see other differences in online self-disclosure scores regarding demographic variables (table 6). Statistical calculations on the gender variable show that the data is homogeneous. There is no significant difference in the level of online self-disclosure of men and women subjects (*Levene's test* $F = .849$, $p = .357$; $t = .724$, $p = .469$).

According to the t-test results conducted based on the subject's domicile aspect, statistical calculations show that the data is homogeneous. There are significant differences in scores for subjects from Java Island and outside Java Island (*Levene's test* $F = .598$, $p = .440$; $t = 2.169$, $p = .031$). Subjects from Java Island had higher online self-disclosure scores than subjects from outside Java Island.

Table 7.
One-way ANOVA test results based on social media account type and access duration

Social Media Usage	Mean	Levene Statistic	Sig.	t	Sig.
Account Type					
Anonymous and non-anonymous accounts	43.58	.207	.813	.436	.647
Non-anonymous account	42.84				
Anonymous account	44.08				
Access Duration					
0-2 hours	40.92	.916	.433	8.642	.000
2-4 hours	41.01				
4-6 hours	42.50				
6-8 hours	45.83				

Besides the Independent t-test, the researchers conducted a One-Way ANOVA test to examine differences in online self-disclosure scores based on the subject's social media use variable (table 7). Based on the results of the variance test for the social media account type variable, it can be concluded that there is no difference in the level of online self-disclosure based on the account type variable ($F = .436$, $p = .647$).

Meanwhile, statistical calculations show significant results on the variable duration of social media access ($F = 8.642$, $p = .000$). There are differences in online self-disclosure based on the access duration variable. It is known that subjects who access social media for 6-8 hours a day

have the highest average online self-disclosure score ($\bar{x} = 45.83$). Based on the posthoc test results on the access duration variable, there are significant differences in the average online self-disclosure score in two pairs of groups, namely 2-4 hours with 6-8 hours and 4-6 hours with 6-8 hours ($p = .000$; $p = .002$).

The developmental stage is one of the main factors of online self-disclosure. According to Buhrmester and Prager (1995), differences in biological to cognitive aspects that shape developmental tasks at each stage will influence individual relational needs, including how individuals express themselves. Adolescents with the development task of identity versus role confusion focus on developing peer relationships and exploring roles (Erikson, 1968; Santrock, 2017). While the exploration of identity in early adulthood generally begins to decline, individuals begin to focus more on developing independence and developing more intimate relationships (Van den Broeck, Poels, & Walrave, 2015; Santrock, 2017). In line with this theory, according to Walrave, Vanwesenbeeck, and Heirman (2012), adolescents have a higher level of online self-disclosure than adults.

However, this study found no significant difference between online self-disclosure by adolescents and early adults. Similar results were also seen in the analysis per aspect of online self-disclosure. There is no significant difference between adolescents and early adults in all aspects, intention, honesty, and valence. These results indicate that adolescents and early adults use social media as a medium for self-disclosure at a similar level. This condition supports the results of the research by Christofides, Muise, and Desmarais (2012) that adolescents and adults have similar characteristics of online self-disclosure.

These results can be explained by the MAMA (Moratorium-Achievement) cycle theory (Stephen, Fraser, & Marcia, 1992). According to this theory, after experiencing identity achievement from a crisis in adolescence, individuals may regress to the moratorium stage several times in their adult years, including in their efforts to fulfill developmental tasks (Stephen, Fraser, & Marcia, 1992; Marcia, 2002). This regression can be triggered by significant events experienced by individuals. In the moratorium phase, a person tries to understand himself and achieve identity commitment through experimentation and exploration (Marcia, 2002). In today's technological era, social media is one of the main mediums for exploring identity because it makes it easier for a person to express himself and get feedback from others. At the same time, it is known that self-disclosure and feedback help individuals in their efforts to identify themselves (Helmi, 1995). Previous research has also found that in showing or presenting oneself on social media, there is no difference between adolescents and early adults (Setyani, 2020).

On the other hand, the majority of the research subjects were students (48.1%), both in the adolescent and early adult groups. According to Christofides, Muise & Desmarais (2009), college students have an understanding of privacy similar to teenagers. Higher educational levels are also known to influence the regression of the adult identity back to the moratorium stage as many challenges are faced (Jordan-Conde, Mennecke, & Townsend, 2014). This pattern is one reason for the apparent lack of significant differences between adolescent and early adult online self-disclosure.

Previous studies have concluded that people are likelier to disclose personal information on social media than face-to-face communication (Christofides, Muise, & Desmarais, 2009). The statement explains the results of this study which show that the subjects' online self-disclosure empirical score is higher than the hypothetical score. Social media generally gathers large groups of people who do not know each other so that disclosing personal information becomes a norm that must be lived to meet social needs (Bazarova & Choi, 2014; Ma, Hancock, & Naaman,

2016), one of which is the need for popularity. According to Christofides and colleagues (2012), the need for popularity is one of the most important predictors of online self-disclosure for adolescents and adults. It means the social benefits that can be obtained from interactions on social media encourage users to feel more necessary to share personal information on social media than through face-to-face communication (Christofides, Muise, & Desmarais, 2009; Bazarova & Choi, 2014; Bauer & Schiffinger, 2016).

Furthermore, the relationship between the need for popularity and online self-disclosure is moderated by culture (Bauer & Schiffinger, 2016). Based on Hofstede's cultural concept (Hofstede Insights, n.d.), Indonesia has a high power distance, so a hierarchical system becomes essential in Indonesian culture. Meanwhile, according to Bauer and Schiffinger (2016), power distance strengthens the effect of social advantage on self-disclosure. In line with this concept, research by Ardi and Maison (2014) found that, in general, Indonesians have a high need to be popular. This explains why in the context of social media users in Indonesia, there is no significant difference in the level of online self-disclosure between stages of development because both adolescents and early adults, in general, have a high need for popularity.

Indonesia is one of the eastern countries that holds a culture of collectivism. Collectivism culture in Indonesia tends to emphasize broad friendships and the development of social networks that are not too intimate rather than building dyadic relationships (French, 2015), so communication focuses more on gaining more relationships than deep ones. This statement is supported by the research results of Ardi and Maison (2014) that Indonesians have an extensive network of friends on social media. This condition can explain why the online self-disclosure carried out by the research subjects is centered on the medium category.

However, according to Ardi and Maison (2014), online self-disclosure of Indonesians with a culture of collectivism is higher than users from a culture of individualism. This difference may occur due to differences in measuring tools used. Ardi and Maison's research (2014) uses a measurement tool that focuses on quantity, while this research measurement tool focuses on the intensity of self-disclosure. Therefore, the moderate level means the subject can manage self-disclosure on social media without exaggeration.

Although the average online self-disclosure score between adolescent and early adult users did not have a significant difference, there was a slight difference in the categorization of scores based on developmental stages. Adolescent subjects have a higher percentage of very high and very low category scores than the percentage of early adult subjects. Therefore, adolescent subjects are more vulnerable to difficulties in social interaction. According to Walker (2016), extreme self-disclosure, both very high and very low, can trigger difficulties in social life, such as displaying impulsive disclosure behavior and difficulties forming empathy.

Those conditions differ from individuals with moderate self-disclosure tendencies who can control things that need and do not need to be disclosed (Walker, 2016). This statement can explain the categorization of early adult subjects in this study, which showed a higher percentage than adolescent subjects in the moderate score category. It can be said that early adult subjects can better set boundaries in self-disclosure on social media (Christofides, Muise, & Desmarais, 2009).

Because the research results did not support the hypothesis, the researchers conducted additional analysis on demographic variables. Based on gender, this study did not show differences in online self-disclosure rates. Both men and women expressed themselves at a moderate level. These results support the conclusions of a meta-analysis conducted by Kim and Dindia (2011) on online and offline self-disclosure. In offline conditions, women's self-disclosure

level is higher than that of men. However, in the online context, there is no difference in self-disclosure based on gender. This is because, in online self-disclosure, which is generally carried out between strangers, the influence of gender tends not to appear (Kim & Dindia, 2011).

Meanwhile, in the analysis based on the domicile area, it was found that there were significant differences between subjects living on the island of Java and outside Java. Until now, no research has discussed the differences between residents of Java Island and outside Java Island in the context of online communication. However, in Boentoro and Murwani's research (2018) regarding offline self-disclosure, it was found that there were differences in the level of self-disclosure between the Javanese and the Batak people. The Batak people are known to make more self-disclosure than the Javanese people. This is related to the Javanese culture, known for its habit of conformity and the assumption that silence is better than talking a lot (Suseno & Reksosusilo, 1983). In addition, self-disclosure is associated with a haughty attitude which is inversely proportional to Javanese culture (Boentoro & Murwani, 2018).

Based on the disinhibition effect theory, how a person presents himself in online communication reflects his internal expectations, hopes, and needs (Suler, 2004). This theory could explain the higher online self-disclosure among users from Java Island. Social norms in the Javanese environment that are strong can encourage someone to use anonymous social media as a medium to fulfill the needs of social interaction and self-expression (Suseno & Reksosusilo, 1983; Suler, 2004). So that people who live in the area of Java Island tend to be more comfortable expressing themselves on social media. Future research can further analyze differences in self-disclosure on social media based on ethnic differences in Indonesia.

Differences in online self-disclosure scores between users from Java Island and outside Java Island can also be caused by different sociodemographic characteristics, such as the penetration rate of internet users. According to the 2022 annual survey, the Association of Indonesian Internet Service Providers (APJII) summarizes that Java Island has the second highest percentage of internet user penetration in Indonesia (78.39%) (Bayu, 2022). However, it is necessary to examine further how much influence sociodemographic factors have on people's behavior in using social media.

In addition to demographic variables, the researchers also conducted additional analysis based on social media use variables. Based on the type of account anonymity, this study did not find any significant differences in online self-disclosure. This finding shows different results from previous research by Ma and colleagues (2016) in the United States, which concluded that in anonymous conditions, self-disclosure is higher than in conditions with real names.

Cultural differences can cause this difference. According to Mitgen (2014), collectivist cultures like Indonesia tend to show a higher sense of trust in others than individualistic cultures so that personal information, such as names, is more disclosed to the public. This opinion can explain the characteristics of early adult subjects in this study, with a higher percentage of non-anonymous account users than adolescents. However, the two do not differ in online self-disclosure on social media.

The Hyperpersonal theory can also explain the absence of differences in online self-disclosure between types of social media accounts. The visually anonymous characteristics of social media encourage everyone to have equal opportunities to feel more accessible to make self-disclosure online more quickly than offline, despite using real names (Walther, 1996; Suler, 2004; Kim & Dindia, 2011; Kisilevich, Chee, & Last, 2012). Therefore, although the online self-disclosure score of non-anonymous accounts was the lowest in this study, it did not differ significantly from other types of accounts.

On social media itself, each user also has the opportunity to have more than one account. Most of the research subjects (63%) have more than one anonymous and non-anonymous account. A person, especially an early adult, has several social media accounts, mainly to improve impression management (Jojo, 2018). So that someone can manage their professional impression on one account and still express themselves freely on another. Previous research also found that social media users in Indonesia have a stronger tendency to form impressions (Ardi & Maison, 2014).

This pattern is why there were no significant differences in online self-disclosure between social media accounts. This is also why the early adult subjects in this study expressed themselves at the same level as the adolescent subjects. In the future, it is necessary to review further the self-disclosure pattern in people with multiple accounts.

Meanwhile, based on the access duration variable, a significant difference in online self-disclosure was found, with the 6-8 hour access group having the highest average online self-disclosure score (45.83). These results support the research by Valkenburg and Peter (2009), who found that the frequency of online communication is positively correlated with self-disclosure behavior. Several previous studies also stated that the duration of social media use is one of the main predictors of self-disclosure (Christofides, Muise, & Desmarais, 2012; Walrave, Vanwesenbeeck, & Heirman, 2012). The longer a person spends on social media, the higher the likelihood of the user self-disclosing.

Based on the research subjects' characteristic descriptions, adolescent subjects have more social media access duration than 4 hours. This means that adolescents are more likely to carry out social interactions online, including self-disclosure. Previous studies have shown that adolescents are more likely to engage in excessive internet communication (Borca et al., 2015; Chen et al., 2017). Therefore, further research and management are needed regarding the use of social media in adolescents related to the risk of internet addiction which affects the balance of online and offline life (Lin, Su, & Potenza, 2018; Siste, 2019, Ostendorf, Muller, & Brand, 2020).

This study is not without limitations. One is the number of samples from each subject group that is not balanced. This imbalance occurs because the convenience sampling method researchers use causes researchers to be unable to control the number of subjects from each group. In addition, research data collection was carried out online. The absence of supervision in filling out the questionnaire can encourage high social desirability on the results of filling out the scale. In the scale trial process, many items failed on honesty and intention. This can result in the items on the main scale of the research being less representative of online self-disclosure aspects. Besides that, the lack of research data from Indonesia on a similar topic limits the discussion of the analysis results. Most research on online self-disclosure is conducted on populations of Western states. The research finding has contributed to an understanding of online self-disclosure based on the duration of access to social media and the local culture in Indonesia.

CONCLUSION

According to the analysis results, the research hypothesis was rejected because there was no significant difference in online self-disclosure between adolescent and early adult subjects. Most research subjects at both stages of development showed online self-disclosure behavior in the moderate category. This condition shows that the subjects can manage self-disclosure on social media without exaggeration. Based on the additional analysis conducted, significant differences in scores were found based on the subject's domicile area and the duration of social media access. Online self-disclosure of subjects living in the Java Island region is higher than

those outside Java Island. The openness tendency of subjects from Java to self-disclose on social media can originate from reflecting the subject's internal need for self-expression related to the stronger social norms in the Javanese environment. There was also a significant difference in the level of online self-disclosure in the access duration variable. Subjects who accessed social media for 6-8 hours had higher levels of online self-disclosure. This can mean that the longer someone spends on social media, the higher the possibility of users to self-disclose.

Given the limited research on differences in online self-disclosure on social media between adolescents and early adults, this research can be considered for future researchers who wish to research a similar theme. Future researchers can further analyze other factors that influence differences in self-disclosure on social media, such as based on the number of social media accounts owned, social media motivation, and the need to be popular. In addition, it can be investigated further regarding the comparison of online self-disclosure between internet users from various regions in Indonesia based on geographic and sociodemographic factors, such as educational level and socioeconomic status. The number of sample individuals in each category should be more evenly distributed in future studies using quota sampling techniques for the results to be more representative.

The results of this study can also be used as a consideration for self-development for social media users. Social media detox can be done by users who are used to accessing social media for more than four hours daily. This activity is recommended so that users can be more connected with the environment around them and not depend on interactions in cyberspace. In addition, to balance online and offline social life, users can also do some practices to improve soft skills, such as increasing self-expression and social interaction skills to balance online and offline social life. Meanwhile, parents, education providers, and internet service providers must socialize about managing social media behavior and personal data security. This strategy is essential to avoid the risk of uncontrolled internet use, both for adolescent and adult users.

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