

The relationship between social media exposure and sexual orientation of latest adolescents

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Abstract

During adolescence, the development of sexual needs, the regulation of sexual orientation, and the decision to become a woman or a man are carried out to create a connection and form behavior leading to deviant sexual behavior. Sexual orientation becomes a person's identity in the environment and adolescents are expected to know the direction of attraction. The factors influencing sexual orientation are internal and external, such as exposure to social media. Therefore, this research aims to determine the relationship between social media exposure and late adolescent sexual orientation. A quantitative method is adopted using a cross-sectional design on 111 samples. The instruments used are the Intensity Scale of Social Media Use (SIPMS) and the Kinsey scale to measure exposure to social media and sexual orientation, respectively. The study's findings indicate a statistically significant correlation between social media exposure and sexual orientation in late adolescents, with a p-value of 0.040. In conclusion, education should be provided from an early age on sexual orientation and the anticipation of adolescents in fulfilling duties, resulting in a process of self-development within the social environment.

Introduction

Adolescence is a period of development during childhood and adulthood from 10 to 19 years. Many biological, psychological, and social transformations are recorded at this age when adolescents are looking for true identity. Every individuals have the right to select a lifestyle and determine sexual orientation.² According to WHO, about 1.2 (18%) billion of the world's population are adolescents.³ The Central Statistics Agency in August 2021 reported 22,119,160 adolescents between 15-19 years in Indonesia.⁴ In 2020, East Java Province recorded 3,020,928 adolescents, while Malang City reported 84,347, consisting of 44,338 women and 40,009 men.^{5,6}

Late adolescent phase is marked by the achievement of physical maturity where the individuals are expected to think more about the future. Adolescents are becoming more serious about relationships with the opposite sex and are starting to accept the

norms and habits of the surrounding environment.⁷ The formation of a person's self-identity reaches the peak in late adolescence and continues throughout life. Sexual orientation is the basic desire of individuals to satisfy the need for love in relation to a sense of intimacy or closeness.⁸ Generally, the concept is divided into homosexuality, heterosexuality, and bisexuality, which are sexual attraction to people of the same, opposite, and both sexes.⁹

The factor of exposure is because social media has an attraction for adolescents. Social media allows communication between users where adolescents reconnect and make new friends. By joining a community of people with the same interests or hobbies, social media can help adolescents feel comfortable.¹⁰ Based on a research conducted by Yanti et al. with the title The Role of Parents in Preventing Deviations in Children's Sexual Orientation in the City of Padang, one of the causes of children's behavior and changing sexual orientation is technology.¹¹ According to Oktavia, sexual behavior and social media in adolescents are unrelated.¹² Therefore, this study seeks to investigate the correlation between exposure to social media and the sexual orientation of late adolescents.

Design and Methods

The research method uses a Cross-Sectional design. A simple random sampling method was used based on inclusion and exclusion criteria to obtain 111 samples. Meanwhile, Social Media Usage Intensity Scale (SIPMS) was adopted to measure social media exposure and the Kinsey Scale to measure late adolescent sexual orientation.

Data Collection and Analysis

Sexual orientation questionnaire uses the Indonesian version of The Kinsey Rating Scale, adopted by Putri in "Description of Gender Identity Orientation in Adolescent Santri at the Salafiyah Syafi'iyah Sukorejo Islamic Boarding School, Situbondo Regency".¹³ Social media use intensity scale questionnaire (SIPMS) was adopted from Sabekti. SIPMS was used previously in Sabekti's research with the title "The Relationship between Intensity of Social Media (Social Networking) Use and Narcissistic Tendencies and Self-actualization in Late Adolescents".¹⁴

The IBM SPSS Statistics 24 application was adopted to perform univariate and bivariate analysis. The univariate analysis

Significance for public health

Adolescents are individuals in a period of self-discovery, capable of obtaining information through social media. However, inappropriate use of social media can adversely affect adolescents and the data generated from this research increases public awareness of the dangers on adolescent sexual orientation. The study explores the significant correlation between the amount of time late adolescents spend on social media and their sexual orientation.

described the characteristics of respondents based on demographic sexual data, social media use and exposure, as well as orientation. The results of the analysis were described in the form of tables and narratives. Bivariate analysis used the Spearman rank statistical test to determine the relationship between social media exposure and sexual orientation in late adolescents. Filling out informed consent is carried out by asking the respondent directly and distributing the sheet. The subjects are humans, and ethical permission has been obtained from the Ethics Commission of the Faculty of Health Sciences, Brawijaya University, Malang, with No.3965/UN10.F17.10/TU/2022.

Results and Discussion

Based on Table 1, 85.6% of the respondents were women, while 55.9% were 20 years old. All respondents used smartphones to access social media and 70.3% had more than three types. A total of 58.6% had one to two types of social media and 64.9% used this platform more than six times a day. Approximately 67.6% conducted one to three activities after opening social media. Table 2 shows that 56 (50.5%) and 55 (49.5%) respondents are classified into low and high categories of social media exposure. Based on the data, the most common sexual orientation of late adolescents was heterosexual, consisting of 107 (96.4%) respondents, and this is followed by bisexual and homosexual, with 3 (2.7%) and 1 (0.9%) respondents, respectively.

From Table 3, the respondents were woman, with 51 (53.7%) having low exposure to social media. More than half were 20 years

old, and social media exposure of 32 (28.8%) at the age of 20 was in the low category. In addition, 24 (21.6%) were in the Reg 2 class, where the level of exposure to social media was also low. The respondents used smartphones to access social media, but the difference between the high and low categories was limited. The standard and high categories consisted of 56 (50.5%) and 55 (49.5%) respondents, respectively. Most respondents have more than three social media, but exposure of 40 (36%) was in the low category. The most frequently used social media were only 1-2 types, with exposure category of 35 (31.5%) respondents being high. Approximately 64.9% used social media more than six times a day, and the highest exposure was in the low category, consisting of 42 (37.8%).

Based on Table 4, sexual orientation of most late adolescents was heterosexual. The heterosexual man and woman gender categories consisted of 14 (12.6%) and 83 (83.8%) respondents, respectively. Approximately, 60 (54.1%) aged 20 years and 42 (37.8%) respondents from the Reg 2 class were heterosexual. Most smartphone users (96.4%) and 75 (67.6%) respondents with three types of social media were heterosexual. Furthermore, a total of 62 respondents (55.9%) using 1-2 types of social media were heterosexual. Approximately 62.2% of heterosexuals used social media more than six times daily and 71 (64%) conducted one to three activities on the platform.

The cross-tabulation of the relationship between exposure and sexual orientation shows that 51 (45.9%), 3 (2.7%), and 1 (0.9%) respondents were heterosexual, bisexual, and homosexual, respectively. With low social media exposure, 56 (50.5%) respondents had a heterosexual sexual orientation. From the data analy-

Table 1. Characteristic of respondents.

Characteristic of respondents	n'	%'
Gender		
Man	16	14.4
Woman	95	85.6
Age		
19 years old	22	19.8
20 years old	62	55.9
21 years old	27	24.3
Class		
Reg 1	39	34.2
Reg 2	44	40.5
Reg 3	28	25.2
Electronic devices used to access social media		
Smartphones	111	100
Number of social media owned		
2-3	33	29.7
>3	78	70.3
Types of social media frequently used		
1-2 types of social media	65	58.6
3-4 types of social media	32	28.8
5-7 types of social media	14	12.6
Average length of social media use		
1-3 times a day	8	7.2
4-5 times a day	31	27.9
>6 times a day	72	64.9
Activities frequently performed when opening social media		
1-3 activities	75	67.6
4-6 activities	34	30.6
7-10 activities	2	1.8

sis, the Spearman Rank correlation test results in a significance value of 0.040. This shows the relationship between social media exposure and sexual orientation of late adolescents at Brawijaya University, Malang, with a correlation coefficient of -0.195.

Late adolescent social media exposure

Based on the results, women use social media the most, with a percentage of 85.6%. According to Sumter et al., most women use social media to search for information and partners.¹⁵ Women spend more time on social media to check trending topics and gain recognition from other people.¹⁶ However, this differs from the results of Eka Yan Fitri and Chairael, where gender does not affect the length of time spent on social media or learning achievement.¹⁷

The respondents were predominantly 20 years old and categorized in late adolescent phase, where many physical and psychological changes are experienced.¹⁸ According to Mahdia, the content shown by influencers influences the psychological health of late adolescents.¹⁹ Hallainia states that influencer content often affects psychological well-being positively or negatively.

This research also found that late adolescents' social media use was >6 times a day. Stockdale and Coyne stated that late adolescents used social media to overcome boredom.²⁰ Some individuals engaged in excessive use of the platform to reduce boredom.^{21,22} From the results, 50.5% of the respondents had low social media exposure. According to Fadillah and Widyatuti, low exposure has less chance of risky adolescent sexual behavior among adole-

scent.²³ This is supported by Nuraeni et al. who reported that the use of social media is directly proportional to sexual behavior.²⁴

Late adolescent sexual orientation

Based on the results, all respondents were in late adolescent phase of 19-21 years, which is a time of sexual identity formation. According to Alves et al. (2016), discovering an individual's sexual orientation occurs when the first homosexual desire and atypical behavior are manifested in childhood. This also continues until adolescent strengthens sexual desire as a homosexual due to experience.²⁵ Besides age, the research obtained gender data, which does not affect sexual orientation. According to Rahman et al, the level of gender equality and economic development of a country is not significantly related to the level of sexual orientation of men or women.²⁶ The relatively stable rates of heterosexuality,

Table 2. Social media exposure and sexual orientation.

	n	%
Social media exposure		
High	55	49.5
Low	56	50.5
Sexual orientation		
Heterosexual	107	96.4
Bisexual	3	2.7
Homosexual	1	0.9

Table 3. Results of cross tabulation of respondent characteristics with social media exposure.

Respondent characteristics	n	Social media exposure			
		High		Low	
		%	N	%	
Gender					
Man	11	9.9	5	4.5	
Woman	44	39.6	51	53.7	
Age					
19 years old	11	9.9	11	9.9	
20 years	30	27.0	32	28.8	
21 years	14	12.6	13	11.7	
Class					
Reg 1	16	14.4	22	19.8	
Reg 2	21	18.9	24	21.6	
Reg 3	18	16.2	10	9.0	
Electronic devices used to access social media					
Smartphones	55	49.5	56	50.5	
Number of social media owned					
2-3	17	15.3	16	14.4	
>3	38	34.2	40	36.0	
Types of social media frequently used					
1-2 types of social media	35	31.5	30	27.0	
3-4 types of social media	13	11.7	19	17.1	
5-7 types of social media	7	6.3	7	6.3	
Average length of social media use					
1-3 times a day	5	4.5	3	2.7	
4-5 times a day	20	18.0	11	9.9	
>6 times a day	30	27.0	42	37.8	
Activities frequently performed when opening social media					
1-3 activities	39	35.1	36	32.4	
4-6 activities	15	13.5	19	17.1	
7-10 activities	1	0.9	1	0.9	

bisexuality, and homosexuality suggest that nonsocial factors may underlie many differences in individuals' sexual orientation. These results do not support the often-stated assumption that differences in sexual orientation are related to social gender norms in society. The activity of opening social media can affect a person's perception of sexual orientation. According to Hidayah, the dynamics that cause changes are parenting patterns, imitation from blue films, disappointment with women, and surrounding environment that supports behavior. Imitation (modeling) of things of sexual nature can be easily accessed via social media.²⁷ According to Bandura, imitation or modeling is a learning behavior without direct experience,²⁸ Sheva and Roosiani state that the behavior of women who like the boy's love story genre, or fujoshi, has a dependency effect due to daily activities. With social media Twitter as a link between fujoshi, fans of the boy's love genre are identified. Therefore, the effect of frequently accessing Boy's Love content changes the views in real life.²⁹

The relationship between exposure to social media and sexual orientation in late adolescents

This research shows the relationship between exposure to social media and sexual orientation of late adolescents. The significance and correlation coefficient values are at 0.040 and -0.195, with the correlation category being fragile (Table 5). Limited exposure to social media enables adolescents to opt for heterosexual orientation, while extensive exposure leads to the diversification into heterosexual, bisexual, and homosexual categories. According to Yanti et al., one of the causes of changes in sexual orientation is technology, namely social media.¹¹ Gozan reported that sexual orientation was greatly influenced by events and stimuli felt from an environment openly accepting homosexual activity and the availability of information media from cyberspace.³⁰

The relationship between social media exposure and sexual orientation occurs because social media content quickly has adverse effects. The increasing number of adolescents who use social

Table 4. Results of cross tabulation of respondent characteristics by sexual orientation.

Respondent characteristics	Sexual orientation					
	Heterosexual		Bisexual		Homosexual	
	n	%	n	%	n	%
Gender						
Man	14	12.6	1	0.9	1	0.9
Woman	83	83.8	2	1.8	0	0.0
Age						
19 years old	21	18.9	1	0.9	0	0.0
20 years	60	54.1	1	0.9	1	0.9
21 years	26	23.4	1	0.9	0	0.0
Class						
Reg 1	38	34.2	0	0.0	0	0.0
Reg 2	42	37.8	2	1.8	1	0.9
Reg 3	27	24.3	1	0.9	0	0.0
Electronic devices used to access social media						
Smartphones	107	96.4	3	2.7	1	0.9
Number of social media owned						
2-3	31	28.8	1	0.9	0	0.0
>3	75	67.6	2	1.8	1	0.9
Types of social media frequently used						
1-2 types of social media	62	55.9	2	1.8	1	0.9
3-4 types of social media	31	27.9	1	0.9	0	0.0
5-7 types of social media	14	12.6	0	0.0	0	0.0
Average length of social media use						
1-3 times a day	8	7.2	0	0.0	0	0.0
4-5 times a day	30	27.0	1	0.9	1	0.9
>6 times a day	69	62.2	2	1.8	0	0.0
Activities frequently performed when opening social media						
1-3 activities	71	64.0	3	2.7	1	0.9
4-6 activities	34	30.6	0	0.0	0	0.0
7-10 activities	2	1.8	0	0.0	0	0.0

Table 5. Results of cross tabulation of the relationship between social media exposure and sexual orientation in late adolescents.

Social media exposure	Sexual orientation				Significance Value (p)	Correlation coefficient		
	Heterosexual		Bisexual					
	n	%	n	%				
High	51	45.9	3	2.7	1	0.9%	0.040	-0.195
Low	56	50.5	0	0.0	0	0.0		

media makes it very easy to imitate the harmful content circulating on social media platforms. Adolescents can easily fall into several different age groups, so the language spoken is different; some even discuss adult topics that they should not know at that age.³¹ The emergence of sexual content on social media also arouses the desire to know and carry out sexual activities among its users, specifically adolescents. In general, the use of social media sites represents a time of change as people read and share news, content, and information with others. Social media allows adolescents to make friends with strangers and new people. Most adolescents spend much time on social media looking at pictures and commenting on posts on social media. Correlation results show the relationship between social media exposure and sexual orientation in late adolescents. Therefore, exposure to social media is only one factor influencing adolescents' sexual orientation. According to Sunarti and Latif et al., internal and external factors influence sexual orientation. These include parenting errors and family conflicts, influence through friends, exposure to social media, and victims of sexual violence.^{9,32}

Conclusions

In conclusion, a correlation was observed between exposure to social media and orientation of late adolescents at Brawijaya University, Malang. Among late adolescents, 56 (50.6%) were classified into a low category of social media exposure, with the majority, constituting 96.4% as heterosexual in terms of sexual orientation.

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