

DO ADOLESCENTS USE DATING APPS TO FIND SEXUAL PARTNERS? A STUDY OF MOTIVATION OF DATING APPS USE AMONG ADOLESCENTS IN INDONESIA

Andhika Ajie Baskoro^{1*}, Sari Kistiana², Desy Nuri Fajarningtyas³, Evalina Franciska Hutasoit⁴

¹National Research and Innovation Agency (BRIN), Indonesia

²National Research and Innovation Agency (BRIN), Indonesia

³National Research and Innovation Agency (BRIN), Indonesia

⁴National Research and Innovation Agency (BRIN), Indonesia

Correspondence address: Andhika Ajie Baskoro

Email: andh005@brin.go.id*

ABSTRACT

Introduction: The existence of dating apps as a form of technological advancement has given individuals new ways to search for a romantic partner. Twenty-five percent of newlywed couples met through dating apps, while 40% of unmarried individuals were looking for partners online. Behind the search for a romantic partner through an app, some risks keep track of its users, which is associated with increased sexual activity. The use of dating apps for adolescent users should be a concern, given that, in the adolescent phase, initiation into sexual activity has become one of the frequently emerging aspects. **Aims:** To find out the motivation for using dating apps among adolescents aged 18-24 years old. **Methods:** The users' motivation of the dating apps focuses on three aspects: Relationship Seeking, Sexual Experience, and Flirting which are categorized into low and high motivation. The study used a quantitative approach with data collection through online questionnaires on 151 respondents. This study used chi-square as its analytical tool. **Result:** The study showed that, of the three motivations, the motivation to find a lover was the most common among the participants. Regarding the socio-demographic characteristics, sex and the frequency of use of dating apps show significant association with sexual experience and flirting motivation. Age and region are associated with relationship-seeking and flirting motivation, respectively. Interestingly, relationship status is associated with sexual experience motivation. **Conclusions:** The study recommends increasing the provision of reproductive health information to minimize the risk of dating app use among adolescents.

Keywords: Dating apps, adolescents, motivation

INTRODUCTION

The pattern of life in an increasingly digital society has brought many changes in various aspects of people's lives, including how individuals establish relationships with others. With the support of information technology on the internet, the process of finding relationships, both friendship and romantic relationships, can be done by everyone. Finding a mate online (online dating) is increasing along with technological developments. In 2022, it is predicted that as many as 366 million people worldwide will explore online, and this number will continue to increase and touch 440 million in 2027 (Dixon, 2023). Numerous studies

showed that 40% of unmarried individuals used the dating apps to find a partner, while around 25% of couples met through dating apps (Barrada and Castro, 2020). In addition to online dating, exploring partners is now also starting to be carried out through apps available on a device. This condition is a change that arises along with the increasing number of internet users and device ownership. Hence, dating apps are specifically designed to be operated through devices (Sumter and Vandebosch, 2019).

Currently, trends show an increase in dating apps users worldwide. Of the various dating apps, Tinder and Bumble are the two most used in various parts of the world, including Indonesia (Lidwina,

2021; Paramitha, Tanuwijaya and Natakoesoemah, 2021). Judging from the number of users on the Tinder application, the data show that the number of users increased from 8.3 million users in the first quarter of 2020 to 10.7 million users in the first quarter of 2022 (Rizaty, 2022). Other data also show that dating app users will be predicted to continue to increase. Furthermore, the massive phenomenon of dating app users has also been caused by the COVID-19 pandemic situation. The condition of the COVID-19 pandemic, which has limited public access to activities, has made dating apps increasingly attractive to the public (Gibson, 2021; Choi et al., 2022; Duguay, Dietzel and Myles, 2022).

The high public interest in dating apps is also supported by various features that are believed to provide many conveniences for its users. Dating apps can access the user's location to search for a mate based on the location inhabited by the user (Ranzini and Lutz, 2017). In addition to location, the dating apps will ask users to set preferences to determine what kind of potential mate the user expects. This preference refers to religion, ethnicity, hobbies, and other things, according to the user's wishes. This preference becomes the basis for the application to match users with potential matches on dating apps (David and Cambre, 2016).

From the description above, dating application users need an understanding or ability to operate it. The ability to operate these apps is considered higher in younger age groups. Although the older generation also experiences the same technological developments, they have difficulty operating apps on their devices compared to the younger generation (Berkowsky, Yost and Cotten, 2018). This condition then impacts the demographics of dating apps users, dominated by those from younger age groups (under 30). A survey in America shows that more than 50% of dating apps users are those aged 18-29 years (Pew Research Center, 2023). In

addition, a survey conducted by the SurveyMonkey platform in 2016 also showed that more than 50% of Tinder and Bumble application users are 18-29 years old (SurveyMonkey Intelligence, 2016). Furthermore, a survey comparing the two countries (Britain and America) showed similar results. The survey results show that more than a quarter of respondents (27%) in the UK and 35% of respondents in America aged 18-24 years are active users of the Tinder application (Cast From Clay, 2018).

From the description above, the young age group is the most dominant in using dating apps. Some risks lurk in the use of dating apps, especially in users who come from younger age groups. In adolescents, for example, several studies show that adolescents who use dating apps are at risk for experiencing things related to cybercrime, risky sexual behavior, physical violence, and things related to psychological conditions, such as stress, depression, and other illness related to the issue of mental health (Navarro-Pérez et al., 2020; Mignault et al., 2022; Chakravarty, Jagota and Sahoo, 2023). With the various risks that arise from the dating app use among adolescents, it becomes interesting to see what the goals of adolescents are in using dating apps. Therefore, this study aims to see the underlying motivation of dating app use among adolescents aged 18-24 years old.

Regarding the issue of finding the motivation to use dating apps, several measurement scales can be used, including The Dating Apps Motivation Scale (DAMS) and Tinder Motivation Scale (TMS) (Timmermans and De Caluwé, 2017; Sumter and Vandenbosch, 2019). Sumter and Vandenbosch (2019) describe six main motivations for a person to use dating apps, namely (1) motivation to find a soul mate, (2) motivation to find a sexual relationship partner, (3) motivation to facilitate communication, (4) motivation to validate self-value, (5) motivation for pleasure sensations, and (6) motivation to

use dating apps to keep up with the times. Meanwhile, studies (Timmermans and De Caluwé, 2017) show that there are 13 aspects related to a person's motivation to use dating apps, namely (1) social acceptance, (2) looking for a soul mate, (3) sexual experience, (4) practicing socialization or seduction skills, (5) information about vacation spots, (6) forgetting ex-lovers, (7) to keep up with the times, (8) pressure from peers, (9) to expand connections, (10) find a partner who matches your sexual orientation, (11) to help pass the time, (12) to help distract from daily activities, and (13) out of curiosity about dating apps.

Several studies show several motivations underlying a person's use of dating apps. A study shows three main motivations for dating apps: having sex, finding a soul mate, and looking for friends (Ranzini and Lutz, 2017; Garga et al., 2021b). Furthermore, a study in Indonesia shows that several aspects determine a person's dating app use motivation, namely, to find a partner, find a sexual partner, because of the ease of communication that can be built through apps, pleasure sensations, as an effort to keep up with the times, and as a form of permissive attitude toward sexuality issues (Respati and Amalia, 2021). Other studies have also shown that, in the aspect of sex, for example, more men tend to seek partners for sexual intercourse when compared to women (Sevi, Aral and Eskenazi, 2018; Sumter and Vandenbosch, 2019). A study in Australia shows that there are several motivations underlying someone using dating apps, namely for sexual intercourse, social interests, and to pursue pleasure (Garga et al., 2021b). From the description of the motivation for using dating apps from previous studies, in addition to determining the motivation for using dating apps in adolescents, this study also aims to examine the relationship between several demographic characteristics and the motivation for using dating apps among adolescents.

METHODS

This study uses a cross-sectional quantitative approach by taking primary data through an online questionnaire distribution mechanism. Data collection was performed online and a voluntary sampling design was applied considering that studies related to dating apps remain quite sensitive for some people. The participants were adolescents aged 18-24 who were recruited voluntarily via the provided link of the online questionnaire (Google Forms) and widely spread through WhatsApp and social media, including Twitter and Instagram. Respondents were selected based on the eligibility criteria (using or not using the dating apps) included in the questionnaire, which filtered out three non-users of any dating apps and succeeded in collecting 151 users who completed the questionnaire during the data collection timeline (June-September 2023). Hence, the total respondents were 151 adolescents.

The motivations for dating app use were assessed by using the Tinder Motives Scale (TMS) with several modifications. TMS contains 58 question points extracted from 13 main motivations of dating app use. A modification made was to replace the word Tinder with "dating application." For example, in a motivational question related to finding a partner, the question sentence that previously stated "I use Tinder to look for someone serious about dating" was changed to "I use a dating application to look for someone serious about starting a relationship." These modifications were made to enhance the likelihood of capturing respondents who use other dating apps, considering the various types of the recent dating apps. In addition, this study focuses on the three most frequently reviewed motivational aspects, namely motivational aspects related to relationship seeking, sexual experience, and aspects regarding the ability to flirt.

Of the three motivations above, the total number of questions asked to respondents was 17 questions, and for each question respondents were asked to fill in on a scale ranging from 1-7 which reflected the answers 1= “strongly disagree” and 7= “strongly agree”. The 17 questions from the three motivations selected in this study can be seen in the appendix. The dependent variables in this study are the three motivations: relationship seeking, sexual experience, and ability to flirt. The mean score of the respondents’ responses to dating app use was used to define the category of each dependent variable. Respondents with a mean score ≤ 4 were coded into “1” (low motivation), otherwise, they were coded into “2” (high motivation).

Meanwhile, independent variables in this study are type of dating application, age, gender, level of education, place of residence, area of residence, respondent activities, sexual orientation, frequency of dating application usage, user status of the dating apps (subscription membership), and relationship status.

Univariate and bivariate data analysis were performed. Univariate

analysis was carried out by descriptively explaining all the variables selected in this study. The chi-square test was performed to see the significance of the relationship between independent and dependent variables chosen in the study as the bivariate analysis. This study has been reviewed and approved by the Ethics Committee for Social Humanities, the National Research and Innovation Agency, with the ethics test number 401/KE.01/SK/06/2023 (Komisi Etik Bidang Sosial Humaniora, Badan Riset dan Inovasi Nasional).

RESULT

Socio-demographic characteristics of dating application users

Table 1 displays the respondents' characteristics based on socio-demographic and other factors related to dating application use. More than half of respondents used the dating application Bumble (58.9%), followed by Tinder (29.1%) and other apps, such as Coffee Meets Bagel, OKCupid, Litmatch, Badoo, Tantan, Omi, Boo and Skout (11.9%).

Table 1. Characteristics of the Respondents (n=151)

Variables	Categories	Frequency	Percentage (%)
Dating apps	Bumble	89	58.9
	Tinder	44	29.1
	Others	18	11.9
Age	18-20	33	21.9
	21-24	118	78.1
Sex	Females	105	69.5
	Males	46	30.5
Educational level	Secondary	49	32.5
	> Secondary	102	67.5
Place of residence	Rural	13	8.6
	Urban	138	91.4
Region	Java	117	77.5
	Non-Java	34	22.5
Activity	Students	81	53.6
	Employed	62	41.4

Variables	Categories	Frequency	Percentage (%)
Sexual orientation	Unemployed	8	5.3
	Sexual minority	14	9.3
	Heterosexual	137	90.7
Dating apps exposure	Rarely	88	58.2
	Often	63	41.8
Dating apps membership	Free	119	78.8
	Premium	32	21.2
Relationship status	Single	121	80.1
	In relationship	30	19.9

According to age, most respondents were adolescents in the age group of 21-24 years (78.1%). Only 21.9% of respondents were aged 18-20 years. Moreover, female adolescents dominated this study (69.5%), compared to 30.5% of male adolescents. The majority of respondents completed more than secondary school (67.5%), while 32.5% of respondents finished less than secondary school. Considering the place they lived in, 91.4% of respondents lived in urban areas, whereas only 8.6% of respondents lived in rural. Around 77.5% of respondents lived in Java Island, while only 22.5% of respondents resided in Sumatera, Sulawesi, Kalimantan, and Nusa Tenggara Islands.

At the time of the study, 53.6% of respondents were students, 41.4% were employed, and 5.3% were unemployed. About 90.7% of respondents disclosed themselves as having heterosexual orientations, while 9.3% stated as part of a sexual minority orientation. Based on the exposure frequency of dating application use, most respondents were rarely using (58.2%). There were 41.8% of respondents who were often using dating apps. Most respondents used free-membership apps (78.8%), whereas the rest of them signed up as premium members (21.2%). Around 80.1% of respondents said that they were single, and 19.9% were in a relationship.

The Motivation of Dating Application Use

Figure 1 demonstrates the percentage of respondents based on their

motivation for dating application use. From the three motivations (relationship seeking, sexual experience, and flirting), the figure clearly shows that seeking sexual experiences was the least reason stated by adolescents as the motive for dating app use (13.9%). Contrarily, more than half of the respondents had relationship seeking and flirting as the main motivation for using dating apps with 61.6% and 59.6%, respectively.

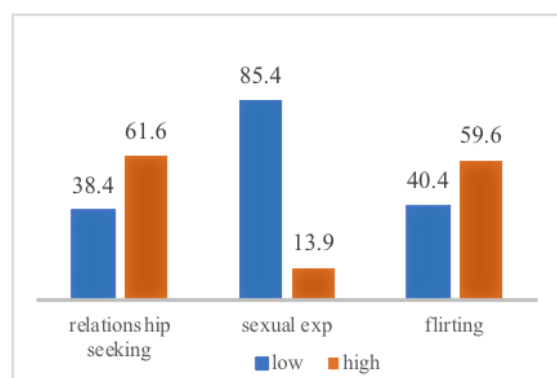


Figure 1. Motivation for the Use of Dating Apps

The Relationship between Respondents' Characteristics and Motivation for the Use of Dating Apps

The results of the bivariate analysis are presented according to each motivation to use dating apps. Table 2 shows the correlation between respondents' characteristics and motivation of dating app use for relationship-seeking. For all variables assessed, age was the only variable that significantly correlated to the use of the dating application for relationship-seeking purposes. Among

respondents within the age group of 18-20 years, 32.8% had low motivation and 15.1% had high motivation to use the apps for relationship-seeking. While, among those aged 21-24 years, 84.9% had high motivation and 67.2% had low motivation to use the apps for relationship-seeking.

Furthermore, respondents' sex, the frequency of exposure to dating apps, and relationship status correlated with the motivation to use dating apps for seeking sexual experience (Table 3). The percentage distribution exhibits that 85.7% of male adolescents showed higher motivation to use the apps for seeking

sexual experiences, and 21.7% of those had low motivation. On the other hand, only 14.3% of females were highly motivated to use the apps for the same reason, while 78.3% of females had low motivation.

Respondents with a high frequency of exposure (often using dating apps) seemed to have a higher motivation for using the application (66.7%), whereas only 38% of them had low motivation for seeking sexual experience. Of those who rarely used apps, 62% had lower motivation to use the apps, and 33.3% had higher motivation.

Table 2. The Relationship between Respondents' Characteristics and Motivation to Use Apps for Relationship Seeking

Variables	Relationship seeking				χ^2	P-value
	Low		High			
	n	%	n	%		
Dating apps					1.285	0.526
Bumble	34	58.6	55	59.1		
Tinder	19	32.8	25	26.9		
Others	5	8.6	13	14.0		
Age					6.557	0.010*
18-20	19	32.8	14	15.1		
21-24	39	67.2	79	84.9		
Sex					0.234	0.628
Females	39	67.2	66	71.0		
Males	19	32.8	27	29.0		
Educational level					3.425	0.064
Secondary	24	41.4	25	26.9		
> Secondary	34	58.6	68	73.1		
Place of residence					1.433	0.231
Rural	7	12.1	6	6.5		
Urban	51	87.9	87	93.5		
Region					2.491	0.114
Java	41	70.7	76	81.7		
Non-Java	17	29.3	17	18.3		
Activity					5.644	0.059
Students	38	65.5	43	46.2		
Employed	17	29.3	45	48.4		
Unemployed	3	5.2	5	5.4		
Sexual orientation					0.876	0.349
Sexual minority	7	12.1	7	7.5		
Heterosexual	51	87.9	86	92.5		
Dating apps exposure					2.03	0.154
rarely	38	65.5	50	53.8		

Variables	Relationship seeking				χ^2	P-value
	Low		High			
	n	%	n	%		
often	20	34.5	43	46.2		
Dating apps membership					0.014	0.905
Free	46	79.3	73	78.5		
Premium	12	20.7	20	21.5		
Relationship status					1.079	0.299
Single	44	75.9	77	82.8		
In relationship	14	24.1	16	17.2		

Note: *) statistically significant at p-value < 0.05

The proportion of respondents who were single who had high motivation to use the apps for sexual experience was 61.9%, whereas 82.9% of them had low motivation to use dating apps for sexual experience. Only 17.1% of respondents

who were in relationship had low motivation to use application for experiencing sexual relationship. On the other hand, 38.1% of young people who were in relationship had low motivation for seeking sexual experience.

Table 3. The Relationship between Respondents' Characteristics and Motivation to Use Apps for Sexual Experience

Variables	Sexual experience				χ^2	P-value
	Low		High			
	n	%	n	%		
Dating apps					4.310	0.116
Bumble	77	59.7	12	57.1		
Tinder	35	27.1	9	42.9		
Others	17	13.2	0	0		
Age					0.124	0.725
18-20	29	22.5	4	19.0		
21-24	100	77.5	17	81.0		
Sex					34.801	0.000*
Females	101	78.3	3	14.3		
Males	28	21.7	18	85.7		
Educational level					0.327	0.567
Secondary	41	31.8	8	38.1		
> Secondary	88	68.2	13	61.9		
Place of residence					0.47	0.493
Rural	12	9.3	1	4.8		
Urban	117	90.7	20	95.2		
Region					3.316	0.069
Java	103	79.6	13	61.9		
Non-Java	26	20.2	8	38.1		
Activity					1.604	0.448
Students	70	54.3	11	52.4		
Employed	51	39.5	10	47.6		
Unemployed	8	6.2	0	0		

Variables	Sexual experience				χ^2	P-value
	Low		High			
	n	%	n	%		
Sexual orientation					0.603	0.437
Sexual minority	13	10.1	1	4.8		
Heterosexual	116	89.9	20	95.2		
Dating apps exposure					6.099	0.014*
rarely	80	62.0	7	33.3		
often	49	38.0	14	66.7		
Dating apps membership					2.095	0.148
Free	104	80.6	14	66.7		
Premium	25	19.4	7	33.3		
Relationship status					4.997	0.025*
Single	107	82.9	13	61.9		
In relationship	22	17.1	8	38.1		

Note: *) statistically significant at p-value < 0.05

Table 4 shows that respondents' sex, region, and frequency to use dating apps were associated with flirting motives. About 80.3% of female respondents had high motivation to use the apps for flirting, while 62.2% of them had low motivation. Around 37.8% of male respondents had high motivation for flirting, while 19.7% of them had low motivation. The

proportion of respondents who lived on Java Island had higher motivation than those who had low motivation to use apps for flirting (83.3% compared to 68.9%). While 31.3% of those who lived outside Java Island had higher motivation, 16.7% of them had lower motivation to use apps for the same reason.

Table 4. The Relationship between Respondents' Characteristics and Motivation to Use Apps for Flirting

Variables	Flirting				χ^2	P-value
	Low		High			
	n	%	n	%		
Dating apps					1.834	0.400
Bumble	32	52.5	57	63.3		
Tinder	21	34.4	23	25.5		
Others	8	13.1	9	11.1		
Age					2.168	0.141
18-20	17	27.9	16	17.8		
21-24	44	72.1	74	82.2		
Sex					5.626	0.018*
Females	49	80.3	56	62.2		
Males	12	19.7	34	37.8		
Educational level					0.079	0.778
Secondary	19	31.1	30	33.3		
> Secondary	42	68.9	60	66.7		
Place of residence					1.069	0.301
Rural	7	11.5	6	6.7		
Urban	54	88.5	84	93.3		
Region					4.370	0.037*
Java	42	68.9	75	83.3		

Variables	Flirting				χ^2	P-value
	Low		High			
	n	%	n	%		
Non-Java	19	31.1	15	16.7		
Activity					0.185	0.912
Students	34	55.7	47	52.2		
Employed	24	39.3	38	42.2		
Unemployed	3	4.9	5	5.6		
Sexual orientation					0.141	0.708
Sexual minority	5	8.2	9	10.0		
Heterosexual	56	91.8	81	90.0		
Dating apps exposure					8.078	0.004*
rarely	44	72.1	44	48.9		
often	17	27.9	46	51.1		
Dating apps membership					0.612	0.434
Free	50	82.0	69	76.7		
Premium	11	18.0	21	23.3		
Relationship status						
Single	49	80.3	72	80.0	0.002	0.960
In relationship	12	19.7	18	20.0		

Note: *) statistically significant at p-value < 0.05

Of the respondents who were rarely exposed to dating apps, 72.1% had lower motivation to use the application for flirting, and 48.9% of those had higher motivation. Moreover, 51.1% of respondents with higher exposure to apps had higher motivation to use the apps for flirting, whereas only 27.9% of them had low motivation to use the apps for flirting purposes.

DISCUSSION

In recent years, dating apps have become more and more popular in Indonesia. In a sample of 151 adolescents aged 18-24 years old, this study sought to identify the main motivation for dating app use among adolescents. The current study identified three dating app motivations, namely relationship seeking, sexual experience, and social skills/flirting. Results of the descriptive analysis showed that relationship-seeking motivation was stronger than flirting/social skills or sexual experience motivation. The motivation for finding a partner through dating apps is to establish new relationships that are

inspired by social needs. This motivation also may reflect the necessity of being in a relationship in modern-day society, where being single may be experienced as a hard condition. The finding was in line with previous studies on dating apps that most users are looking for a steady relationship (Sumter, Vandenbosch and Ligtenberg, 2017; Tanner and Huggins, 2018; Breitschuh and Göretz, 2019). One has to keep in mind, though, that a lot more females than males completed this survey, and previous studies stated that the majority of females are interested in finding a steady relationship. In addition, although most participants showed lower motivation regarding sexual experience, this finding needs to be taken into consideration as 13.9% of participants seek to experience casual sex. Several studies show that dating app users who are influenced by the motivation of sexual relationships are more likely to engage in risky sexual behaviors (Garga et al., 2021a).

Results of the bivariate analysis showed that age was significantly associated with relationship-seeking

motivation. In line with this perspective, a study in the Netherlands (Sumter, Vandenbosch and Ligtenberg, 2017) also reports the association between age and relationship-seeking motives. As individuals get older, naturally, they look for serious partners to be in a relationship with. Older adults tend to seek out commitment in their romantic relationships. Also, this might be due to the users' demographics in this study, which skewed toward female users. In Indonesia, particularly in traditional society, there are norms regarding the appropriate age for women to get married. The situation was similar to other studies which reported that, compared to men, women experience stronger social and cultural pressure to marry at an age considered appropriate by societal norms (Ibrahim, 2016; Lari, 2022).

Although sexual experience was not the main motivation, this motivation was predicted by gender, dating apps exposure, and relationship status. Concerning gender, the result could be explained and aligned with findings from previous research that males tend to have higher motivation for sexual experience and risk-taking behavior than females (Ranzini and Lutz, 2017; Sumter, Vandenbosch and Ligtenberg, 2017; Sevi, Aral and Eskenazi, 2018; Breitschuh and Göretz, 2019; Sumter and Vandenbosch, 2019). This may be explained by the fact that males are risk takers and have a more moderate perspective on casual sex.

The study also found that there was a significant relationship between the frequency of using dating apps and the intention to seek sexual experiences. So far, there have been few studies that showed the relationship between the frequency of using dating apps with sexual experience motivation. Thus, this finding could lead to further research. The relationship between the sexual experience motivation and the frequency of using dating apps could also be explained by sexual permissiveness. According to Sumter and Vandenbosch (2019),

individuals who had a more moderate perspective on casual sex were more attracted to casual sex adventures and accordingly seemed to use dating apps more frequently to fulfill their needs. Naturally, single individuals appeared to be open to the idea of casual sex experiences or one-night stands. Several studies show that those who are single have a higher tendency to seek sexual experiences through dating apps when compared to those in a relationship or married (Timmermans and Alexopoulos, 2020; Garga et al., 2021b).

The social skills or flirting as the motivation for dating app use was significantly related to the variables of gender, region, and exposure to dating apps. This finding corresponds to earlier research (Ranzini and Lutz, 2017; Tannes and Huggins, 2018; Sumter and Vandenbosch, 2019). The explanation regarding this might be related to the issue of different expectations between males and females when it comes to using dating apps; perhaps females consider online communication as an easier way to meet new people than males. Moreover, because females might believe there are fewer negative consequences of using dating apps, females may utilize dating apps to flirt or hone their social skills. In terms of the frequency of dating apps, this study's findings indicate that the length of time users use dating apps is related to social skills/flirting motivation. So far, we have not found any other studies that specifically discuss the relationship between these two indicators; however, several studies show that excessive use of dating apps can lead to several conditions related to mental health, such as the risk of verbal sexual harassment, fear of rejection, anxiety, and symptoms of behavioral disorders (Echevarria, Peterson and Woerner, 2023; Gewirtz-Meydan et al., 2023; Thomas et al., 2023). These findings highlighted the risks for dating application users, especially those who use the apps for quite a long time per day.

Although the current study has provided important insights into why young adults use dating apps, it also has several limitations that need to be considered when interpreting the results. First, response and bias may have an impact on the study's findings because it relies on self-selected samples and self-reported measures. Second, some of the group categories in this study were imbalanced in the number of participants (i.e. place of residence, sexual orientation), which means that findings need to be checked against more balanced groups of participants to reliably confirm the differences that were found. Finally, the cross-sectional design and limited sample limit our ability to make firm judgments and extrapolate our results. Regarding the limitations, the data on the motivation of dating app use provided in this study might contribute to the provision of evidence-based to tailor specific regulations related to the issue of the risk of dating app use, especially among adolescents aged 18-24 years old. Future research should consider a qualitative approach to explore more about how motivation for using dating apps could affect emerging adults' romantic and sexual life, sometimes in an undesirable way.

CONCLUSIONS

The digital age has brought many changes in human life, including how they use dating apps to find a partner. The existence of dating apps provides benefits and risks for its users. For users who are adolescents, the level of risk may be greater than for those who are older. The study's findings provide important information regarding the motivations of the adolescent age group for using dating apps. The findings from this study show that the motivation to find a partner becomes the strongest motivation compared to other motivations (sexual experience and flirting). Moreover, several variables like sex and frequency of dating

apps use were significantly associated with sexual experience and flirting motivation. The study's findings can be beneficial as evidence-based for policymakers to create policies targeting the adolescent age group, for example, by promoting information about reproductive health for adolescents through social media channels so they can make decisions based on adequate reproductive health knowledge. Apart from that, efforts can also be made through a small group (peer) approach to become a place for adolescents to express their feelings or experiences when using dating apps.

REFERENCES

- Barrada, J.R. and Castro, Á., 2020. Tinder users: Sociodemographic, psychological, and psychosexual characteristics. *International Journal of Environmental Research and Public Health*, 17(21), pp.1–17.
<https://doi.org/10.3390/ijerph17218047>
- Berkowsky, R.W., Yost, E.A. and Cotten, S.R., 2018. Using Technology to Enhance Resiliency Among Older Adults. In: B. Resnick, L.P. Gwyther and K.A. Roberto, eds. *Resilience in Aging: Concepts, Research, and Outcomes*. [online] Cham: Springer International Publishing. pp.385–399.
https://doi.org/10.1007/978-3-030-04555-5_21
- Breitschuh, V. and Göretz, J., 2019. User Motivation and Personal Safety on a Mobile Dating App. In: G. Meiselwitz, ed. *Social Computing and Social Media. Design, Human Behavior and Analytics*. Cham: Springer International Publishing. pp.278–292.
https://doi.org/10.1007/978-3-030-21902-4_20
- Cast From Clay, 2018. *Social 2018 Main Findings*.

- Chakravarty, R., Jagota, G. and Sahoo, S., 2023. Online dating and its impact on teens: An overview with its special reference to the current Indian Scenario: A Mini-review. *Consortium Psychiatricum*, 4(3), pp. 65-70. <https://doi.org/10.17816/CP222>
- Choi, E.P.H., Hui, B.P.H., Kwok, J.Y.Y. and Chow, E.P.F., 2022. Intimacy during the COVID-19 pandemic: an online survey examining the impact of COVID-19 on the sexual practices and dating app usage of people living in Hong Kong. *Sex Health*, 19(6), pp.574–579. <https://doi.org/10.1071/SH22058>
- David, G. and Cambre, C., 2016. Screened intimacies: Tinder and the swipe logic. *Social media+ society*, 2(2), p.2056305116641976 <https://doi.org/10.1177/2056305116641976>
- Dixon, S.J., 2023. *Online dating worldwide - Statistics & Facts*.
- Duguay, S., Dietzel, C. and Myles, D., 2022. The year of the “virtual date”: Reimagining dating app affordances during the COVID-19 pandemic. *New Media & Society*, 26(3). <https://doi.org/10.1177/14614448211072257>
- Echevarria, S.G., Peterson, R. and Woerner, J., 2023. College Students’ Experiences of Dating App Facilitated Sexual Violence and Associations with Mental Health Symptoms and Well-Being. *Journal of Sexual Research*, 60(8), pp.1193–1205. <https://doi.org/10.1080/00224499.2022.2130858>
- Garga, S., Thomas, M., Bhatia, A., Sullivan, A., John-Leader, F. and Pit, S., 2021a. Geosocial Networking Dating App Usage and Risky Sexual Behavior in Young Adults Attending a Music Festival: Cross-sectional Questionnaire Study. *Journal of Medical Internet Research*, 23(4), p.e21082. <https://doi.org/10.2196/21082>
- Garga, S., Thomas, M.T., Bhatia, A., Sullivan, A., John-Leader, F. and Pit, S.W., 2021b. Motivations, dating app relationships, unintended consequences and change in sexual behaviour in dating app users at an Australian music festival. *Harm Reduction Journal*, 18(1), p.49. <https://doi.org/10.1186/s12954-021-00493-5>
- Gewirtz-Meydan, A., Volman-Pampanel, D., Opuda, E. and Tarshish, N., 2023. Dating Apps: A New Emerging Platform for Sexual Harassment? A Scoping Review. *Trauma Violence Abuse*, 25(1) <https://doi.org/10.1177/15248380231162969>
- Gibson, A.F., 2021. Exploring the impact of COVID-19 on mobile dating: Critical avenues for research. *Social and Personal Psychology Compass*, 15(11), p.e12643. <https://doi.org/10.1111/spc3.12643>
- Ibrahim, R., 2016. “What Is Wrong With Me?” – Single Women’s Reflections on Missing the Marriage Transition. *Asian Social Science*, 12, p.213. <https://doi.org/10.5539/ass.v12n12p213>
- Lari, N., 2022. Toward marriage sustainability: Impacts of delayed marriages in Qatar. *Cogent Social Sciences*, 8. <https://doi.org/10.1080/23311886.2022.2083480>
- Lidwina, A., 2021. *Tinder, Aplikasi Kencan Daring Paling Banyak Digunakan di Indonesia*.
- Mignault, L., Vaillancourt-Morel, M.-P., Ramos, B., Brassard, A. and Daspe, M.-È., 2022. Is swiping right risky? Dating app use, sexual satisfaction, and risky sexual behavior among adolescents and young adults.

- Sexual and Relationship Therapy*.
<https://doi.org/10.1080/14681994.2022.2078804>
- Navarro-Pérez, J.J., Oliver, A., Carbonell, Á. and Schneider, B., 2020. Effectiveness of a Mobile App Intervention to Prevent Dating Violence in Residential Child Care. *Psychosocial Intervention*, 29, pp.59–66.
<https://doi.org/10.5093/pi2020a3>
- Paramitha, A., Tanuwijaya, S. and Natakoesoemah, S., 2021. Analisis Motif dan Dampak Penggunaan Aplikasi Tinder Berbayar. *Jurnal Komunikasi dan Kajian Media*, 5(2), pp.187–204.
- Pew Research Center, 2023. *Key findings about online dating in the U.S.*
- Ranzini, G. and Lutz, C., 2017. Love at first swipe? Explaining Tinder self-presentation and motives. *Mobile Media & Communication*, 5(1), pp.80–101.
<https://doi.org/10.1177/2050157916664559>
- Respati, C.W.A. and Amalia, I., 2021. Intention Using Dating Apps in Indonesia. In: *2021 9th International Conference on Cyber and IT Service Management (CITSM)*. pp.1–6.
<https://doi.org/10.1109/CITSM52892.2021.9588813>
- Rizaty, M.A., 2022. *Kian Populer, Pelanggan Tinder Naik Lagi pada Kuartal I 2022*.
- Sevi, B., Aral, T. and Eskenazi, T., 2018. Exploring the hook-up app: Low sexual disgust and high sociosexuality predict motivation to use Tinder for casual sex. *Personality and Individual Differences*, 133, pp.17–20.
<https://doi.org/10.1016/j.paid.2017.04.053>
- Sumter, S.R. and Vandenbosch, L., 2019. Dating gone mobile: Demographic and personality-based correlates of applications among emerging adults. *New Media & Society*, 21(3), pp.655–673.
<https://doi.org/10.1177/1461444818804773>
- Sumter, S.R., Vandenbosch, L. and Ligtenberg, L., 2017. Love me Tinder: Untangling emerging adults' motivations for using the dating application Tinder. *Telematics and Informatics*, 34(1), pp.67–78.
<https://doi.org/10.1016/j.tele.2016.04.009>
- Tannes, M. and Huggins, M., 2018. Why Swipe Right? Women's Motivation for Using Mobile Dating Applications such as Tinder. *Journal of Business Diversity*, 18(2), pp.78–86.
<https://doi.org/10.33423/jbd.v18i2.527>
- Thomas, M.F., Binder, A., Stevic, A. and Matthes, J., 2023. 99 + matches but a spark ain't one: Adverse psychological effects of excessive swiping on dating apps. *Telematics and Informatics*, 78, p.101949.
<https://doi.org/10.1016/j.tele.2023.101949>
- Timmermans, E. and Alexopoulos, C., 2020. Anxiously Searching for Love (Among Other Things): Attachment Orientation and Mobile Dating Application Users' Motives and Outcomes. *Cyberpsychology, Behavior, and Social Networking*, 23(7), pp.447–452.
<https://doi.org/10.1089/cyber.2019.0542>
- Timmermans, E. and De Caluwé, E., 2017. Development and Validation of the Tinder Motives Scale (TMS). *Computers in Human Behavior*, 70, pp.341–350.
<https://doi.org/10.1016/j.chb.2017.01.028>