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Abstract | This study examines factors associated with dating app facilitated sexual violence (DAFSV) among a large, nationally representative sample of dating app or website users ($n=9,987$).

Through the lens of routine activity theory, we examined the way in which respondents used dating platforms and how this was associated with experiences of DAFSV.

Prolific dating platform users and those who share more information, who chat with people on different platforms or who paid for an online dating service were more likely to report experiencing DAFSV. Risk factors for DAFSV extending from the online sphere into the physical world were also explored.

Findings give much needed context for experiences of DAFSV and provide direction for responses aimed at protecting individuals from harm facilitated by online dating platforms.

Routine online activities and vulnerability to dating app facilitated sexual violence

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Online dating platforms have grown in popularity over the last decade and are the method through which many people now meet romantic partners (Business of Apps 2024; Hanrahan 2019). However, these platforms have also become vehicles through which users can experience sexual harassment, aggression and violence (Echevarria, Peterson & Woerner 2023; Gewirtz-Meydan et al. 2024; Wolbers et al. 2022). Recent research estimates that three in four dating platform users in Australia (73%) have experienced at least one incident of dating app facilitated sexual violence (DAFSV; Wolbers et al. 2022).

DAFSV is technology facilitated, occurs both online and in person and is perpetrated by an individual met through a dating platform. Key elements of technology-facilitated crime, including broader patterns in how, when, where and against whom they occur, are increasingly being understood through the lens of routine activity theory (RAT; Cohen & Felson 1979; Leukfeldt & Yar 2016). RAT understands crime as resulting from the convergence of a motivated offender and a suitable target for crime (ie individuals, groups, places, structures or objects) in the absence of a 'guardian' (eg police, security, bystanders) capable of preventing it (Cohen & Felson 1979).

RAT ties concentrations of interpersonal crimes involving physical and sexual violence to broader patterns of routine human activity. This is borne out in empirical research, which shows that this violence occurs more often in certain places and at certain times—such as bars and nightclubs at night (eg Perez-Trujillo et al. 2016)—concurrently with increases in other, legitimate activities at these places and times that bring together large numbers of motivated offenders and suitable targets (Cohen & Felson 1979).

The term ‘suitability’ in the RAT literature reflects an interest in understanding crime from the perspective of perpetrators: how they make decisions when offending. This can inform (often contextual) crime prevention initiatives that aim to influence this decision-making and disrupt their offending. It does not imply that some victims are inherently more suited to victimisation or responsible for their own victimisation. Importantly, it is argued that the suitability of a target, as perceived by perpetrators, depends on several factors. Offenders tend to prefer targets encountered throughout the course of their routine activities over targets they must exert some effort to locate (Miró 2014). They also tend to prefer targets that have few protections installed around them, those likely to offer little resistance and those where any offending behaviour has a lower chance of being discovered.

Although RAT was conceived as an approach to understanding crime in the physical world, it is also highly relevant to cyber-enabled and cyber-dependent crimes (Miró Llinares & Johnson 2018), such as technology-facilitated sexual violence, for which the opportunity for perpetration and risk of victimisation is contingent on the nature of online spaces (Marcum, Ricketts & Higgins 2010; Office of the eSafety Commissioner 2023b). Applied to dating apps specifically, RAT can help explain why DAFSV has become so common (Wolbers et al. 2022). Online dating platforms often lack the immediate forms of guardianship expected when meeting people in the physical world—such as bystanders and formal security. Further, online dating platforms bring together large numbers of individuals, giving motivated offenders convenient and easy visibility of, and access to, a large pool of people to offend against. Offenders are also able to protect their identity (eg with privacy settings or by catfishing). Underdeveloped monitoring and reporting mechanisms, coupled with deficiencies in guardianship, make offending highly concealable (Lawler & Boxall 2024). Earlier research has found that online dating platform users may be at increased risk of sexual violence if they spend more time on these platforms, have higher match success rates or share certain types of information (Centelles 2019; Wolbers & Boxall 2024). RAT suggests that all of these can be said to increase the visibility, accessibility and vulnerability of users to a larger number of motivated offenders.

The current study further investigates risk factors for DAFSV victimisation through the lens of RAT. We particularly explore how individuals use dating platforms, focusing on behaviours that increase visibility, accessibility or the chances of converging in time and space with a motivated offender without a capable guardian. We also consider whether these risks differ for DAFSV experienced online and in person.

We aimed to answer the following research questions:

- Is there an association between online dating behaviours and the risk of experiencing DAFSV?
- Are there differences in online dating behaviours between users who experienced DAFSV in person, compared with those who experienced DAFSV online only?

Both research questions will provide much needed information on the risk factors and contexts for different forms of DAFSV victimisation and will help guide prevention and intervention approaches aimed at protecting dating platform users. DAFSV victimisation can affect short- and long-term wellbeing. It has been associated with negative health outcomes, such as lower self-esteem and increased levels of depression, anxiety and post-traumatic stress disorder (Gewirtz-Meydan et al. 2024).

Method

Data collection and sample

This study is part of a body of work examining the prevalence and nature of online harms facilitated by mobile dating apps and websites (Lawler & Boxall 2024, 2023; Teunissen et al. 2022; Wolbers et al. 2022). Data were collected via an online survey sent to individuals living in Australia aged 18 years and over who reported that they had used a mobile dating app or website in the last five years. The survey was conducted by Roy Morgan Research between June and August 2021 using its Single Source panel and panels managed by PureProfile and Dynata. Respondents were recruited using proportional quota sampling, a non-probability sampling method. Quotas were based on the Australian adult population stratified by sex, age and usual place of residence, based on data from the Australian Bureau of Statistics (2017). Quotas were adjusted to account for age and gender-related propensity for using a dating app or website in the last five years. The sample is thus broadly reflective of the spread of people aged 18 and over living in Australia, adjusted to account for likelihood of using online dating platforms. Overall, five percent of contacted participants completed the study, and 76 percent of respondents who opened the invitation, passed the screening process and read the consent form went on to complete the survey ($n=9,987$).

Analytical approach

To answer the research questions, we employed an ordered logistic regression model predicting DAFSV with sociodemographic and online dating behaviours as explanatory variables. Model fit was assessed using the Cragg–Uhler (Nagelkerke) R^2 and Likelihood–ratio test χ^2 , and multicollinearity between the explanatory variables was assessed with variance inflation factors. The predicted probabilities of each variable that was significant in the regression model were examined. These indicate the predicted probability of each level of the dependent variable holding all other variables included in the regression model constant.

Dependent variable

We measured DAFSV using 22 questions—14 for online DAFSV and eight for in-person DAFSV—focusing on the previous five years. Online DAFSV included behaviours perpetrated online classified as sexual harassment (eg continued to contact the respondent even after they told them they were not interested in having a relationship with them), abusive and threatening language (eg threatened the respondent in any way), online stalking (eg pressured the respondent to give them information about their location or their schedule) and online image-based sexual abuse (IBSA; eg shared a sexually explicit photo of the respondent with others without their consent). In-person DAFSV included sexual assault and coercion (eg attempted to engage in a sexual act with the respondent when they could not consent), reproductive and sexual health related abuse (eg lied about their sexual health status), in-person stalking (eg loitered around, followed the respondent or showed up inappropriately at their home, school or workplace) and in-person IBSA (eg took photos or videotaped the respondent engaging in sexual acts without their knowledge or consent). These were behaviours perpetrated in person by someone met through an online dating platform (see Wolbers et al. 2022 for more information on the measures and survey). Overall, 73 percent of the sample experienced at least one of the 22 DAFSV behaviours ($n=7,334$). Further, 72 percent experienced online DAFSV ($n=7,224$), and 34 percent experienced in-person DAFSV ($n=3,394$).

An ordinal dependent variable of DAFSV was specified for the current study, explaining the use of an ordered, as opposed to multinomial, logistic regression. This was a three-level variable categorising individuals as those who did not experience any DAFSV (19%, $n=1,859$), those who experienced DAFSV online only (31%, $n=3,133$) and those who experienced in-person DAFSV (34%, $n=3,394$). Notably, most respondents who were subjected to DAFSV in person also experienced DAFSV online (97%). Respondents who did not provide enough information to gauge whether they had experienced DAFSV or not (8%, $n=794$), and those who had experienced online DAFSV but did not provide sufficient information to measure in-person DAFSV victimisation (8%, $n=807$) were subsequently removed from regression analyses.

Independent variables

We asked respondents several questions gauging their online dating behaviours. These behaviours align with RAT in that they potentially increase the 'suitability' of a user as a target of sexual violence (ie visibility, accessibility or concealability) or their chances of converging in time and (virtual) space with a motivated offender. The online dating behaviours we asked about related to respondents' online dating platform use over the previous five years and include:

- highest frequency of dating platform use—from once a week or less to more than once per hour;
- whether the respondent ever used multiple dating platforms at once—yes or no;
- whether the respondent ever paid to use a service—yes or no;
- the primary type of service used—app or website;
- the frequency of communicating with matches on other platforms—from never to very often;
- whether the respondent ever linked social media to their dating platform account—yes or no; and
- the type of information included at any point on their dating profile—personal identifying information, interests and sexual or relationship preferences—all yes or no.

We also included five sociodemographic control variables in the regression models, all of which have been shown to be associated with DAFSV (Wolbers & Boxall 2024; Wolbers et al. 2022). These were gender and sexuality, age, Indigenous status, language background and health status.

Limitations

In addition to the data limitations discussed in Wolbers et al. (2022; eg small number of non-binary respondents not allowing for inclusion in statistical tests), we acknowledge the limitations of the behavioural measures in the current study. The cross-sectional nature of the data did not allow us to determine the exact timing of any DAFSV victimisation over the past five years and how this coincided with typical online dating behaviours. Findings relating to any association between these behaviours and DAFSV should therefore be interpreted with this lack of temporal information in mind. Further, we lack certain contextual information about DAFSV experiences, such as whether they were perpetrated by an intimate partner and constituted intimate partner violence—which may differ from DAFSV experienced in different contexts.

There were high rates of missing data, with around 16 percent of the sample not providing sufficient information on DAFSV victimisation. This means that the rate of DAFSV victimisation may be under-reported. It introduces missing data biases. Respondents who chose not to provide answers may differ meaningfully from the rest of the sample in ways that we cannot measure, possibly affecting the representativeness of the findings. Generalisability of the findings is further impacted by the dynamic nature of online dating platforms, which continue to evolve.

Sample characteristics

Table 1 displays the sample characteristics of all respondents ($n=9,987$) and those who experienced DAFSV (73%, $n=7,334$). Within the full sample of mobile dating app and website users, there were slightly more heterosexual men than women (42% vs 40%) and LGB+ women than men (8% vs 7%). Around one percent of the sample identified as non-binary. Most dating platform users were under 35 years old (56%), eight percent identified as First Nations, nine percent were from a non-English-speaking background, and 12 percent reported having a disability. During the highest frequency of dating platform use over the previous five years, most respondents were using a dating platform several times a day or week (62%). Most respondents used more than one platform at the same time (61%), primarily used an application rather than a website (81%), had linked a social media account to their online dating profile (53%) and often or occasionally used another platform to communicate with matches (51%). Further, two in five respondents paid to use a dating service (40%).

Among individuals who experienced at least one incident of DAFSV, the largest proportion identified as heterosexual women (44%), followed by heterosexual men (36%), LGB+ women (10%) and LGB+ men (8%). Just under one percent identified as non-binary. Respondents who experienced DAFSV were commonly aged 25 to 34 (36%) or 35 to 44 (22%). Ten percent identified as First Nations, eight percent were from a non-English-speaking background, and 14 percent reported having a disability. Further, over the previous five years:

- Sixty-two percent used a dating platform several times a day or week during the highest frequency of use, with 25 percent using a platform once an hour or more.
- Sixty-eight percent used more than one platform at the same time.
- Forty-three percent paid to use a dating service.
- Eighty-four percent primarily used an app rather than a website.
- Sixty percent had linked a social media account to their dating profile.
- Fifty-three percent communicated with matches on another platform occasionally or often, with 21 percent doing this very often.

	Full sample ($n=9,987$)		DAFSV ($n=7,334$)	
	<i>n</i>	%	<i>n</i>	%
Gender and sexuality^a				
Heterosexual men	4,192	42.0	2,633	35.9
LGB+ men	716	7.2	580	7.9
Heterosexual women	4,037	40.4	3,229	44.0
LGB+ women	836	8.4	728	9.9
Non-binary	71	0.7	60	0.8

Table 1: Sample characteristics (cont.)				
	Full sample (n=9,987)		DAFSV (n=7,334)	
	<i>n</i>	%	<i>n</i>	%
Age				
18–24	2,092	21.0	1,653	22.5
25–34	3,471	34.8	2,625	35.8
35–44	2,220	22.2	1,634	22.3
45–54	1,161	11.6	810	11.0
55+	1,043	10.4	612	8.3
Aboriginal and/or Torres Strait Islander^b	778	7.8	717	9.8
Non-English-speaking background	863	8.6	613	8.4
Disability^c	1,155	11.6	1,021	13.9
Highest frequency of dating platform use^d				
Once a week or less	1,484	14.9	844	11.5
Several times a week	3,454	34.6	2,406	32.8
Several times a day	2,747	27.5	2,159	29.4
Around once an hour	1,045	10.5	894	12.2
More than once an hour	1,065	10.7	936	12.8
Used more than one platform at the same time	6,129	61.4	4,994	68.1
Paid to use a dating platform	3,940	39.5	3,149	42.9
Primary type of online dating platform used				
App	8,079	80.9	6,185	84.3
Website	1,908	19.1	1,149	15.7
Frequency of using other platforms to communicate with matches				
Never	1,246	12.5	647	8.8
Rarely	1,843	18.5	1,244	17.0
Occasionally	3,048	30.5	2,294	31.3
Often	2,071	20.7	1,626	22.2
Very often	1,779	17.8	1,523	20.8
Linked social media account to dating platform	5,275	52.8	4,328	59.0
Personal identifying information included on dating profile^e	7,862	78.7	5,809	79.2
Interests included on dating profile^f	8,251	82.6	5,979	81.5
Sexual or relationship preference included on dating profile^g	7,433	74.4	5,561	75.8

a: LBG+ refers to lesbian, gay, bisexual or another non-heterosexual sexual orientation. Denominator includes 135 (1%) respondents (n=104, 1% of those who experienced DAFSV) who did not provide a response

b: Denominator includes 126 (1%) respondents (n=97, 1% of those who experienced DAFSV) who did not provide a response

c: Includes respondents who indicated that they had a restrictive health condition or needed supervision or help for a health condition that had lasted or was likely to last six months or longer

d: Denominator includes 190 (2%) respondents (n=95, 1% of those who experienced DAFSV) who did not provide a response

e: Includes contact information/full name/age/location/geotags

f: Includes hobbies/music/interests/work industry/religious views/political views

g: Includes sexuality/sexual desires/connection type sought

Note: Percentage totals may not equal 100 because of rounding and missing data

Source: Australian Institute of Criminology (AIC) Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

Results

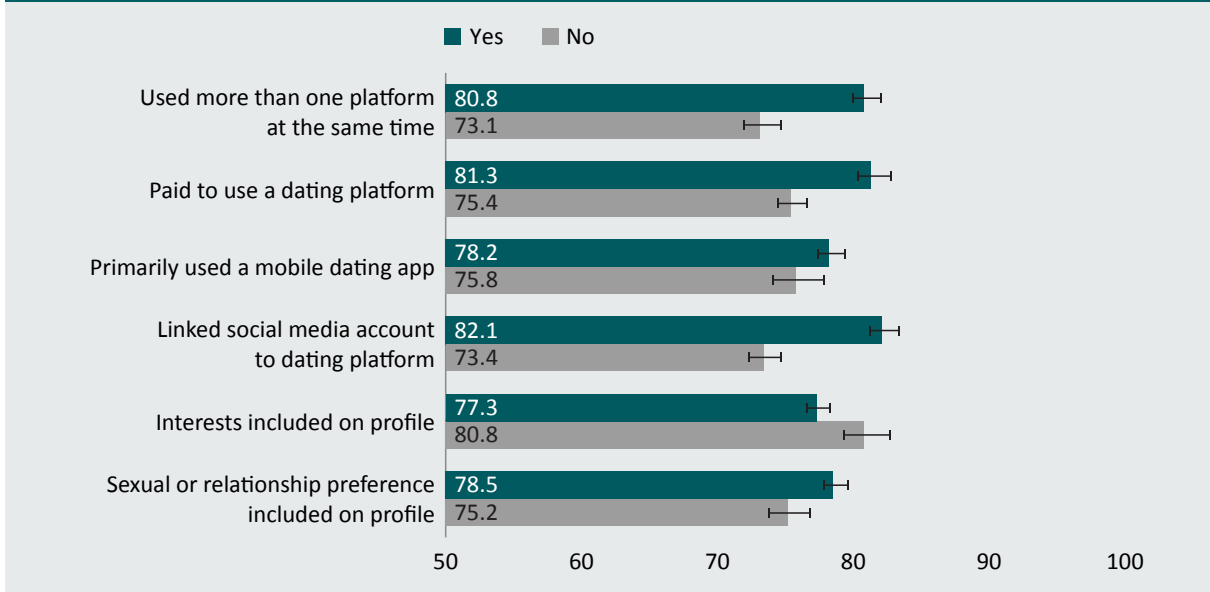
An ordered logistic regression model was estimated to determine how online dating behaviours were associated with DAFSV victimisation—namely, no DAFSV, online-only DAFSV or in-person DAFSV. Odds ratios for each variable and full model results are included in the *Appendix*. We examine the predicted probabilities for each of the online dating behaviour variables that were statistically significant in the regression (ie all except including personal identifying information on dating profile). We inverted the value for no DAFSV to gauge the predicted probability of experiencing any form of DAFSV.

Figure 1 shows the predicted probabilities by the dichotomous online dating behaviour variables. All marginal effects were significant in relation to any DAFSV, demonstrating that, when we control for demographic characteristics and the other online dating behaviours, the respondents who were more likely to experience DAFSV of any kind:

- used more than one platform at the same time (81% vs 73%);
- paid to use a dating platform (81% vs 75%);
- primarily used an app rather than a website (78% vs 76%);
- linked social media to their dating platform account (82% vs 73%); and
- shared sexual or relationship preference information on their dating profile (79% vs 75%).

One online dating behaviour emerged as a possible protective factor in the regression model (ie a significant odds ratio below 1.0). Users who included interests on their dating profile had a lower predicted probability of experiencing any form of DAFSV than those who did not share this information (77% vs 81%).

Figure 1: Predicted probability of experiencing any DAFSV, by selected online dating behaviours (%)



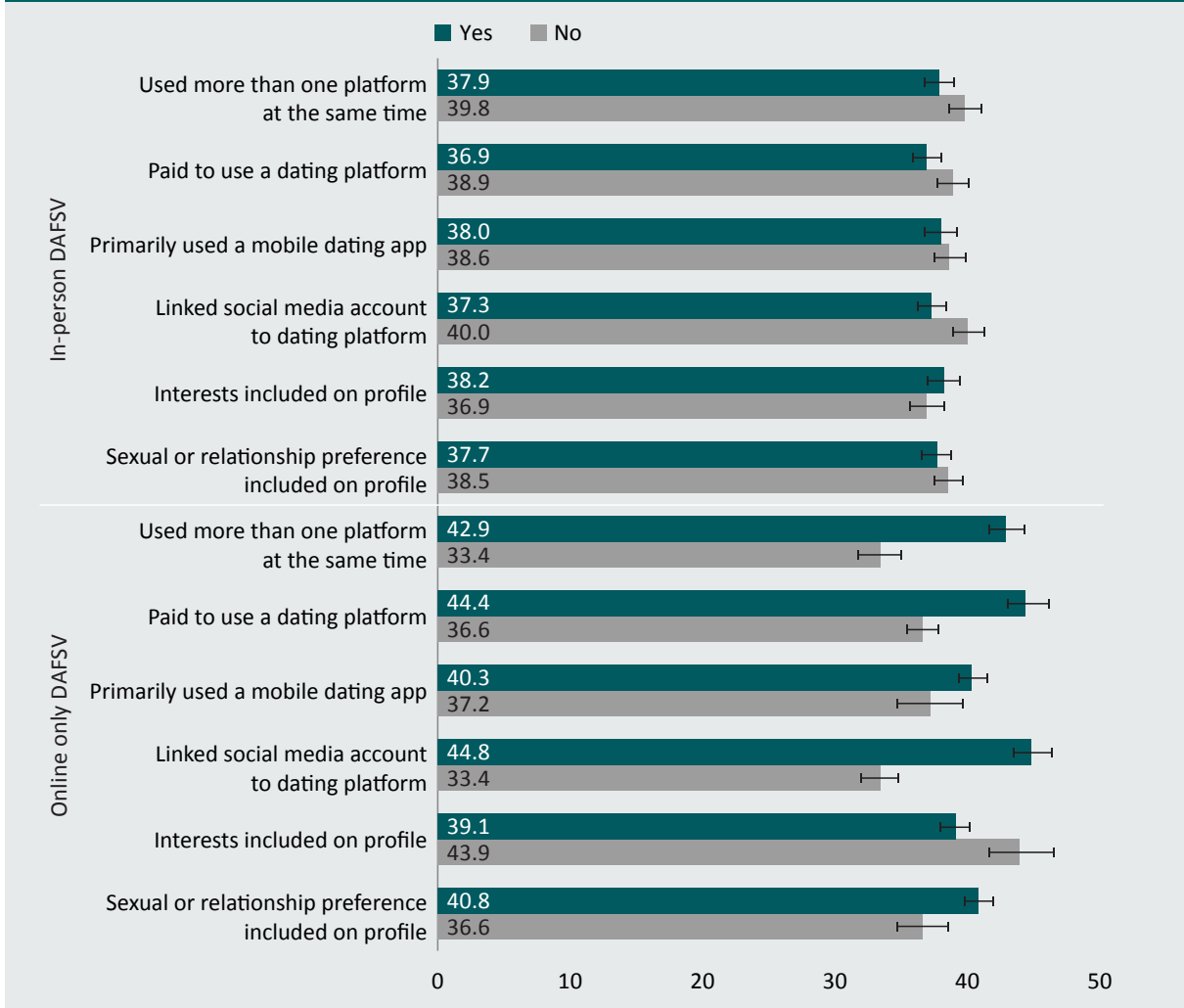
Note: DAFSV=dating app facilitated sexual violence. Individuals with missing data or those who were unsure or did not want to disclose information were excluded from analysis. Non-binary respondents were excluded from the analysis because of small sample size. Error bars depict 95% confidence intervals. Values are derived from inverted predicted margin values for no DAFSV

Source: AIC Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

Except for sharing information on interests, each of the online dating behaviours increased the predicted probability of in-person DAFSV and decreased the predicted probability of online-only DAFSV (Figure 2). However, the confidence intervals for online-only DAFSV overlap those of each of the online dating behaviours. This means that we cannot say with certainty that the predicted probabilities are, in fact, different for online-only DAFSV, based on how dating platforms were being used by respondents. Online dating behaviours did not appear to have a strong effect on the risk of online-only DAFSV. There were, however, some clear differences in the predicted probabilities for in-person DAFSV. Respondents were more likely to experience in-person DAFSV if they:

- used more than one platform at the same time (43% vs 33%);
- paid to use a dating platform (44% vs 37%);
- primarily used an app rather than a website (40% vs 37%);
- linked social media accounts to their dating platform account (45% vs 33%);
- did not include information about interests on their dating profile (44% vs 39%); or
- shared sexual or relationship preference information on their dating profile (41% vs 37%).

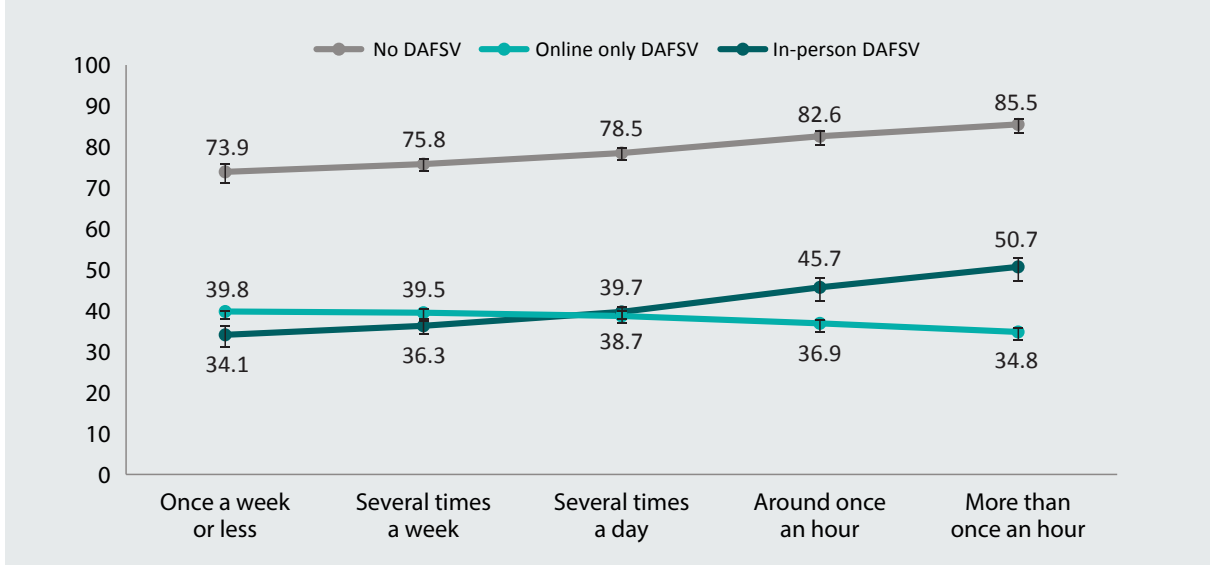
Figure 2: Predicted probability of experiencing online-only and in-person DAFSV, by selected online dating behaviours (%)



Note: DAFSV=dating app facilitated sexual violence. Individuals with missing data or those who were unsure or did not want to disclose information were excluded from analysis. Non-binary respondents were excluded from the analysis because of small sample size. Error bars depict 95% confidence intervals
Source: AIC Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

Figure 3 demonstrates the average predicted probability of DAFSV based on the highest frequency of dating platform use for respondents over the previous five years. Increases in frequency of use were accompanied by an increase in the predicted probability of experiencing any form of DAFSV (74% to 86%), meaning that respondents who used dating platforms more frequently had a higher predicted probability of experiencing DAFSV. The predicted probability of experiencing DAFSV online only decreased as the frequency of dating platform use increased (from 40% to 35%), while it increased for in-person DAFSV as the frequency of dating platform use increased (from 34% to 51%).

Figure 3: Predicted probability of experiencing any DAFSV, online-only DAFSV and in-person DAFSV, by highest frequency of dating platform use over the last five years (%)

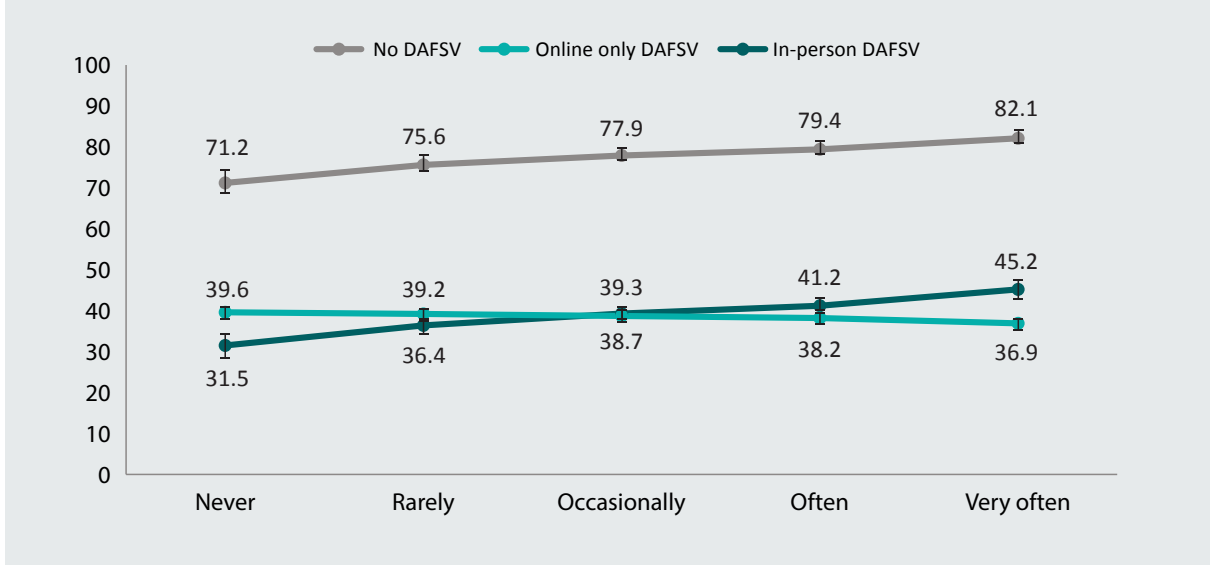


Note: DAFSV=dating app facilitated sexual violence. Individuals with missing data or those who were unsure or did not want to disclose information were excluded from analysis. Error bars depict 95% confidence intervals. Any DAFSV values are derived from inversed predicted margin values for no DAFSV
Source: AIC Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

Figure 4 shows the average predicted probabilities of DAFSV by the frequency of using other platforms to communicate with matches over the previous five years. The predicted probability of experiencing any DAFSV increased by 11 percentage points with an increase in the frequency of communicating on other platforms (71% to 82%). While less frequently communicating with matches on other platforms appeared to reduce the risk of DAFSV, respondents who never did this still had a 71 percent predicted probability of experiencing some form of DAFSV.

The predicted probability of experiencing DAFSV online only slightly decreased as the frequency of communicating on other platforms increased (40% to 37%). However, there was a large increase in the predicted probability of in-person DAFSV as the frequency of communicating on other platforms increased (32% to 45%). Communicating with matches on other platforms, particularly if this was done regularly, appeared to increase the risk of experiencing DAFSV in person.

Figure 4: Predicted probability of experiencing any DAFSV, online-only DAFSV and in-person DAFSV, by frequency of using other platforms to communicate with matches (%)



Note: DAFSV=dating app facilitated sexual violence. Individuals with missing data or those who were unsure or did not want to disclose information were excluded from analysis. Non-binary respondents were excluded from the analysis because of small sample size. Error bars depict 95% confidence intervals. Any DAFSV values are derived from inversed predicted margin values for no DAFSV

Source: AIC Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

Discussion

The current study investigated DAFSV through the lens of RAT, identifying several online dating behaviours that may contribute to a motivated offender’s perception of a user as a ‘suitable target’ (in the parlance of RAT) and the possibility of dating platform users converging in time and space with a motivated offender. Most of the online dating behaviours we examined increased the predicted probability of experiencing any DAFSV, online DAFSV and in-person DAFSV—although not online DAFSV on its own. However, because almost all users in the sample who experienced in-person DAFSV had also experienced online DAFSV, we cannot rule out that these behaviours play a role in online DAFSV.

Vulnerability to dating app facilitated sexual violence

Many of the online dating behaviours examined can be said to have increased users’ exposure to potential offenders (ie being visible and accessible). For example, spending a lot of time on dating platforms and using multiple platforms at once increased the predicted probability of experiencing DAFSV. Using an app rather than a website was also associated with DAFSV. Dating apps may increase exposure to potential offenders because the nature of phone applications makes them difficult to switch off (eg notifications, easy access via mobile device) or because they can enable location tracking.

Those who paid for an online dating service (eg a subscription) had an increased predicted probability of experiencing DAHSV. These individuals possibly interacted with other users in different ways; those with a subscription may have a stronger motivation to meet someone, making them more vulnerable to motivated offenders. Alternatively, people may be more willing to pay for a dating service if they have previously experienced DAHSV, because features available with subscriptions can increase user safety and prevent future victimisation. One example is browsing in 'incognito mode' (Bumble 2021): at the time of writing, only subscribing Bumble users can browse in 'incognito mode' and prevent unwanted exposure to other users (Bumble 2021). However, other features available with subscriptions, like 'message before matching', 'Passport to any location' or 'Travel mode', increase opportunities for motivated offenders to view and access other users (Bumble 2022). Without temporal data, it is difficult to determine the exact nature of the association between paying for a dating platform and DAHSV.

Those who shared certain types of information on their dating profile—specifically, relationship or sexual preferences and links to social media accounts—had an increased likelihood of being subjected to DAHSV. Links to social media accounts can be exploited by perpetrators to access personal information and to contact, harass and stalk other dating platform users. Similar results were found by Centelles (2019), who showed that sharing employment details and a larger number of profile pictures on a dating profile increased the risk of sexual cybervictimisation. In contrast to our findings, however, Centelles (2019) found that sharing a social media account was not associated with in-person or cybervictimisation.

We found that communicating with matches on other platforms (eg social media) was associated with DAHSV victimisation. This may be because these other communication platforms have poor guardianship and increase the concealability of offending. For example, alternative communication platforms may offer lower levels of safety features than some mainstream dating platforms—such as moderating abusive language or blocking the sharing of intimate images (eg Tinder 2020). Similarly, perpetrators may move conversations onto other communication platforms that offer increased privacy or encryption, allowing them to abuse other users while avoiding detection (ie concealable offending).

Differences in online-only and in-person DAFSV

The online dating behaviours we examined were associated with an increase in the probability of having experienced both online and in-person DAFSV but not online-only DAFSV. Indeed, the predicted probability of online-only DAFSV decreased as exposure increased. This is probably because a concurrent increase in risk of online and in-person DAFSV comes with more exposure, rather than because increased exposure actually reduces the risk of online DAFSV. The explanations offered above are broadly applicable to this finding, although there is an obvious need to account for the fact that these online behaviours increase the risk of in-person, as well as online, DAFSV. A relatively straightforward explanation extends from the fact that certain online behaviours bring users into contact with a larger number of other people online, which could also increase the number of people they choose to meet in person. Consistent with RAT, the higher volume of people encountered online and in person increases the risk of encountering those motivated to perpetrate either online or in-person DAFSV. Some other online behaviours associated with the sharing of personal information also, arguably, may make a user seem a more vulnerable target for both online and in-person DAFSV in the eyes of a perpetrator.

Another explanation, also consistent with RAT, posits a real link between online and in-person victimisation, rather than just a spurious connection. That is, online DAFSV precedes or follows in-person DAFSV by the same perpetrator. For example, higher volume users of dating apps may choose to meet more people offline, increasing their risk of in-person DAFSV and, later, online DAFSV in subsequent online contacts—particularly if the victim spurns or calls out the perpetrator's behaviour. Of course, with no information on specific experiences of online and in-person DAFSV, it is not possible to use the current data to determine whether this explanation is valid. Further research is needed to explore this.

Implications

The findings suggest measures that broadly bolster guardianship within dating apps, reduce victim vulnerability and remove motivated offenders from dating apps constitute promising approaches to preventing DAFSV. Each of these approaches can be helped by online dating platforms embedding Safety by Design principles in their development and improvement processes. Some features that can reduce the risk of DAFSV include identity verification, which would allow platforms to block previously removed individuals from creating a new account and continuing the abuse of other users. Critically, the findings point to the importance of reporting mechanisms within apps that allow users to report problematic interactions in a timely and convenient way and of apps quickly identifying and sanctioning or removing perpetrators. These reporting mechanisms are vital, and several areas for improvement have been identified regarding functionality, effectiveness and transparency (Lawler & Boxall 2024).

Many of these features have been adopted by mainstream dating platforms; however, given the high prevalence of harm, more needs to be done, and new features must be implemented. Importantly, online dating platforms should not only innovate safety features but also communicate those effectively to users and make them easily accessible, to bolster uptake. The adoption of new safety features should, however, be undertaken with consideration of how they may impact users to avoid inadvertent consequences—particularly for diverse, marginalised and/or minority users (Stardust, Gillett & Albury 2023). Steps towards industry change have recently been taken by some key online dating companies, which, at the request of the Australian Government, have now adopted an industry code to improve safety (Rishworth 2024). The code focuses on implementing new systems to detect and intervene in harmful situations, bolstering reporting avenues, and providing support to users, while improving transparency and engagement with law enforcement.

The findings of the current study focus on the behaviours of victims and how they were associated with DAHSV. While this has provided insight into some possible mechanisms for DAHSV, it is not intended to place the onus for preventing DAHSV on victims. Certainly, while there are recommendations for actions that people can take to increase their safety while online dating (Office of the eSafety Commissioner 2023a), and users report undertaking such activities (Gillett 2023), we do not contend that this alone will address DAHSV, especially because the very nature of online dating requires users to be visible and accessible. Ultimately, the responsibility is on platforms and government to lower the risk of harm, rather than on users to change their patterns of use. Approaches must balance empowering users through information provision, preventing perpetrators from exploiting dating platforms and promoting technological solutions. Additionally, the situational approaches discussed here must be accompanied by approaches aimed at addressing the underlying causes of DAHSV and sexual violence more broadly (eg gender inequality).

Conclusion

Online dating platforms facilitate a high prevalence of sexual harassment, aggression and violence victimisation. This study has improved our understanding of the potential mechanisms behind DAHSV—namely, how certain online dating behaviours may increase the risk of DAHSV generally and of DAHSV transcending from online spaces into in-person harm. These findings indicate how DAHSV could be understood by considering RAT, whereby normal patterns of human behaviour increase the opportunity for motivated offenders and suitable targets to converge in time and space where DAHSV can occur. The findings have important implications for those responsible for protecting individuals who use online dating platforms from harm.

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Appendix

Odds ratios (OR) for each independent variable represent the change in odds of being at a higher level of the dependent variable with a one unit increase in that independent variable, holding all other independent variables constant.

	Offences (n)	95% CI	
		Lower limit	Upper limit
Gender and sexuality (vs heterosexual man)^a			
LGB+ man	2.3***	1.9	2.8
Heterosexual woman	2.7***	2.4	3.0
LGB+ woman	3.6***	3.1	4.3
Age (vs 55+)			
45–54	1.1	0.9	1.3
35–44	1.1	0.9	1.3
25–34	1.2*	1.0	1.5
18–24	1.7***	1.4	2.1
Aboriginal and/or Torres Strait Islander (vs non-Indigenous)			
	3.0***	2.5	3.8
Non-English-speaking background			
	1.0	0.8	1.2
Disability (vs without disability)			
	2.2***	1.9	2.6
Highest frequency of dating platform use (vs once a week or less)			
Several times a week	1.1	1.0	1.3
Several times a day	1.3***	1.1	1.6
Around once an hour	1.8***	1.5	2.2
More than once an hour	2.3***	1.9	2.8
Used more than one platform at the same time			
	1.6***	1.5	1.8
Paid to use a dating platform			
	1.5***	1.4	1.6
Primarily used a mobile dating app (vs website)			
	1.2*	1.0	1.3
Frequency of using other platforms to communicate with matches (vs never)			
Rarely	1.3**	1.1	1.6
Occasionally	1.5***	1.3	1.8
Often	1.7***	1.4	2.0
Very often	2.0***	1.7	2.4
Linked social media account to dating platform			
	1.8***	1.6	2.0
Personal identifying information included on dating profile			
	0.9	0.8	1.0
Interests included on dating profile			
	0.8***	0.7	0.9
Sexual or relationship preference included on dating profile			
	1.2***	1.1	1.4

***statistically significant at $p < 0.001$, **statistically significant at $p < 0.01$, *statistically significant at $p < 0.05$

a: Non-binary respondents were excluded from the analysis because of small sample size

Note: Individuals with missing data or those who were unsure or did not want to disclose information were excluded from analysis. OR=odds ratio, CI=confidence interval. Likelihood-ratio test $\chi^2(25)=2,068.6$, $p < 0.001$; Nagelkerke $R^2=0.26$; $n=8,024$. Cut 1=1.0 (CI [0.7, 1.3]), Cut 2=3.0 (CI [2.7, 3.3]). Levels for the ordinal outcome variable were no DAFSV (0), online-only DAFSV (1) and in-person DAFSV (2)

Source: AIC Mobile Dating Apps and Sexual Violence Survey 2021 [computer file]

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