

Abstract

Background: In today's world, technology has entered every aspect of our lives, including the dating world. Gone are the days of the traditional dating system where one would meet their significant other in person. Instead traditional dating is being replaced with mobile dating applications. There are many mobile dating applications available for free such as Tinder and Bumble making it very popular among university students; however, studies have shown that students who use dating applications tend to take part in risky sexual behaviours (Sawyer, Smith, & Benotsch, 2017). This literature review looks at university students use of mobile dating applications and their risky sexual behaviours.

Aim: This paper discusses risky sexual behaviour among university students who use mobile dating applications. The purpose of this literature review is to find strategies that promote risk-prevention and sexual wellness programs on university campuses.

Results: Dating app users are at higher risk for participating in risky sexual behaviour such as inconsistent condom use, multiple sexual partners, and sexting. Alcohol and cannabis use was found to be consumed at higher rates in dating app users, compared to non-users. There was a lack of information on specific risk-prevention programs to incorporate on university campuses. **Conclusions:** Dating applications are popular among university students. From the literature it was recommended that universities incorporate resources regarding dating application risk preventions and sexual wellness to their students; however, specific information was lacking and therefore more research is needed on risk-prevention programs.

Methods

A data search was conducted by using Google scholar and the Thompson Rivers

University database from January 2016 to November 2020. The key words that were used for

this literature search were mobile dating applications, university students, high-risk sexual behaviour, sexually transmitted infections, and sexting.

Mobile Dating Applications

Mobile dating applications (apps) such as Tinder and Bumble have been constructed to connect people together to find potential romantic partners, friendships, and in some circumstances casual sex (Coduto, Lee-Won, & Baek, 2020; Orchard, 2019). Mobile dating applications use a technology called Global Positioning System (GPS) which allow users in the same area to connect within another (Miller, 2020). Algorithms are also used based on the personal information collected when a service user creates a profile. This information includes age, gender, desires of potential partners, and the distanced willing to travel to connect with other dating app users (Orchard, 2020). These dating apps can be easily downloaded onto an individual's smartphone and are designed to allow users to swipe through the possible dating options in their area (Coduto, Lee-Won, & Baek, 2020). With mobile dating apps the user swipes right on a profile they are interested in and swipes left if there is no interest (Sumter, 2017). Such practice allows users to "match" if they both swiped right on each other's profile, while at the same time the user is not aware of those who rejected them which makes the environment enjoyable since it "focuses on social approvals" (Orchard, 2020, p. 448). Once a match has been made dating app users are free to chat with one another (Shaw, 2018).

Chan (2017) states that five affordances make dating apps unique, which are the following: "mobility, proximity, immediacy, authenticity, and visual dominance" (p.247). Since dating apps are used on smartphones, they make mobility accessible for users to use the apps anytime they want (Chan, 2017). As for proximity, dating apps only connect users to other users in nearby locations, which can result in meeting up immediately (Chan, 2017). Authenticity is

seen on some dating apps that require users to sign up with their pre-existing social media accounts such as Facebook (Chan, 2017). Lastly, the visual appearance is pleasant since the images take up the entire phone screen (Chan, 2017). These affordances of dating apps, make them very popular among younger populations such as university students (Miller, 2020).

Motivations to Use Mobile Dating Applications

Five out of the fourteen articles used to create this literature review discussed the motivations behind students mobile dating app use. The main themes that were discovered included the following: fun/entertainment, causal dating or sex, romantic relationships, and friendship (Beauchamp et al, 2017; Bryant and Sheldon, 2017; Davis, 2018; Miller, 2020; Sawyer, Smith, & Benotsch, 2017). According to Bryant & Sheldon (2017), mobile dating apps provide entertainment for their users since they can view different profiles and pictures of other dating app users. Furthermore, dating apps can be thrilling for users who are looking to meet new people or who are interested in trying new things (Bryant & Sheldon, 2017). Causal dating/sex was another motivation for students to use dating apps because individuals tend to be braver and more upfront about what they are looking for behind a screen than in-person (Bryant & Sheldon, 2017). Bryant and Sheldon (2017), also state that some individuals may feel more comfortable using a dating app for casual sex since it can be impersonal. As for seeking out romantic relationships dating app users may feel less nervous communicating to a potential mate "behind a screen," instead of "face-to-face" exchanges (Bryant & Sheldon, 2017, p.10). Without the "face-to-face" exchanges, there is a risk that dating app users will miss out on nonverbal cues; however, users tend to make up for the lack of nonverbal cues by giving more details about their lives through private messages (Bryant & Sheldon, 2017, p.10) While dating apps may be used for fun and finding potential dates among students, it is also important to acknowledge the

possible dangers that may be associated with it, such as high-risk sexual behaviour, sexually transmitted infections (STIs), and sexting.

High-Risk Sexual Behaviour

Researchers have defined high-risk sexual behaviour as sexual acts that increase an individual's chance of contracting sexually transmitted infections (STIs) (Chawla & Sarkar, 2019, p.26). STIs are an organism that is most commonly spread between sexual partners by having unprotected vaginal, anal, and oral sex (Sexually transmitted infections, 2020). Some STIs are curable with medication, but others such as the human immunodeficiency virus (HIV) are not (Sexually transmitted infections, 2020). A common theme in the literature found that students who used mobile dating apps tended to participate in high-risk sexual behaviour more often compared to non-dating app users (Miller, 2020; Choi, Wong, Lo, Wong, Chio, & Fong, 2016; Sawyer, Smith, & Benostch, 2017). These high-risk sexual behaviours ranged from inconsistent condom use to multiple sexual partners (Menon, Mwaba, Thankian, & Lwatula, 2016; Choi et al, 2016; Sawyer et al, 2017; Ingram, Macauda, Lauckner, & Robillard, 2019; Miller, 2020). In a cross-sectional study done in Hong Kong in 2016, it was discovered that students who engage in dating apps tend to participate in high-risk sexual behaviour such as having multiple sexual partners and unprotected sex at higher rates compared to those who do not use dating apps (Choi et al, 2016). These results were also similar to another study that found that dating app users "were twice as likely" to participate in sexual acts without using protection, in fact, those who were in casual relationships "were five times more likely" to not use protection during sexual actions compared to dating app users who were strictly single (Sawyer et,al, 2017,p. 183 & 186). In contrast, Miller (2020) found that there was no real distinction of condom use between dating app users and non-dating app users when it comes to oral sex and

sexual intercourse. In this study Miller (2020), found that 21% of participants reported that they never used condoms during vaginal intercourse, yet 94.7% reported that they never used protection with oral sex. However, dating app users were more likely to use condoms during anal sex (Miller, 2020).

Additionally, the Sawyer et al (2017) study also found that dating app users tend to have a larger number of sexual partners in their lifetime compared to non-dating app users (Sawyer et, al, 2017). Similarly, Miller (2020) reported that there was an association with dating app users having more sexual partners in their lifetime compared to non-users, as well as having multiple sexual partners at the same time. Another study found that 87% of dating app users were more likely to be sexually experienced than non-users (Choi et al, 2016). Furthermore, another study found that male dating app users were more likely to have multiple sexual partners than female dating app users (Menon et, al, 2016). In addition, to multiple partners the Ingram et al (2019) study, found that dating app users who had multiple sexual partners were "2.5 times more likely" to participate in sexting compared to dating app users who (p.92). Sexting is the sending of sexual images or text messages (Robert & Raven, 2019). An earlier study found similar results which associated sexting "with multiple partners, unprotected sex, and STIs" (Benotsch, Snipes, Martin, & Bull, 2013, p.13). Ingram et al (2019), noted that sexting was more often seen among individuals who had received testing for STIs. In fact, those who had been diagnosed with an STI were 2.1 times more likely to send sexts. The most common types of STI testing reported by sexters and dating app users were for chlamydia and gonorrhea (Ingram et al, 2019; Miller, 2020). Additionally, it was revealed that dating app users who had tested positive for an STI also consumed alcohol frequently (Miller, 2020). In fact, alcohol and cannabis consumption before sexual actions was higher in dating app users than non-dating app users (Choi et al, 2016; Miller,

2020). Furthermore, a study conducted by Menon et al (2016) suggested that fourth-year students reported having received STIs at higher rates than first-year students.

In addition to STIs, many individuals rely on their intuition to determine if a future mate is clean (Krishnamurti, Davis, & Fischhoff, 2020). A survey experiment was done to determine how students who use dating apps assess whether another dating app user has a STI (Krishnamurti, Davis, & Fischhoff, 2020). It was discovered that students judged other dating app users based on levels of attractiveness (Krishnamurti, Davis, & Fischhoff, 2020). Students believed that those who were more attractive had more sexual options available to them therefore, they would have an increased risk for STIs (Krishnamurti, Davis, & Fischhoff, 2020). However, the results showed that it is impossible to know who has an STI based on intuition and attractiveness (Krishnamurti, Davis, & Fischhoff, 2020).

Discussion

The purpose of this review was to investigate if university students who use mobile dating apps take part in high-risk sexual behaviours to understand what type of risk-prevention and sexual wellness resources needs to be available to students on campus. From the literature, there is evidence that shows students who take part in dating apps participate in high-risk sexual behaviour such as inconsistent condom use and multiple partners (Miller, 2020; Choi et al, 2016; Sawyer, Smith, & Benostch, 2017). Additionally, when students were under the influence of alcohol and drugs, there was an association in high-risk sexual behaviours. Sexting was also connected to higher rates of risky sexual behaviours among dating app users (Ingram et al, 2019). There is a lack of research on the topic of sexting among university students and since sexting has become a normal part of students' lives, future research should be conducted for

universities to provide the most relevant sexual health risk preventions to students (Ingram et al, 2019).

Furthermore, this literature has also shown that mobile dating apps are convenient because they can be accessed anywhere making them very popular among students (Choi et al, 2016). In fact, since one of the motivations behind students using dating apps was for casual sex, the accessibility aspect is very appealing because dating app users can expedite sexual meetings (Choi et al, 2016). While some of the articles in this literature review discussed motivations for student use of dating apps, there is a need for further research in this field to understand the causal relationship between utilizing dating applications and the commencement of sex (Choi et al, 2016). Additionally, there appeared to be lack of knowledge in students understandings of contracting STIs. For example, Miller (2020) found that both dating app and non-dating app students seldom used protection with oral sex. This could be because of the lack of knowledge regarding dental dams, which are latex sheets that protect against direct mouth contact on genitals during oral sex (CDC, 2016). In addition, to the fourth-year students in the Menon et al (2016) study that were diagnosed with STIs at higher rates than first-year students this could be because as students move along in university they tend to experiment with sexual activities. However, while their use of condom protection is low they still maintained use of oral contraceptives to avoid pregnancies (Menon et al, 2016).

Since there seem to be misunderstandings surrounding STIs, it would be wise for universities to inform students on the different ways STIs can be contracted and prevented.

Additionally, condoms and other barrier protection should be made available on campuses that students can easily access (Choi et al, 201). Furthermore, there is a lack of research on the specific risk-prevention programs that should be available on campus. For example, the Choi et

al (2016) study gave a recommendation that "school-based interventions to promote safe sex" should be advocated on campus, but failed to mention specific interventions (p.16). Similarly, the Menon et al (2016) study suggested that their research could be beneficial for universities to create "sexual risk-reduction programs," however, there were no specific details on the programs (p.6). The literature revealed that there is definitely a problem that exists between student use of mobile dating apps and high-risk sexual behaviour, as well as a gap in research for specific risk-prevention resources for university campuses. Therefore, further research is needed to understand what type of risk-prevention programs should be implemented on university campuses to promote sexual wellness. Additionally, mobile dating apps are here to stay and further research to understand the new trends such as dating during the current COVID-19 pandemic is recommended to provide students with the most relevant sexual health resources (Miller, 2020).

Conclusion

In conclusion, there appears to be an association between students use of dating apps and high-risk sexual behaviour. In this literature review, students who used dating apps were at high-risk for having unprotected sex, multiple partners and being diagnosed with a STI compared to non-dating app users. Additionally, higher rates of drug and alcohol consumption was associated with high-risk sexual behaviours, as well as sexting. Universities need to incorporate risk-prevention resources that include the dangers of mobile dating apps and sexting; however, further research is needed since there was a gap in the literature on what programs and interventions would be the most beneficial to university students. Furthermore, additional research is needed to continue to learn about the new trends in mobile dating in order to provide the most relevant risk-prevention resources to maintain sexual wellness.

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