In Victoria, all forensic medical examination services for victims of sexual assault are provided by the Victorian Institute of Forensic Medicine (VIFM) (adult victims), and the Victorian Forensic Paediatric Medical Service (VFPMS) (child victims). Clinicians from both services provide 24-hour forensic examination services for victims, as well as addressing their medical needs, often in the hours immediately following their assault.

Over the past several years, forensic practitioners from both services have anecdotally observed a concerning rise in the number of sexual assault examinations performed after a technology facilitated encounter. As a consequence, both services are currently undertaking further research in this area. We are therefore grateful for the opportunity to provide the following submission for the VLRC’s consideration.

The communication technology and social media evolution:
The use of technology to facilitate social encounters in both children and adults is now ubiquitous, and a mainstream form of social interaction. There has been a rapid evolution in communication technology from a ‘dot com’ desk-based era, to smartphone geosocial based networking applications (‘Apps’). These ‘Apps’ enable
instant information sharing, and facilitation of online and real-life social encounters. Smartphone ownership is nearly universal among teens, regardless of socioeconomic background (1), with construction of the online ‘social self’ accepted as an essential method of socialization (2). In Australian adults, meeting online has surpassed all other methods of people establishing romantic relationships (3). While applauding the connectivity and positive social change that can be achieved through the use of the internet, there is now an increasing awareness of the darker side of this technology as a vehicle to facilitate sexual violence.

**Technology facilitated sexual violence:**

Technology facilitated sexual violence (TFSV) refers to a range of harmful sexual behaviours facilitated by the use of technology. These behaviours include, but are not limited to; online sexual harassment, cyberstalking, image-based abuse, and real life contact sexual offences facilitated through technology (4,5). There is extensive research into the impact of specific image-based laws, unwanted online sexual experiences and online grooming of children (4, 6-8). However, there is limited empirical research examining real-life contact sexual offences facilitated by technology (4, 9). Police data from the National Crime Agency UK reported a six-fold increase between 2009 and 2014 in the number of people reporting they were raped by someone they met on a dating App on the first date (10) and this raised concern that a new type of opportunistic sexual offending may be emerging (10). A recent report published by the Australian Institute of Criminology echoed concerns for urgent further understanding of the Australian context and recommended that future research be directed at determining the characteristics of dating app sexual offending in order to inform preventive efforts (5).

In the course of conducting forensic examinations of complainants of sexual assault practitioners at the VIFM and VFPMS have anecdotally observed an increasing proportion of sexual assault examination caseload occurred following the parties meeting via an online platform, which we have specifically referred to as **technology facilitated sexual assault (TFSA)**, with research efforts directed towards characterising this alarming phenomenon commencing in early 2020.
Technology facilitated sexual assault (TFSA) in adults:

A retrospective audit conducted at the Victorian Institute of Forensic Medicine found that 14% of adult sexual assault cases in 2018 allegedly occurred following the parties meeting via a dating app (9). Although this study was limited to a single practitioner’s caseload, common some concerning themes were identified:

1. The majority of incidents occurred on the first face-to-face meeting after a variable period of online communication.
2. The majority of incidents occurred at a private residence as opposed to a public place.

This small preliminary study identified the urgent need for larger scale research along with improvement in data collection systems across state-wide forensic sexual assault services. In early 2020 the VIFM modified their standard examination proforma in order to capture specific details regarding the incidence and characteristics of technology facilitated sexual assault. This new data capture included the technological platform used, period of online communication prior to real life meeting, and whether the assault occurred at the first or subsequent real life meeting.

Making use of the new data collection system, a formal state-wide prospective audit of all adult technology facilitated cases was commenced. A further study is also underway looking at the impact of COVID 19 and Victorian lockdown restrictions on the incidence of TFSA. Results of this research are anticipated to be available by February 2020.

Vulnerable population subgroups

Consistent with most forms of sexual offending and results of existing studies, our preliminary research indicates that TFSA is a gendered crime, with predominantly female victims assaulted by male offenders (4,9). However, it is also likely that TFSA, like other forms of sexual violence in males, is grossly underreported.

Concerns have also specifically been raised in relation to the under-reporting of TFSA in LGBTQ+ users (5).
There is limited data regarding whether people living with an intellectual disability are overrepresented as victims of TFSA. It has been established that people living with a disability are up to ten times more likely to be victims of a sexual assault (11). Historically, three main groups of offenders have been associated with sexual assault of individuals with a disability, including other residents of residential care settings, family members with carer responsibilities, and staff in residential care facilities (11). It is likely that in the current climate, geosocial networking apps create a new platform for vulnerable subgroups to be accessed by offenders that they would not have ordinarily come into real-life contact with. This is an area worthy of urgent further exploration.

**But what about the children?**
There has been significant legislative reform in the areas of online grooming of children, resulting in a paradigm shift in thinking about emerging forms of child sexual abuse. Given the widespread evolution of technological platforms as a normative social meeting place for both primary and high school aged children in the last decade, a further leap forward is required. Despite extensive research into online grooming of children (6) there is also a dearth of empirical research characterising technology facilitated sexual assault in children. While the issue has been garnering an increased focus in the adult population, the situation for children has been largely overlooked. There has been no mention of children and TFSA in recent media reports or the recent and otherwise very comprehensive AIC report (5,12). Concerningly, children may have very specific vulnerability to this form of sexual violence due to their relative cognitive immaturity, their developing sense of self identity, their need for social connection and the additional barriers to recognition and reporting that a perceived parental disapproval may foster.

Children are able to easily access a wide range of Apps and internet sites. Controls in place to prevent access of adult-only sites are minimal and easily overcome. There is very little restriction of the material that a child can receive in an unsolicited manner, although several Apps have introduced measures to limit this, such as blurring explicit images that require consent to view (5). Sites directed at children may use misleading marketing, seemingly encouraging connection with a wide range of age-similar peers, while in reality, unintentionally providing a dating site.
Opportunistic assailants can therefore, develop an on-line relationship which leads to a face to face contact.

Given the rapidly evolving nature of communication technologies, the current risk and characteristic features of real-life contact technology-facilitated sexual assault in children is largely unknown. At the Victorian Forensic Paediatric Medical Service (VFPMS), we are in the process of finalising a study, which quantifies and characterises TFSA examination caseload of 12-17 year-old children that were examined in the years 2013-2020. The results of this research are anticipated to be available in January 2021. A previous internal audit at the Victorian Forensic Paediatric Medical Service of sexual assault examinations conducted between 2007 and 2013 found that approximately 4% of 12-17 year old sexual assaults were facilitated by technology (13).

Since 2013 the technology marketplace has been bombarded with Apps and online game sites which have attracted children. Alarmingly, the preliminary findings of our research since 2013 suggests that the incidence of TFSA in children has become significantly worse and is now appears even greater than for their adult counterparts. In 2019, almost one in five sexual assault forensic examinations conducted by the VFPMS were following allegations of sexual assault following meeting on an online platform (data currently unpublished – expected data of publication January 2021). This represents a notable increase from the 2007-2013 time period.

Contrary to our initial assumptions when embarking on this research, although there are some emerging commonalities, it appears the situation in children is not entirely analogous to that of adults. Similar to their adult counterparts, the majority of child TFSA’s occur at the first face-to-face meeting after a period of online communication. In contrast, however, in the 12-17-year old population our preliminary research suggests the period of online communication prior to first face-to-face meeting is much longer – usually in the order of months, or even up to a year.
It is important to note that the largest proportion of child TFSA’s were facilitated following the use of the social media platform ‘Snapchat’, which is not primarily marketed as a ‘dating app’ and is available to children from the age of 13. Other online forums featured include Facebook (available from age 13), and various dating apps (generally only available from age 18).

**A perfect storm: The online disinhibition effect**

In addition to unprecedented accessibility(5), the dynamic created by online communication creates ‘the online disinhibition effect’ (14), resulting in heightened feelings of trust following online communication. Combined with an illusion of serendipity facilitated by geolocation technology, this dynamic may result in a perfect storm for a high risk encounter. (7, 9,14). Concerns have been specifically raised by professionals working in paediatric sexual assault, that the emerging communication technologies provide a modern vehicle to fast track establishing a relationship with the victim (2).

It is likely that, due to the ‘online disinhibition effect’, App specific functions such as ‘friending’ and prolonged periods of online communication, the users are lulled into a false sense that they are dealing with friends rather than real-life strangers. In our experience with victims of technology facilitated sexual assault, there is frequently a genuine difficulty in reconciling the events that occurred with the online persona of somebody they felt they knew at a deep level.

In addition, the anonymity afforded to users of the internet allows individuals to facilitate engagement under false pretences (5) i.e. falsification of their name, age, appearance and other characteristics. Recent media reports have also highlighted the potential negative impact of the online dating platforms’ ‘unmatch’ feature, that deletes all conversations and information about contact between the victim and perpetrator (12). Similarly, “Snapchat” interactions and images disappear within 10 seconds leaving no evidence of an exchange or links to a perpetrator.

In both children and adults, the prolonged periods of online communication prior to the alleged sexual offence is particularly concerning. Urgent action and education is
required to reframe these interactions as being effectively with real-life strangers and to perhaps re-emphasise the need to apply the more traditional model of ‘stranger-danger’.

**The tip of the iceberg – the problem of underreporting**

Sexual assault is known to be one of the most under-reported crimes, with only approximately 15-20% of victims reporting their assault (15,16). Two-thirds of adolescent sexual assaults are never reported (17). It is likely that there are additional barriers to reporting that are unique to tech-facilitated assault in both children and adults. There may be a sense of self-blame and perceived shame and judgement from engaging in risky pre-assault behaviour i.e. previous communications of a sexual nature (such as intimate image sharing) or having travelled to the alleged offenders house for the first face-to-face meeting. Children are likely to be meeting others online without parental knowledge.

The sense that “it was not a real assault” is strong, due to the perceived expectation of sexual activity, especially when dating apps have been used. Perpetrators may perceive a sense of entitlement as a result of time invested into prolonged periods of online communication which may have been of a sexual nature. Additionally, they may feel invincible or invisible as communications can seemingly disappear without trace.

It is almost certain that such reporting barriers mean that we are seeing only the tip of the iceberg. We recognise that our data only captures those cases who have had a forensic examination conducted. In future, there is likely to be considerable benefit in a collaborative coordinated approach between forensic services, police, and other relevant services (such as Centre Against Sexual Assault counsellor advocate services), as well as survey based epidemiological data, to capture the full scope of the problem.

**Technology facilitated sexual assault and the COVID-19 effect**

Since the time of commencement of our research, the COVID-19 virus has emerged and attained pandemic status. In Victoria, due to staged restrictions, including the
closings of public venues and restrictions on public gatherings, there have been limited ways to facilitate contact between individuals. With the increased reliance on technology for communication and unavailability of other avenues to facilitate social interaction, the effects on rates of technology facilitated sexual assault, both during lockdown following the easing of restrictions, are not currently known. We are therefore conducting an urgent study in this area, comparing 2019 ‘baseline’ rates, to 2020 ‘COVID-19 pandemic restrictions’.

**Future directions**

Our preliminary findings demonstrate that, while there has been some recent attention directed towards TFSA in the adult sphere, technology-facilitated sexual assault of children is also increasing at an alarming rate. The COVID-19 pandemic has expanded our use of and reliance on the virtual world even more. Technological platforms will continue to rapidly evolve, and urgent research is required to further characterise high risk and unique features of sexual assaults facilitated by technology. Such knowledge is essential in order to develop preventative interventions and inform and educate users and parents of young users. We believe there is a considerable role for legislative reform in this rapidly emerging and evolving area, similar to the establishment of image-based reform. Mandatory seatbelts and drink driving laws were introduced to make the automobile safe. Similarly, equivalent safety mechanisms for consumers of technology should be introduced.

Increased awareness is urgently required around the online disinhibition effect. Despite lengthy virtual interactions, face to face meetings need to be reframed as and understood to be real-life stranger encounters.

In parallel with this work, it is also advisable to begin research in collaboration with Machine Learning experts (Monash FIT). This research may discover ways of detecting perpetrators online and preventing offending. The technologies involved here include development of algorithms that can process language patterns across various online environments and recognise similarities and highlight suspicious patterns (Natural Language Processing). These algorithms will also be able to
analyse imaging and recognise fake profile images related to one offender with multiple profiles on multiple social media environments. In order for this AI research to be successful access to conversation threads and imaging on social media apps needs to be accessed – either from Police surveillance or directly from the social media companies.

Recommendations for consideration by the VLRC, on behalf of the Victorian Institute of Forensic Medicine and the Victorian Forensic Paediatric Medical Service regarding TFSA:

1. **Consideration be given to legislative reform** in relation to the ability of Victoria Police to obtain material exchanged on virtual platforms when a TFSA is under investigation.

2. **Greater scrutiny of the technology companies** in relation to adequately controlling the ability of minors to access age inappropriate sites and better controlling content in sites marketed at younger users. Greater transparency and external oversight is needed in relation to the manner in which sites directed at young users are marketed and used (such as dating sites for children).

3. **Promotion of greater awareness amongst the criminal justice system and legal fraternity** that the use of technology to facilitate social and intimate encounters is mainstream. This should assist in reducing the associated stigma. This could also extend to further consideration around the provision of jury directions regarding the sociological background to technological communications in the setting of sexual assault (such as the online disinhibition effect, and the nature of online communication histories).

4. **Establishment of a core interest group of representatives working in the sexual assault field in Victoria**, to

   - foster formal collaboration in this rapidly evolving area, and
- facilitate a coordinated response to the key issues identified above. This is likely to benefit from representation from: adult (VIFM) and child (VFPMS) clinical forensic services, child advocacy groups, Victoria Police, representatives of the judiciary and criminal justice system, the Department of Education, public health representatives, youth advocacy representatives, and representation from the office of the e-safety commissioner.

5. **Incorporation of TFSA education** into existing respectful relationships school programs, broader education about the unique dynamic of online communication and expansion of the target groups to include late primary aged school children.

6. **Improved education targeted at parents and CALD communities** with regard to child TFSA.

7. **Collaboration enabling improved data collection systems between police, forensic services, and sexual assault advocacy groups**, to provide a comprehensive picture in order to inform preventive interventions, analogous to robust existing systems in place in relation to family violence.

8. **Further consultation with representatives from specific subgroups** that may be overrepresented as victims of TFSA, or have additional barriers to reporting.

9. **Further research into rates and causes of attrition** of TFSA cases, through accurate mapping of these cases from reporting to their journey through the criminal justice system.

10. **Incorporation of TFSV questions into population level survey based data collection**, to provide an overall epidemiological understanding given high rates of underreporting of these allegations, (for example ABS surveys, high school surveys).

11. **Greater awareness amongst health professionals** treating children, and consideration of the incorporation of questions about the use of technology and negative online experiences into established screening tools and medical consults. Involvement of the Paediatrics and Child Health Division of the Royal Australasian College of Physicians, as well as the Royal Australian College of General Practitioners in promoting this is recommended.

12. **Prioritisation of further research in the detection of perpetrators online and prevention of offending**, through enabling access to conversation
threads and imaging on social media apps, to ultimately develop algorithms to detect perpetrators online across multiple social media platforms.

References:


