An exploratory study of Technology-Facilitated Sexual Violence in online romantic interactions: Can the Internet’s toxic disinhibition exacerbate sexual aggression?

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Abstract

An investigation of Technology-Facilitated Sexual Violence (TFSV) was conducted with 340 university students. Participants rated five TFSV scenarios concerning online sexual harassment, image-based sexual exploitation, cyberstalking, gender- and sexuality-based harassment, and sexual assault and/or coercion. Each scenario depicted a perpetrator and victim conversing online. Victims’ responses were randomised from a possible selection of four (i.e., no response, flirty response, respectful rejection, and aggressive rejection). Participants rated for: (1) appropriateness of the perpetrators’ and victims’ behaviour; (2) attribution of responsibility between the perpetrator and victim; and (3) likelihood to perpetrate TFSV. In addition, scores for participants’ experiences of sexual aggression and the Internet’s toxic disinhibition were recorded. Perpetrators were rated as significantly more inappropriate and responsible than victims. Participants’ sexual aggression and toxic disinhibition were positive predictors of reporting a higher likelihood to perpetrate TFSV. A moderation effect showed that TFSV could be exacerbated by a combination of sexual aggression and toxic disinhibition.
Introduction

Technology has altered the way we operate and interact. Accessible via smart phones, tablets and computers, the Internet has become an integral part of our everyday lives. There are, however, risks associated with technology (Hanseth & Ciborra, 2007), including opportunities for cyber-based offending like fraud, identity theft, and illegal trafficking of intellectual property (Statista, 2018). Under most circumstances, the Internet is simply a tool (Australian Cybercrime Online Reporting Network, 2015; International Criminal Police Organisation, 2015; National Crime Agency, 2016), but theories about how it can influence individuals to perpetrate offences are beginning to emerge. This paper contributes to this growing area in the literature by attempting to understand how the Internet can affect potential perpetrators.

It does not appear as though the threat of punishment, ranging from a formal warning to imprisonment (California Criminal Stalking Law, Penal Code x 646.9; Computer Misuse Act, 1990; Enhancing Online Safety Act, 2015; Texas H.B. 2003) can deter perpetrations of cyber-based offences. The anonymity, speed and convenience of the Internet has, instead, led to a steady rise in illegal information and communications technology (ICT) activities (see Australian Bureau of Statistics, 2016; Elkin, 2019; International Criminal Police Organisation, 2015; Statista, 2018). According to the International Criminal Police Organisation (2015), these type of crimes can be placed into two categories: (1) ‘pure cybercrime’ that are offences directed at the hardware or software of computers, and, (2) ‘technology-enabled cybercrime’ that are traditional offences aided by the Internet. For instance, ‘cyber abuse’ is the extension of traditionally harmful social, psychological and physical behaviours using technology (see eSafety Commissioner, 2017 for a thorough explanation). The present study focuses on a form of technology-enabled cybercrime – sexual violence that occurs online.
In general, ‘sexual violence’ can be defined as any unwanted, sexual behaviours (physical or non-physical) directed toward another individual regardless of the relationship between the perpetrator and victim (Basile, Smith, Breiding, Black, & Mahendra, 2014; Cook, David, & Grant, 2001; Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; The Crown Prosecution Service, 2017). Dean, Hardiman, and Draper (1998) elaborated that these behaviours include “unwanted touching, sexual harassment and intimidation, coerced sexual activity, sexual assault and rape, other physical violence and threats to life” (p. iii), but in the context of ‘online sexual violence’, this term and definition is unviable for real world applications. It does not properly reflect instances where technology has been used to perpetrate or extend harm (Diette, Goldsmith, & Hamilton, 2014; Henry & Powell, 2015, 2016a; Southworth, Finn, Dawson, Fraser, & Tucker, 2007; Woodlock, 2016). Henry and Powell (2016a) suggests that existing terminology and laws are unable to “adequately capture the scope, nature or intersection of such harms” (p. 398). Despite certain government entities now acknowledging the issue of image-based abuse (i.e., revenge pornography; eSafety Commissioner, 2019; Franks, 2020; Ministry of Justice, 2015; Queensland Government, 2019), other relevant behaviours are being overlooked. Thus, to ensure better legal, policy and preventative responses, a comprehensive term and definition of harmful ‘online sexual violence’ should be utilised.

As such, this paper adopts the term ‘technology-facilitated sexual violence’ (hereinafter, TFSV) that defines harmful sexual behaviours that has been enabled, assisted, prompted or promoted by communicative technology (Powell & Henry, 2014, p. 3). This definition best describes the broad nature of these behaviours (Bailey & Mathen, 2019; Rowse, Bolt, & Gaya, 2020; Snaychuk & O’Neill, 2020) and has been adopted in studies concerning sexting (Buiten, 2020), abuse and stalking (Messing, Bagwell-Gray, Brown, Kappas, & Durfee, 2020), and family violence (Markwick, Bickerdike, Wilson-Evered, &
Zeleznikow, 2019). In the past, researchers have attempted to employ terms like ‘electronic aggression’ (see Bennett, Guran, Ramos, & Margolin, 2011), ‘electronic harassment’ (see Fenaughty & Harré, 2013), and ‘online harassment’ (see Finn, 2004), but unfortunately, they were too vague and interchangeable. For instance, a term like ‘online harassment’ could potentially refer to any behaviour from receiving a rude comment, blackmail, to sexual coercion (Barak, 2005; Citron, 2014). To address this issue, five dimensions of TFSV were identified.

Five dimensions best represent the experience of TFSV victims. Unlike the abundance of research concerning technology-facilitated sexual harm directed at children (see Beech, Elliot, Birgden, & Findlater, 2008; Dombrowski, LeMasney, Ahia, & Dickson, 2004; Kloess, Beech, & Harkins, 2014; Martin & Alag-gia, 2013; Mitchell, Jones, Finkelhor, & Wolak, 2011) and adolescents (see Stonard, Bowen, Lawrence, & Prince, 2014; Zweig, Dank, Yahner, & Lachman, 2013), TFSV primarily focus on adults (Powell & Henry, 2016). Adult victims’ most common experiences of TFSV often involve (1) online sexual harassment, (2) image-based sexual exploitation, (3) cyberstalking, (4) gender- and sexuality-based harassment, and (5) sexual assault and/or coercion (also known as technology-facilitated unwanted sexual experiences; see Henry & Powell, 2016b, for a thorough explanation). Previous studies from the last decade for ‘online sexual harassment’ (see Lindsay & Krysik, 2012; Vitak, Chadha, Steiner, & Ashktorab, 2017), ‘image-based sexual exploitation’ (see Drouin, Ross, & Tobin, 2015; Gámez-Guadix, Almendros, Borrado, & Calvete, 2015), ‘cyberstalking’ (see Kraft & Wang, 2010; Reyns, Henson, & Fisher, 2011), ‘gender- and sexuality-based harassment’ (Powell & Henry, 2016), and, ‘sexual assault and/or coercion’ (see Andar, 2014; Powell & Henry, 2016) supports this notion, but it is important to acknowledge that changes to these TFSV dimensions can occur overtime.
In the interim, TFSV is a prevalent issue (Duggan, 2014; National Crime Agency, 2016; Powell & Henry, 2015; Ruvalcaba & Eaton, 2019) with 60% of the 2956 participants in an Australian study having experienced ‘online sexual harassment’ at least once in their lifetime (Powell & Henry, 2015). Powell and Henry (2015) reported that these incidents would involve participants receiving unwanted sexually explicit images, comments and requests. Results in Duggan’s (2014) study from the United States recounted similar rates of experience. From the 2849 participants who were recruited, there were approximately 76% witnesses and 40% victims of ‘online harassment and abuse’ (Duggan, 2014). Of these victims, 55% dealt with less severe harassment (e.g., name-calling and embarrassment) whilst the remaining 45% were targeted for more severe harassment and abuse (e.g., stalking, sexual harassment, and threats of physical violence; Duggan, 2014). In a recent study, 1 in 12 participants reported being a victim of image-based abuse at least once (Ruvalcaba & Eaton, 2019). According to the National Crime Agency (2016) serious sexual offences (e.g., non-penetrative sexual assault and stranger rape) facilitated by the Internet in the United Kingdom has increased six-folds between 2009 and 2014. These findings suggest that TFSV is becoming common. In that, it is possible that people might view sexual offences facilitated via the Internet as less serious, which can perpetuate TFSV. As such, this study will gather information about how adults perceive TFSV’s behavioural appropriateness and attribute responsibility for TFSV.

Reportedly, the main victims of TFSV are young adults aged between 18 and 29 years old (Duggan, 2014; Powell & Henry, 2015). In the aforementioned Australian study, 70% of those participants who reported being victimised were young adults (Powell & Henry, 2015). Despite some differences between the Australian and American rates of victimisation, most victims in the United States were also individuals aged 18–24 years (Duggan, 2014). These figures are consistent with Australian Bureau of Statistics’ (ABS; 2012; 2013) figures for
offline sexual violence. It seems that young adults are most at risk for online and offline sexual violence (ABS, 2013; Duggan, 2014; Powell & Henry, 2015). According to several sources, this could be attributed to their risky dating behaviours (National Crime Agency, 2016; Rowse et al., 2020; Scannell, 2019). Due to its popularity amongst young adults, the study adopts a theme of online romantic interactions, but it appears most adult victims are women.

Incidents of TFSV are more likely to be directed at women by men (Powell & Henry, 2015; Symantec, 2016). A recent Canadian study reported that women were at an increased risk of TFSV victimisation with rates of 87.9% compared to 74.3% for men (Snaychuk & O’Neill, 2020). Sources suggest women are more vulnerable to instances of ‘online sexual violence’ like revenge pornography, sexual harassment, sexual assault, and threats of rape (National Crime Agency, 2016; Powell & Henry, 2015; Ruvalcaba & Eaton, 2019; Symantec, 2016). These experiences often result in depression, anxiety, stress, and post-traumatic stress disorder (Cripps, 2016). When perpetrators can be identified, women were twice as likely to be targeted by a male perpetrator (Powell & Henry, 2015). Male perpetration of TFSV toward females could be explained from an evolutionary perspective (Buss, 1995; Malamuth, 1986; Malamuth, Heavey, & Linz, 1996; Symons, 1979; Trivers, 1972). Malamuth et al. (1996) and Ward, Polaschek, and Beech (2006) posits that sexual offences are the result of the different evolutionary priorities and accompanying strategies men and women adopt to ensure genetic survival. At times, these strategies could be identified as forms of sexual aggression. In certain scenarios where sexual access is denied, like offline sexual violence, sexual aggression on the Internet could be presented as forms of TFSV.

The ‘Sexual Strategies Scale’ (SSS; Strang, Peterson, Hill, & Heiman, 2013; Struckman-Johnson, Struckman-Johnson, & Anderson, 2003) will be used to measure sexual aggression. It employs the use of 22-items, arranged in a non-hierarchical order, to observe
past behaviours that have been used to obtain sexual co-operation. Whilst other scales are available such as the ‘Sexual Experiences Survey’ (SES; Koss, Gidycz, & Wisniewski, 1987; Koss et al., 2007) and the ‘Modified Sexual Experiences Survey’ (MSES; Testa, VanZile-Tamsen, Livingston, & Koss, 2004) the SSS was chosen because of its inclusion of behavioural items that range from “telling him/her lies (e.g., saying “I love you” when you don’t)” to “getting him/her drunk or high in order to convince him/her to have sex” (Strang et al., 2013; Struckman-Johnson et al., 2003). Due to its inclusion of weaker sexual strategies, the measure is expected to be more sensitive to sexual aggression than the SES and MSES (Testa, Hoffman, Lucke, & Pahnna, 2015). Thus, it is hypothesised that individuals’ experience of high sexual aggression can increase their likelihood to perpetrate TFSV. As a form of sexual violence that predominantly occurs using technology, the Internet’s online disinhibition could also have an effect.

The environment afforded by the Internet allows people to express themselves in a relatively uninhibited manner compared to real-world interactions (Suler, 2004). This phenomenon is referred to as ‘online disinhibition’ (Joinson, 1998). If inhibition consists of behavioural constraint because of individuals’ anxieties and self-consciousness from an audience, then disinhibition is the absence of these feelings due to the lack of an obvious audience (Joinson, 1998). Joinson (1998) argues that there are two types of online disinhibition: ‘benign’ and ‘toxic’. Benign disinhibition occurs when individuals tend to adopt a more honest, open, and kind relationship with others; sharing their emotions, fears, and wishes that aid in personal development (Joinson, 1998). In contrast, as the name suggests, toxic disinhibition is negative behaviour comprising of compulsion and/or the anti-social need to attack others (Suler, 2004). Suler (2004) states that there are six contributing factors including dissociative anonymity, invisibility, asynchronicity, solipsistic introjection, dissociative imagination and minimising of status or authority (see Suler, 2004 for a thorough
explanation). Together, these features of the Internet affect how people perceive communication and choose to interact online.

According to Elliot (2012) computer-mediated-communication can disinhibit certain individuals to express negative emotions. For instance, flaming – a display of hostility toward others using insults, profanity and offensive language – is common among online gamers; particularly in communities where there are very little sanctions for unidentifiable rule breakers (Elliot, 2012). Even when concerning behaviours such as ‘trolling’ or ‘griefing’ does occur, other community members are reluctant to contest (Coles & West, 2016; Coyne, Chesney, Logan, & Madden, 2009), instilling more confidence in perpetrators (Wright, 2014). This could be attributed to the unique features of the Internet (i.e., reduction in nonverbal cues, enhanced message control, lack of eye-contact), which increases disinhibition (Casale, Fiovaranti, & Caplan, 2015; Lapidot-Lefler & Barak, 2012; Schouten, Valkenburg, & Peter, 2007). For individuals with high social anxiety, online communication aids in individuals’ abilities to freely express themselves (Wang, Jackson, & Zhang, 2011), but as this study proposes, can also encourage behaviours of TFSV.

To measure toxic disinhibition, the ‘Online Disinhibition Scale’ (ODS) will be utilised. Udris (2014) adapted this theoretical framework into a short 11-item scale that feature two subscales related to benign and toxic disinhibition. In an examination of online disinhibition and cyberbullying among Japanese students; higher ODS scores were indicative of an increased likelihood to cyberbully (Udris, 2014). For this study, the scale was modified to address TFSV with an emphasis on the toxic disinhibition subscale. It is predicted that being vulnerable to the Internet’s toxic disinhibition can increase participants’ likelihood to perpetrate TFSV. Individuals who experience these six factors in a negative manner (i.e., toxic disinhibition) has the propensity to exacerbate behavioural issues like sexual
aggression. As a result, an additional important factor to consider is how individuals perceive rejection in romantic situations that occur online.

In conceptualising rejection, Leary (2001) states “when people feel accepted or rejected, they are not reacting to the objective degree to which others value their relationship but rather to their perceptions of the degree to which they are valued” (p. 7). In other words, feelings of rejection arise when a relational devaluation becomes lower than expected (Leary, 2001). When seeking a romantic relationship, a male can feel spurned not because he hears “we are incompatible” but rather he perceives this comment to mean “you are not good enough”. This has an emotional impact on the individual being rejected, making them feel sad, anxious, or hurt (Baumeister & Tice, 1990; Leary 1990, 2001). Following interpersonal rejection, some people may experience depression and low self-esteem which could increase dysphoria (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997). In efforts to protect themselves, people who have a low threshold for intimate rejection, are more likely to respond in an aggressive manner (Downey, Feldman, & Ayduk, 2005; Pietrzak, Downey, & Ayduk, 2005). For instance, given the nature of romantic interactions online, rejected individuals could release their frustration in an antisocial, sexually aggressive manner. Thus, in situations where there are opportunities for romantic rejection, the behaviours of a victim must be considered when trying to understand TFSV. To assess this relatively new phenomenon, the applicability of the extensive literature on victim blaming for sexual violence is also examined (Grubb & Turner, 2012; Whatley, 1996).

Victim blaming literature could inform interactions between the perpetrator and victim (Grubb & Turner, 2012). Studies of female rape victims (Whatley, 1996) confirm the tendency for others to judge the victims as responsible – or partially responsible for their experiences of sexual violence (Grubb & Turner, 2012). A theoretical framework like the ‘Attribution Theory’ (Heider, 1958) explains how people use logical modes of sense to help
interpret certain events in their lives. These modes are internal or external attributions that assumes (1) a person behaves a certain way because of something about them, or, (2) a person behaves a certain way because of something about the situation. In Grubb and Turner’s (2012) study, women who violate traditional gender roles and consume alcohol prior to an attack were considered more responsible for the attack than women who conform to traditional gender roles and did not consume alcohol. In that, individuals could justify sexual aggression like TFSV perpetrated toward women, on platforms like online dating websites and apps, because they may view victims as ‘asking for it’. If a woman is attacked online in a sexually aggressive manner, others will judge her as being somewhat responsible; regardless of whether she was too unresponsive, flirty, respectful or aggressive.

This paper aims to assess whether the Internet has the potential to influence individuals to perpetrate sexual offences like TFSV. As such, an experimental study has been designed to test five hypotheses. Behaviours associated with TFSV are expected to be rated as inappropriate. Further, perpetrators will be viewed as being more responsible for the TFSV than victims, regardless of victims’ response (i.e., no response, flirty response, respectful rejection, and aggressive rejection) to the perpetrators’ action; but, their type of response may vary the degree to which responsibility is attributed. Past real-life (offline) behavioural engagement in sexual aggression will increase participants’ likelihood to perpetrate TFSV online. As would the presence of toxic disinhibition, which will increase the likelihood of a person choosing to perpetrate TFSV. A combination of sexual aggression and toxic disinhibition will exacerbate perpetrations of TFSV.

**Method**

**Participants**

Three hundred and forty participants (237 women and 103 men) were recruited from a university subject pool. The mean age of the group was 22.55 years ($SD = 6.94$, Range = 17–
68 years) and is similar to the age profile of young adults (aged 18–29 years old) who are reportedly the main victims of TFSV (Duggan, 2014; Powell & Henry, 2015).

Materials

For this study, the online survey platform ‘Qualtrics’ was used and required participants to have access to a computer and the Internet. Our hypotheses were assessed by creating scenarios that featured the five dimensions of TFSV: ‘online sexual harassment’, ‘image-based sexual exploitation’, ‘cyberstalking’, ‘gender- and sexuality-based harassment’ and ‘sexual assault and/or coercion’ (see Henry & Powell, 2016b). For each dimension of TFSV, a scenario was created to show an interaction between a male perpetrator and female victim. These fictional scenarios of harmful cyber-sexual behaviours encapsulate the key nature of each dimension that has been presented in Henry and Powell’s (2016b) literature review of empirical studies related to online sexual harassment, abuse and violence. For example, Henry and Powell (2016b) chose to draw on the narrow definition of sexual harassment that has been provided in legal statutes. ‘Unwanted sexual attention online’ (i.e., online sexual harassment) is defined by Barak (2005, p.78) as “uninvited behaviours that explicitly communicate sexual desires or intentions toward another individual”, which according to Henry and Powell (2016b, p. 198) “may include either virtual or face-to-face contact in public forums or chat rooms or through private communications via mobile phone, e-mail, or Internet sites using either verbal comments or graphic images”. With regards to sexual assault and/or coercion, the rape scenario was modelled after the scenarios presented in Malamuth and Check’s (1980) study that assessed the perception of rape. In general, a romantic link between the victim and perpetrator was established for each scenario as this was often the case for real world incidents of sexual violence (Truman & Langton, 2015).

Victims’ responses to the TFSV scenarios were randomly presented. For each TFSV dimension, the response options included victims becoming quiet ([1] no response), flirty ([2]
flirty response), respectful ([3] respectful rejection) or aggressive ([4] aggressive rejection). In the ‘no response’ scenario, the victim ceases communication with the perpetrator before he retaliates with an act of TFSV. As an example, for cyberstalking, the ‘no response’ victim ignores a message from the perpetrator who requested a date. Alternatively, the ‘flirty’ victim states “I am busy right now, but I am still looking forward to going on a date with you”, the ‘respectful’ victim replies with “I am sorry, I am not interested in dating right now” whilst the ‘aggressive’ victim responds “Are you serious? I am out of your league”. The five scenarios are detailed as follows.

**Online Sexual Harassment.** Cassandra and Joseph meet on an online dating website. They decide to video chat and have a casual conversation about their likes and dislikes. Suddenly, Cassandra’s doorbell ring and she leaves to answer the door. For the ‘no response’ scenario, Cassandra was away for a long period of time. For the other scenarios, prior to leaving, Cassandra is seductive in the ‘flirty response’ while being polite, straight-forward in the ‘respectful rejection’ and insulting in the ‘aggressive rejection’. As Cassandra accepts a delivery, Joseph begins to undress himself. Cassandra returns to a computer screen that is prominently displaying Joseph’s erect penis.

**Image-Based Sexual Exploitation.** Emily decides to end her offline casual, sexual relationship with Jeremy after meeting another man. In the ‘no response’ category, Emily ignores Jeremy and his attempts to contact her. For a ‘flirty response’ Emily again propositions Jeremy for another brief sexual encounter whilst ‘respectful rejection’ involve Emily stating she no longer wishes to continue their relationship and ‘aggressive rejection’ ends with Emily berating Jeremy. Feeling rejected, Jeremy posts Emily’s private information and nude images online.

**Cyberstalking.** Having been infatuated with Sandy for the past two months, Andy finally gathers the courage to ask her out on a date. For the ‘no response’ scenario, Sandy
views the message and ignores it. With the ‘flirty response’ Sandy agrees to date Andy but cannot immediately due to her upcoming exams. Sandy politely declines in the ‘respectful rejection’ scenario. Sandy declines the invitation by stating she is “out of his league” in the ‘aggressive rejection’. Regardless of Sandy’s response, Andy bombards her with texts, online messages and e-mails. Finding this irritating, Sandy blocks Andy. In retaliation, Andy creates multiple fake accounts and profiles to gather information about Sandy. At times, Andy would use this information to taunt and threaten Sandy.

**Gender- and Sexuality-Based Harassment.** Jessie and Justin are dating. One day, Justin writes a lewd comment on a picture located on Jessie’s social media account. Feeling objectified and embarrassed, Jessie responds by ignoring his future messages for the ‘no response’ category. She returns the compliment in the ‘flirty response’ or politely remind him to keep the comments clean in the ‘respectful rejection’ scenarios. She confronts him in the ‘aggressive rejection’ scenario. Regardless of the response, Justin decides to insult Jessie with a derogatory term and makes an inappropriate comment about her breasts.

**Sexual Assault and/or Coercion.** As an additional control and a reflection of the last TFSV dimension, a contact offence was included. After spending some time chatting online, Aaron and Alexandra, decide to meet in person for their first date. When their date ended, Aaron offers to walk Alexandra to her car. On the way, they walk through a dark alley. Seeing his opportunity for privacy, Aaron begins to grope Alexandra despite her protests. Feeling trapped with no escape, Alexandra submits to Aaron by not speaking up; this forms the ‘no response’ scenario. Alexandra suggests that they should save it for later in the ‘flirty response’ scenario. In the ‘respectful rejection’ scenario she tells him to stop in a firm manner, or, yells at him to stop in the ‘aggressive rejection’ scenario. Unfortunately, Aaron ignores Alexandra and continues until he has sex with her.
Measures

General information (i.e., gender, age) were collected from participants using a short demographic questionnaire. For this study, participants’ ratings were obtained for their perception of the perpetrators’ and victims’ behavioural appropriateness (very inappropriate [1] to very appropriate [7]), attribution of responsibility between the perpetrator and victim (from perpetrator [0] to victim [100]), and, the likelihood each participant would behave like the perpetrator (i.e., likelihood to perpetrate TFSV; very unlikely [1] to very likely [7]). These results were assessed against participants’ experience of online disinhibition by utilising the ‘Online Disinhibition Scale’ (ODS, 11-items, $\alpha > 0.81$; Urdis, 2014) and adapting it to address TFSV. Further, sexual aggression was assessed by incorporating the ‘Sexual Strategies Scale’ (SSS; Strang et al., 2013; Struckman-Johnson et al., 2003).

Online Disinhibition Effect. The ODS (11-items, $\alpha > 0.81$; see Urdis, 2014) was adapted for the study. This scale was previously used in a cyberbullying study which indicated online disinhibition was significantly associated with cyberbullying (Udris, 2014). Certain items for disinhibition were altered so that they referred to sexual aggression rather than cyberbullying. There are seven ‘benign’ and four ‘toxic’ online disinhibition questions, with the latter being our focus.

Sexual Aggression. For sexual aggression, the SSS (Strang et al., 2013; Struckman-Johnson et al., 2003) was utilised. It consists of 22-items presented in a non-hierarchical order of severity that describe tactics to obtain sexual cooperation. Participants were expected to tick all behaviours that would apply to them, which included, for example: (1) continuing to touch and kiss him/her in the hopes that he/she will give in to sex; (2) telling him/her lies (e.g., saying “I love you” when you don’t); (3) using your older age to convince him/her; (4) getting him/her drunk/high in order to convince him/her to have sex; and, (5) threatening to
tell others a secret or lie about him/her if he/she doesn’t have sex (i.e., blackmail; Testa et al., 2015).

**Procedure**

Ethical clearance was obtained in the early stages of the study that was aimed toward university students. After students registered their interest for the study, each participant was given access to the study via e-mail. It directed participants to an information sheet, which provided a warning about the sexually explicit language and themes in the study. After providing their consent, participants were randomly displayed one of five TFSV scenarios (i.e., online sexual harassment, image-based sexual exploitation, cyberstalking, gender- and sexuality-based harassment, and sexual assault and/or coercion) with one of four response types (i.e., no response, flirty response, respectful rejection, or aggressive rejection) to read. For each respective scenario, participants were asked to (1) rate the behavioural appropriateness of the perpetrator and victim (on two separate scales); (2) attribute responsibility for the TFSV outcome (between the perpetrator and victim, on a continuous scale); and, (3) report the likelihood they, themselves, would behave like the perpetrator in each TFSV scenario (on a single scale). When all TFSV scenarios were displayed, participants were asked to complete some general questions regarding their demographic. Then, the ODS (Udris, 2014) and SSS (Strang et al., 2013; Struckman-Johnson et al., 2003) measures were administered. At time of completion, a debrief was provided to highlight the fictional nature of the study.

**Results**

**Data Quality Assessment**

After a visual inspection of the data for errors and outlier responses, all survey responses except those for participant 229, were free of violations. Participant 229 reported 210 hours of ICT usage per week, whilst there are only 168 hours in a week, and so was
excluded. Thus, the following results are based on responses from the remaining 339 participants.

**Is TFSV Appropriate? The Answer Is No.**

A comparison between perpetrators’ and victims’ ratings for behavioural appropriateness was conducted. Paired-samples t-tests was used to evaluate how participants rated the perpetrator and victim for each TFSV scenario. Participants were asked to rate the behavioural appropriateness of the perpetrator and victim individually. As shown in Table 1, there was a significant difference between ratings for perpetrators and victims.

**Table 1**

A paired-samples t-test to compare how appropriate the perpetrator and victim were rated for each TFSV dimension.

<table>
<thead>
<tr>
<th>TFSV Scenario</th>
<th>Perpetrator M</th>
<th>Perpetrator SD</th>
<th>Victim M</th>
<th>Victim SD</th>
<th>t (339)</th>
<th>p-value</th>
<th>Difference</th>
<th>95% Confidence Interval Range</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online sexual harassment</td>
<td>1.65</td>
<td>1.30</td>
<td>3.98</td>
<td>2.06</td>
<td>-17.40</td>
<td>&lt; .001</td>
<td>-2.33</td>
<td>-2.60 to -2.07</td>
<td>.47</td>
</tr>
<tr>
<td>Image-based sexual exploitation</td>
<td>1.19</td>
<td>0.84</td>
<td>3.37</td>
<td>2.15</td>
<td>-17.20</td>
<td>&lt; .001</td>
<td>-2.18</td>
<td>-2.43 to -1.93</td>
<td>.47</td>
</tr>
<tr>
<td>Cyberstalking</td>
<td>1.14</td>
<td>0.66</td>
<td>4.20</td>
<td>2.16</td>
<td>-23.97</td>
<td>&lt; .001</td>
<td>-3.06</td>
<td>-3.31 to -2.81</td>
<td>.63</td>
</tr>
<tr>
<td>Gender- and sexuality-based harassment</td>
<td>1.38</td>
<td>1.01</td>
<td>5.35</td>
<td>1.85</td>
<td>-32.46</td>
<td>&lt; .001</td>
<td>-3.97</td>
<td>-4.21 to +3.73</td>
<td>.76</td>
</tr>
<tr>
<td>Sexual assault and/or coercion</td>
<td>1.28</td>
<td>0.96</td>
<td>5.21</td>
<td>1.97</td>
<td>-29.36</td>
<td>&lt; .001</td>
<td>-3.93</td>
<td>-4.19 to -3.66</td>
<td>.72</td>
</tr>
</tbody>
</table>

Perpetrators of TFSV were rated as inappropriate varying from a low of 1.14 (very inappropriate) to a maximum of 1.65 (moderately inappropriate). Indeed, perpetrators were rated as significantly more inappropriate than victims. Nevertheless, victims were still perceived as not being entirely appropriate with their responses varying from a low of 3.37 (neutral responsibility) to a maximum of 5.35 (slightly appropriate).
Who is Responsible for TFSV? Perpetrators Versus Victims

On a continuous scale (from perpetrator [0] to victim [100]) each participant was asked to attribute responsibility for the TFSV outcome. If a score of 50 indicated equal attribution of responsibility to the perpetrator and victim, a score less than 50 would indicate the perpetrator was perceived as more responsible, and, a score more than 50 would be interpreted as the victim being judged as more responsible. To reiterate, participants were randomly displayed one of four response types: no response, flirty response, respectful rejection, and aggressive rejection. Initially participants’ gender was included as a factor using two-way ANOVAs (Analysis of Variance), but there were generally no significant main effects for most of the scenarios. However, there was one significant interaction for image-based sexual exploitation, \( F(3, 331) = 3.18, p = .024, \eta^2 = 0.03 \). This was explained by male participants attributing much more responsibility to the victim when she gave an aggressive rejection \( (M = 60.00, SD = 27.39) \) compared with female participants \( (M = 44.19, SD = 20.05) \). As this was the only effect of gender, the remainder of the analyses are conducted with one-way ANOVAs.

For online sexual harassment, there was a statistically significant difference in participants’ attribution of responsibility scores for the four groups with a small effect size, \( F(3, 335) = 3.07, p = .028, \eta^2 = 0.03 \). Post-hoc comparisons using Tukey HSD test indicated that the mean score for no response \( (M = 36.09, SD = 35.15) \) was not statistically different from a flirty response \( (M = 40.74, SD = 19.80) \), respectful rejection \( (M = 30.00, SD = 38.76) \) and aggressive rejection \( (M = 43.30, SD = 24.90) \). Further, a flirty response did not statistically differ from a respectful or aggressive rejection. However, a respectful rejection was statistically different from an aggressive rejection, Mean Difference = 13.30, \( SE = 4.69 \), \( p = .025, CI_{95} = 25.41 \) to 1.19. This meant that participants viewed perpetrators as being more
responsible for the TFSV. However, the aggressive victim was held more responsible for the resulting online sexual harassment than the victim who responded respectfully.

A statistically significant result was found for image-based sexual exploitation and the participants’ attribution of responsibility, $F(3, 335) = 4.77, p = .003, \eta^2 = 0.04$. Post-hoc comparisons using Tukey HSD test showed no response ($M = 38.85, SD = 25.40$) was not significantly different from a flirty response ($M = 31.57, SD = 28.52$), respectful rejection ($M = 36.00, SD = 39.64$) and aggressive rejection ($M = 48.19, SD = 23.01$). Although, no difference between flirty and respectful responses was present, there was a difference for the flirty and aggressive responses (Mean Difference = 16.62, $SE = 4.53, p = .002$). Further, victims who replied respectfully were rated as being significantly less responsible than those who replied aggressively (Mean Difference = 12.19, $SE = 4.65, p = .045$). Like online sexual harassment, a victim who replied aggressively was viewed as more responsible for the TFSV.

In contrast, there were no statistically significant findings between conditions for cyberstalking ($M = 35.93, SD = 34.70$) with $F(3, 335) = 1.28, p = .282$. Similarly, gender- and sexuality-based harassment ($M = 35.87, SD = 35.12$) did not result in statistically significant differences between the conditions, $F(3, 335) = 2.24, p = .083$. Like cyberstalking and gender- and sexuality-based harassment, there was no significant difference reported for sexual assault and/or coercion ($M = 34.31, SD = 36.24$) with $F(3,335) = 0.525, p = .666$.

In summary, victims’ responses influenced participants’ ratings when attributing responsibility. Perpetrators were as expected, identified as more responsible. However, the findings suggest that an aggressive victim was attributed more responsibility than an individual who was respectful. Interestingly, every victim – regardless of response type – was attributed approximately one-third of the responsibility.
Sexual Aggression and Toxic Disinhibition: Positive Predictors for TFSV Perpetration?

Pearson’s product-moment correlation coefficients were calculated for the predictors (i.e., sexual aggression and toxic disinhibition) and participants’ likelihood to perpetrate TFSV. Tables 2 and 3 display the descriptive statistics and inter-correlations between the variables. In Table 2, there are strong, significant and positive correlations between sexual aggression and participants’ reported likelihood to perpetrate online sexual harassment, image-based sexual exploitation, cyberstalking, gender- and sexuality-based harassment, and sexual assault and/or coercion. All other variables have a significant, positive relationship with one another except gender- and sexuality-based harassment that has no significant relationships with online sexual harassment and image-based sexual exploitation.

Table 2

Means, Standard Deviations and Inter-correlations of sexual aggression and participants’ likelihood to perpetrate online sexual harassment, image-based sexual exploitation, cyberstalking, gender- and sexuality-based harassment, and sexual assault and/or coercion.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sexual aggression</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Online sexual harassment</td>
<td>.13*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Image-based sexual exploitation</td>
<td>.18***</td>
<td>.34***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Cyberstalking</td>
<td>.23***</td>
<td>.11*</td>
<td>.23***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Gender- and sexuality-based harassment</td>
<td>.20***</td>
<td>.08</td>
<td>.09</td>
<td>.13*</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Sexual assault and/or coercion</td>
<td>.19***</td>
<td>.26***</td>
<td>.31***</td>
<td>.11*</td>
<td>.17**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.82</td>
<td>2.03</td>
</tr>
<tr>
<td>2</td>
<td>1.35</td>
<td>1.08</td>
</tr>
<tr>
<td>3</td>
<td>1.24</td>
<td>0.91</td>
</tr>
<tr>
<td>4</td>
<td>1.17</td>
<td>0.75</td>
</tr>
<tr>
<td>5</td>
<td>1.27</td>
<td>0.96</td>
</tr>
<tr>
<td>6</td>
<td>1.25</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01, and *** p ≤ .001
The total scores from the four questions that focused on ‘toxic disinhibition’ were used. Like sexual aggression, similar results are present in Table 3, which indicates a strong, significant and positive relationship between toxic disinhibition and the five TFSV dimensions. However, gender- and sexuality-based harassment, again, did not present a significant relationship with online sexual harassment and cyberstalking. Regardless, it appears that individuals who display sexual aggression or toxic disinhibition are more likely to perpetrate TFSV.

Table 3

Means, Standard Deviations and Inter-correlations of the Internet’s toxic disinhibition and participants’ likelihood to perpetrate online sexual harassment, image-based sexual exploitation, cyberstalking, gender- and sexuality-based harassment, and sexual assault and/or coercion.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Toxic disinhibition</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Online sexual harassment</td>
<td>.15**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Image-based sexual exploitation</td>
<td>.32***</td>
<td>.34***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cyberstalking</td>
<td>.28***</td>
<td>.11*</td>
<td>.23***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gender- and sexuality-based harassment</td>
<td>.12*</td>
<td>.08</td>
<td>.09</td>
<td>.13*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Sexual assault and/or coercion</td>
<td>.16**</td>
<td>.26***</td>
<td>.31***</td>
<td>.11*</td>
<td>.17**</td>
<td>-</td>
</tr>
</tbody>
</table>

| M     | 1.09 | 1.35  | 1.24  | 1.17  | 1.27  | 1.25  |
| SD    | 1.96 | 1.08  | 0.91  | 0.75  | 0.96  | 0.87  |

Note. * p < .05, ** p < .01, and *** p ≤ .001

Self-Reported Instances of Sexual Aggression

Responses to the SSS (Strang et al., 2013) allowed us to record the number of individuals who have reportedly engaged in sexually aggressive behaviours in the past. Results found that 29.11% of female and 24.51% of male participants had engaged in sexual
aggression in the past. A total of 94 participants reported using at least one of the following sexually aggressive tactics (e.g., intoxication, physical force, verbal coercion, arousal, and authoritative strategies) in their attempt/s to procure a sexual act. See Table 4 for the distribution of these self-reports.

Thus, for the remainder of the analysis, participants were divided into two groups. Individuals who did not report having used any sexually aggressive strategy (n = 245) will be classified as ‘non-sexually aggressive’. Those who had used one or more form of sexual strategy (n = 94) will be labelled as ‘sexually aggressive’.

Table 4

A table displaying the number of female and male participants who has reportedly used a sexually aggressive tactic in the past.

<table>
<thead>
<tr>
<th>Sexual Aggression Tactic</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Intoxication</td>
<td>08</td>
<td>04</td>
</tr>
<tr>
<td>(2) Physical Force</td>
<td>07</td>
<td>01</td>
</tr>
<tr>
<td>(3) Verbal Coercion</td>
<td>39</td>
<td>11</td>
</tr>
<tr>
<td>(4) Arousal</td>
<td>66</td>
<td>24</td>
</tr>
<tr>
<td>(5) Authoritative Strategies</td>
<td>05</td>
<td>01</td>
</tr>
</tbody>
</table>

Would you perpetrate TFSV? A Moderation Analysis

To test the hypothesis that toxic disinhibition moderates the relationship between sexual aggression and individuals’ likelihood to perpetrate TFSV, the analysis incorporated a hierarchical multiple regression analysis in addition to Hayes’ (2018) Process Macro across all five dimensions of TFSV. In the first step, two variables sexual aggression and toxic disinhibition were included. These variables accounted for a significant amount of variance in participants’ likelihood to perpetrate TFSV, $R^2 = 0.117, F (2, 336) = 22.26, p < .001$. As
participants increased in toxic disinhibition their likelihood of perpetrating TFSV increased as well. When the interaction term for sexual aggression and toxic disinhibition were added to the regression mode, it also accounted for a significant proportion of the variance, \( \Delta R^2 = 0.060, F(3, 335) = 24.27, p < .001, b = 0.302, t(335) = 2.07, p = .039. \)

Examination of the interaction plot (see Fig. 1) shows an enhancing effect with individuals who reported sexual aggression and toxic disinhibition, which increased participants’ likelihood to perpetrate TFSV. As expected, sexually aggressive individuals who were prone to high toxic disinhibition were more likely to perpetrate TFSV, but even non-sexually aggressive individuals could be affected. Highly, toxically disinhibited people were more likely to perpetrate TFSV than their average and lower counterparts.

![Figure 1. A representation of the moderating relationship between sexual aggression and toxic disinhibition on individuals’ likelihood to perpetrate Technology-Facilitated Sexual Violence.](image-url)
Discussion

The results suggest that the Internet is an amplifier for sexual aggression, however, it may also play a larger, unique role in individuals’ decision to perpetrate TFSV. The significant, negative, attitudes toward TFSV will be discussed.

Unacceptable! The Negative Attitudes Toward Perpetration of TFSV

The results show that participants had a predominantly negative attitude toward perpetrators of TFSV. Behaviours that led to TFSV offences were rated very inappropriate to moderately inappropriate. This seems consistent with the reality of the harm caused by TFSV (Cripps, 2016; Duggan, 2014; National Crime Agency, 2016; Powell & Henry, 2015; Symantec, 2016) which can have legal consequences (see Computer Misuse Act, 1990 [United Kingdom] and Enhancing Online Safety Act, 2015 [Australia] for ACTs that combat cyber abuse). In the United States, only some states like California (California Penal Code 646.9) and Texas (Texas H.B., 2003) has amended the law to include online harassment, but it can be argued that the legal response does not reflect the seriousness of the offending.

Legal and regulatory responses are limited by challenging aspects of the Internet. Police interventions rarely occur as it is difficult to investigate an online attack without the ability to identify or locate the perpetrator (eSafety Commissioner, 2017). Although regulators are beginning to catch up, the prolific nature of the abuse means that platform operators must take responsibility for their users, applying actionable consequences as required.

Aggression: Victims’ Behaviour Playing a Role in the Blame

Aggressive victims were attributed a larger portion of the responsibility than other victims. Significant differences for aggressive rejections were reported for ‘online sexual harassment’ when compared with respectful rejections, and, ‘image-based sexual exploitation’ with the respectful rejections and flirty responses. In both instances, victims who responded in an aggressive manner were viewed more negatively. This was evident
when male participants attributed 60% of the responsibility to the aggressive victim for image-based sexual exploitation – placing an importance on how victims conducted the rejection. Given its impact (Baumeister & Tice, 1990; Leary, 1990, 2001; Nezlek et al., 1997), perpetrators, in their effort to protect themselves may feel more justified in responding with TFSV when confronted (Pietrzak et al., 2005). Our participants adopted this view, placing blame on the victim for the way they chose to react and handle the situation. This could affect whether authority figures intervene and for this reason behaviours of victims are an important, additional, factor. This might involve platform operators making users more accountable for their poor conduct online – ensuring that users are aware of their behaviour and what is expected of them if they choose to utilise the service.

**Predictors of TFSV Perpetration**

Sexual aggression and toxic disinhibition were significant, positive predictors of participants’ reported likelihood to perpetrate TFSV. Past engagement in sexual aggression was positively associated with participants’ reported likelihood to perpetrate TFSV. This suggests that individuals who reportedly engaged in offline sexual aggression, were more likely to carry their behaviours over to the Internet. Indeed, Marganski and Melander (2018) found that, for a group of college students, nearly all respondents (92.6%) who reported having experiences of intimate partner sexual aggression were also victims of intimate partner cyber aggression. As technology mediates communication, feelings of intimacy and hostility can be affected (Baym, 2010), which could potentially allow individuals to ignore social clues and turn a blind eye to the harm they are inflicting on others (Baym, 2010; Marganski & Melander, 2018).

**Toxic Disinhibition.** A high level of toxic disinhibition was associated with an increased likelihood to perpetrate TFSV. Where sexual aggression could be explained by people’s offline behaviour being transferred to the Internet; it is implied that toxic
disinhibition can encourage people to be compulsive and anti-social (Suler, 2004). Individuals who are prone to becoming toxic on the Internet, are likely to engage in inappropriate behaviour like TFSV. This is consistent with previous research regarding ‘cyberbullying’ (Udris, 2014), ‘flaming’ (Elliot, 2012), ‘trolling’ (Coles & West, 2016; Wright, 2014), and ‘griefing’ (Coyne et al., 2009). For instance, Wachs and Wright (2018) revealed a positive association between toxic disinhibition and perpetration of hate directed at minorities. Impulsivity and lack of emotional control among other factors were predictors of online hate (Wachs & Wright, 2018). Thus, the disinhibiting features of the Internet, appear to be powerful contributors. A ‘code of conduct’ which outlines behavioural expectations and hold users accountable can help reduce the effects of toxic disinhibition and the subsequent online abuse.

**A Sexually Aggressive Sample.** Our sample of individuals who have engaged in sexually aggressive behaviour can shed light on the degree of responsibility attributed to victims. Almost a third of our sample reported having used at least one form of sexually aggressive behaviour, such as intoxication, physical force, verbal coercion, arousal, and authority to procure a sexual act. Proportionally, men and women reported similar rates of sexual aggression in our study. This is consistent with Bryant and Spencer’s (2003) study of 135 of college students, 39% of whom reported using emotional abuse, physical violence or sexual violence in a past romantic relationship. In addition, Carvalho and Nobre’s (2015) paper found 35.8% of women in their sample committed some form of sexual aggression against men. Individuals who are sexually aggressive may believe certain behaviours are normal (Carvalho & Nobre, 2015). In that, men who engaged in dating violence in the past were more likely to attribute blame toward the victim (Bryant & Spencer, 2003). For women, strategies like verbal coercion could be masked as socially acceptable (Carvalho & Nobre, 2015). This explains the proportion of responsibility attributed to victims in our study.
Moderation or report systems on platforms should ensure acceptable behaviour is defined and consistently modelled.

**The Influence of Toxic Disinhibition on Sexual Aggression and Individuals’ Likelihood to Perpetrate TFSV**

Toxic disinhibition moderates the relationship between sexual aggression and participants’ likelihood to perpetrate TFSV. The results suggest individuals who perpetrate sexual aggression and experience a high-level of toxic disinhibition are more likely to perpetrate TFSV. It appears that factors of the Internet, can indeed, disinhibit users to commit behaviours of sexual aggression. The literature supports this notion, that the Internet is associated with increased disinhibition (Casale et al., 2015; Lapidot-Lefler & Barak, 2012; Schouten et al., 2007; Wang et al., 2011). As many communication signals, like non-verbal cues (Casale et al., 2015) and eye-contact (Lapidot-Lefler & Barak, 2012) are removed from online interactions, the amount of feedback individuals gathers to inform their behaviour becomes limited. In combination with the lack of perceived repercussion (Suler, 2004) this means that Internet users can feel free to express themselves – be it positive or negative (Wang et al., 2011). When threats are made toward individuals’ sexual access (Malamuth et al., 1996; Ward et al., 2006) the features (or lack thereof) of the Internet can therefore increase individuals’ willingness to perpetrate TFSV.

Conversely, even individuals who did not report sexual aggression but experienced a high-level of toxic disinhibition has an increased likelihood to perpetrate TFSV. This suggests the Internet can disinhibit users to an extent where inappropriate behaviours become more acceptable and justifiable. Concerning unacceptable behaviour of a sexual nature, TFSV could just be a consequence of context. As the popularity of using technology for romantic interactions grow, like on online dating websites and apps, the probability of meeting a person who reacts aggressively under relatively innocuous social circumstances
also increases. For instance, someone who reacts in an extreme, negative manner to romantic rejection (Downey et al., 2005; Nezlek et al., 1997) can also be more predisposed to cyberbullying (Udris, 2014) or flaming-behaviour in an online-gaming environment (Elliot, 2012). As such, reducing TFSV could be as much a matter of tackling online disinhibition as it is tackling sexual aggression. Platforms that can take an active role in promoting appropriate behaviour and reject those who do not conform to the communities’ expectations could potentially have great success at deterring toxic disinhibition. Establishing positive behavioural norms can help online communities thrive. As an example, there is an expectation that responses to questions presented in online support groups are positive (Kiesler, Kraut, Resnick, & Kittur, 2012). When an individual chooses to become antagonistic, moderators can limit the damage; reducing the negative impact on its platform (Kiesler et al., 2012).

**Limitations and Future Directions**

Of course, there are limitations to this study. The undesirable nature of the behaviours under examination in this study mean participants reported less genuine instances of engaging in sexual violence due to its social desirability aspects. This is a risk of conducting research on a sensitive topic in which people minimise bad behaviour and over-state good behaviour. Thus, future studies should include social desirability scales, to ascertain its level of impact. Also, the five scenarios used in this study are not exhaustive of the types of harmful cyber-sexual behaviour engaged by perpetrators. These can change overtime as more information and behavioural trends occur. This is also the case for the brief scenarios provided in the study. Hence future attempts should define, categorise and study sub-types of each dimension across multiple online platforms (e.g., online dating websites and apps, social media, live streams) to provide a more exhaustive assessment.
Conclusion

This paper provides an important insight into an issue that is difficult to police: TFSV. From a psychological perspective, the study assessed how individuals’ experiences of the Internet can shape their behavioural expression. It is the first to examine how a feature of the Internet like toxic disinhibition can influence people’s willingness to commit an online sexual offence. As expected, TFSV is viewed as an inappropriate behaviour. Results indicate perpetrators of TFSV are viewed negatively by other users; however, this was heavily influenced by whether participants believed the victims somehow provoked the perpetrator. Experiences of online toxic disinhibition or sexual aggression can increase an individuals’ willingness to perpetrate TFSV, but their amalgamation can exacerbate the issue. If the goal is to discourage TFSV, a way forward that is worth exploring is focusing on the reduction of disinhibition in online spaces before it becomes the norm. This is important when perpetrators become desensitised to their own wrongdoings; especially so, if the potential perpetrator possess a history of sexual aggression. As the continual use of technology for romantic interactions rise, it is important that platform operators begin to consider the implication certain features of their service can have on their users. In terms of online dating websites and apps, platform providers should provide adequate user background checks. While it may be difficult, it is worth addressing as we do not completely understand the downstream impact of TFSV perpetrators’ unchecked behaviour.
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