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**THX 4 ITS ☺ GNOC L8R?<sup>1</sup> GENDERED BEHAVIOUR AND OPINIONS  
REGARDING SEXTING AMONG SECONDARY SCHOOL LEARNERS****Tara Harris-Cik<sup>1</sup> and Francois Steyn<sup>2</sup>**

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**ABSTRACT**

*Adolescence is a phase characterised by self-discovery and physical, cognitive and sexual development. The current generation of adolescents are forging identities not only through traditional means, but also using the internet and social networking platforms. Adolescents are not exempt from being exposed to sexually explicit content online, or to new forms of sexual exploration such as sexting. Sexting refers to sending, receiving and/or forwarding of nude or sexually suggestive photographs and/or videos and/or sexually explicit messages across social media platforms or internet-based applications. The exchange of sexually explicit content by minors is illegal and is governed both internationally and locally by laws often pertaining to child pornography. The present study explored the gender differences reported in terms of internet use, sexting behaviours and opinions regarding sexting. Key questions included: "What do adolescents use the internet for?", "Have adolescents received, responded to, shared or sent a sext?" and "What are the implications of sexting?". Data was collected from 83 learners (average age of 14.74 years) who attended two private schools in Gauteng. The self-administered questionnaire included the Sexting Behaviours Scale and the Internet Use and Sexting Opinions Scale. Data reduction took place in order to draw meaningful comparisons between male and female respondents. The Sexting Behaviours Scale revealed significant gender differences, for example, male respondents were significantly more likely to have sent a written sext, and to have had a sext shared with them when they were not the intended recipients. Significant differences were further noted, in terms of internet usage, where one in four male respondents agreed using the internet to learn about sex-related topics and nearly half have used the internet to flirt with someone. Most male and female respondents agreed that both boys and girls sext, but significant differences were noted regarding sentiments and perceptions towards sexting. Girls experienced more negative consequences, in particular, that "sexting made them feel unhappy with their bodies". Interestingly, no gender differences were reported for the reasons behind adolescent sexting. Overall, the results speak to the need for a gender specific policy to effectively address the problem of adolescent sexting. Challenges regarding access to adolescent respondents and important themes for future research are discussed.*

**Keywords:** *Adolescence; sexting behaviour; sexting opinions; social media; child pornography.*

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**INTRODUCTION**

The transition between childhood and adolescence is multidimensional and complex and is marked by numerous biological, cognitive and socioemotional transitions. Biologically, adolescents move towards sexual maturation; cognitively, they begin to think more egocentrically and may see themselves as invincible; and socioemotionally, they begin to desire independence, intimacy and romantic relationships (Santrock, 2008: 469). Adolescents also must contend with the dramatic developments in social and communication dynamics, which,

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amid traditional understandings of adolescence, one cannot divorce the impact of modern technologies on adolescent development. These advancements have created a trend of cyber-socialisation, which occurs across social media platforms such as Facebook and Twitter, and through mobile phone applications such as WhatsApp and Snapchat. Virtual methods of communication have challenged conventional ideas of appropriate socialisation with the appearance of phenomena such as sexting. In previous investigations the definition of sexting has been limited to solely text messages or across the medium of a mobile phone (Dilberto & Matthey, 2009: 263; Rodríguez-Castro et al, 2017: 375). However, new generation mobile technology has introduced photo and video material, and with these advancements the definitions of sexting has had to be revisited. Sexting, from a broader perspective (Rodríguez-Castro et al, 2017: 375), refers to sending, receiving and/or forwarding of nude or sexually suggestive photographs and/or videos and/or sexually explicit messages across social media platforms or internet-based applications.

Sexting may have numerous negative implications for adolescents; newspaper headlines such as “Thousands of children sexting, police say” (BBC, 2017), “Chances are, your teen has sexted” (Wallace, 2015), and “Sexting becoming 'the norm' for teens, warn child protection experts” (Weale, 2015), highlight that adolescents are not exempt from virtual methods of communication and intimate engagement, and that sexting is an integral part of adolescent communication and behaviour. The reality of sexting among minors, the decrease in age of those engaging in sexting and the possible link that may be present between sexting and adolescents engaging in actual child pornography offences are all matters that should concern South African communities and society (Dake, Price, Maziarz & Ward, 2012: 1). Adolescent sexting needs to be appropriately and effectively dealt with by schools and community agents to minimise the numerous negative consequences sexting may have on adolescents.

To the authors' knowledge, there are no studies which have addressed the gendered nature of adolescent sexting within the South African context. A local search on SABINET featuring the key words “adolescent sexting” yielded 74 results of which many were irrelevant to the topic. There were articles which addressed the legal issues of sexting and articles published in popular scientific magazines such as *Servamus*, but only one study conducted on the topic of adolescent sexting in schools in Nigeria. The overall aim of the present study was to investigate sexting amongst adolescents in order to develop a gendered, comprehensive school policy informing reactions to sexting in secondary schools, paying attention to, among others, legal matters, assessment, investigation, remedies and prevention. The present contribution presents new insights on adolescent social media usage and gender differences, in both sexting behaviour and opinions surrounding the practice of sexting in two private schools in Gauteng.

## LITERATURE REVIEW

### Adolescents and social media

A social media site can be defined as any website which allows for social interaction to take place (Costello, McNiel & Binder, 2016: 313). Adolescents frequently use sites such as Facebook, Twitter and Instagram for educational, communication and entertainment purposes. With the advancement of technology came numerous benefits, such as being connected in a global world, reducing the carbon footprint, self-learning and global awareness. However, there are also several inherent risks, for instance online victimisation, “Facebook depression”, sexual solicitation and predation, and adolescent sexting, which carries legal implications of creating, distributing and possessing child pornography (Costello et al, 2016: 314). Employers and universities may make use of the social media accounts of individuals to review applications

and poorly advised posts can have severe negative effects on one's application and reputation (Ronson, 2015: np). Adolescents either do not know, or are not concerned, about the consequences of using social media sites.

The evolution of the mediums used to sext means that the practice of sexting has also evolved – more specifically to include picture and video material. The three most used social media platforms by adolescents are Facebook, Instagram and Snapchat (Lenhart, 2015: 3; McGraw, 2013: 69). There appear to be some gender differences when it comes to social media usage. A United States of America (USA) study on social media usage, which surveyed 1060 adolescents aged 13-17, reports that boys log on to Facebook more often than girls do (45% vs 36%), and girls make more use of Instagram and Tumblr (23% vs 17% and 6% vs 1% respectively) than boys do (Lenhart, 2015: 3). Adolescents share personal information such as photographs, dates of birth, addresses, telephone numbers and full names openly on social media sites without fully comprehending the inherent risk. Research by the Pew Research Center in Washington DC on a representative sample of 802 adolescents aged 12-17 and their parents, reported that significant percentages of adolescents shared their photographs (91%), real name (92%), birthdays (82%), school name (71%), city (71%), email address (53%) and mobile phone number (20%) (Madden, Lenhart, Cortesi, Gasser, Duggan, Smith & Beaton, 2013: np). Interestingly, while male and female adolescents generally share personal information at similar rates, this is not the case when it comes to mobile phone numbers – boys share their numbers more on social media sites (26%) than girls do (14%) (Madden et al, 2013: np). Although these percentages are relatively low, they still show that girls appear to be more aware of the dangers of sharing personal information. One in six adolescents in the Pew study had received unwanted online contact that made them feel scared or uncomfortable, and girls were more likely than boys to have encountered such unwanted contact (Madden et al, 2013: np). Lastly, a third of adolescents report receiving advertisements that were clearly not age appropriate (Madden et al, 2013: np) – a further concern for parents, youth advocates and policy makers in terms of adolescents' online activities.

Adolescents make use of social media sites and some of their online activities can be viewed as risky in nature. Adolescence is a time of significant development and in a technological world, both online and offline risk-taking behaviours are now prevalent in the lives of adolescents. Laws cannot, and more pertinently do not, offer faultless protection to minors for “offline” risky behaviour, such as early sexual engagement, underage drinking and smoking (Costello, McNiel & Binder, 2016: 320) or for online risk-taking such as sexting.

### **Adolescent internet use and sexting behaviours**

#### ***Adolescents online***

A consistent finding relating to adolescents and the internet in the USA is that approximately 95 percent of adolescents are online (Madden, Lenhart, Duggan, Cortesi & Grasser, 2013: 3). What has changed is that adolescents are increasingly becoming “cell-mostly” internet users (Madden et al, 2013: 7), which increases privacy because they can lock their phones or make use of locked or hidden folders. Moreover, emerging technologies and the internet may influence adolescents in terms of sexual script building (Simon & Daneback, 2013: 305). Research on adolescent internet use (Jones & Fox, 2009; Peter & Valkenburg, 2006) has reported that adolescents make use of the internet to view sexually explicit material as well as for educational and entertainment purposes. Adolescents appear to use the internet as a sex education resource because it is perceived as more private and allows for anonymity (Nwagwu, 2007: 364; Simon & Daneback, 2013: 306). Adolescents can experiment with various identities (Valkenburg & Peter, 2008: 209), including forming a sexual identity online without the embarrassment of having to engage in face-to-face contact with peers or adults. The internet's appeal as a resource for sex education and as a place to meet new people and practise relational

skills, such as flirting, may be based on various factors, such as perceived anonymity, user friendliness, and availability to peers (Simon & Daneback, 2013: 306). Previous research on adolescents using the internet as a source of sexual information indicates a prevalence rate of between 20 percent and 76 percent (Simon & Daneback, 2013: 307). A New York based study on a sample of 412 ethnically and socioeconomically diverse adolescents with a mean age of 15.8 years reported that 31 percent of the participants made use of the internet to glean information on birth control and safer sex options, and “sex” as a topic was the most popular search on the internet (Borzekowski & Rickert, 2001: 815). A more recent 2011 study conducted in California with low-income adolescents aged 14-19 indicated that 40 percent of adolescents in the sample reported searching sexual health information online (Ralph, Berglas, Schwartz & Brindis, 2011: 42). A study conducted in Nigeria on a sample of 1011 school-going and 134 non-school-going adolescent girls, reported that both school-going and non-school-going girls use the internet as a source of reproductive health information (Nwagwu, 2007: 359). Topics searched included HIV and AIDS, sexually transmitted diseases, pregnancy, sexual activities and sexual abuse. It is clear then, that adolescents use the internet for experimenting with identities, as well as a resource for sex-related information. The fact that adolescents increasingly access the internet on their phones is striking when looking at adolescent sexting, because of the privacy and anonymity afforded by owning and using a personal mobile device with access to the internet.

#### ***Adolescent sexting and negative consequences***

Adolescent sexting has received substantial media coverage, and is generally discussed alongside the negative consequences associated with the phenomenon (Klettke et al, 2014: 45; Van Ouytsel, Ponnet, Walrave & d’Haenens, 2017: 287). The costs linked to adolescent sexting include the dissemination of compromising photographs or videos to a wider audience, cyberbullying, deleterious mental health ramifications (including, but not limited to, depression, and even suicide) and other risk-taking behaviours such as early-debut sexual activity (Klettke et al, 2014: 45; Van Ouytsel et al, 2017: 287). Further, there are legal implications as those capturing and distributing sexts are under the age of majority. However, while there is little research linked specifically to gender differences in terms of prevalence, nature and consequences, the issue of gender has become progressively more relevant to the discussion of adolescent sexting (Cooper, Quayle, Jonnson & Svedin, 2016: 712; Rodríguez-Castro et al, 2017: 376).

#### ***Gender prevalence of sexting***

Studies conducted with adolescents aged 10 to 18 in the USA and the United Kingdom (UK) between 2008 and 2012 report that the overall prevalence rates of adolescent sexting range from 17 percent to 35 percent (Donlin, 2010; Mitchell, Finkelhor, Jones & Wolak, 2012; Phippen, 2009; Ringrose, Harvey, Gill & Livingstone, 2012). Though various authors have included gender within their studies, findings regarding prevalence in relation to gender are at best contradictory (Cooper et al, 2016: 709). From a systematic literature review, three studies (AP-MTV, 2009; Cox Communications, 2009; Mitchell et al, 2012) reported that girls were more likely to send sexts than boys, and one study (Patchin & Hinduja, 2011: np), indicated that while there was no significant gender difference in the sending of sexts, boys received more sexts than girls (Klettke et al, 2014: 46). Some studies (Dake et al, 2012; Lenhart, 2009) have found similar rates of sexting for both adolescent males and females, while Jonnson, Priebe, Bladh and Svendin’s 2014 study cited that boys were more likely than girls to engage in taking nude or semi-nude photographs. Conversely, there are also studies (Martinez-Prather & Vandiver, 2014; Mitchell et al, 2012), which indicate that girls show a higher prevalence in sexting than boys do. The prevalence and nature of adolescent sexting produce conflicting findings, but gender can be used in predicting certain aspects of sexting.

***The sexting 'double standard'***

Several studies (McGraw, 2013; Ringrose et al, 2013; Walker, Sancı & Temple-Smith, 2013) show that girls experience more pressure to engage in sexting from their peers and romantic partners than boys do. There is also a reported “double standard” when it comes to adolescent sexting. Girls are pressurised into sending sexts, and yet, when they relinquish and comply, they are then shamed and criticised (McGraw, 2013: 134; Owens, 2017: 9; Ringrose et al, 2013: 314; Ševčíková, 2016: 157; Walrave, Ponnet, Van Ouytsel, Van Gool, Heirman & Verbeek, 2015: 2). Boys are not criticised to the same degree and, in fact, often use sexts they possess as a type of “popularity currency” in order to increase their status within their peer groups (McGraw, 2013: 134; Owens, 2017: 9; Walrave et al, 2015: 2).

***Attitudes towards sexting***

While not a gender-specific finding, a study conducted in South-West USA, on sexting amongst 606 high school student participants, reported that adolescents who reveal having sent a sext are significantly more likely to have a positive attitude towards sexting and view it as acceptable (Strassberg, McKinnon, Sustar'ita & Rullo, 2012: np). The study further reports that one in seven adolescents, who reported they had sexted, had negative feelings towards the behaviour and, interestingly, just over a third of the sample that reported never having sexted appeared to have positive feelings towards sexting (Strassberg et al, 2012: np). Prevalent findings indicate that girls are viewed differently for producing and distributing sexts and girls also have a more negative experience of sexting than boys do, which may lead to more negative attitudes towards sexting (Cooper et al, 2016: 712-713; Owens, 2017: 5). It appears that boys have a more positive attitude towards sexting overall and have greater relational expectations than girls do (Owens, 2017: 33; Rodríguez-Castro et al, 2017: 382). On the other hand, girls perceive sexting to be risk-taking behaviour, and are more aware of the possible consequences associated with sexting (Rodríguez-Castro et al, 2017: 382). The consequences of sexting also appear to affect girls more adversely than their male counterparts (Martinez-Prather & Vandiver, 2014: 32). How sexting is perceived across gender (Owens, 2017: 8) and within the peer group plays a crucial role in the engagement in sexting behaviour.

***Reasons for sexting***

Understanding the reasons that adolescents offer for sexting is important because it situates the practice of sexting as a social behaviour within the context of adolescent relationships and could also highlight policy and educational implications in terms of addressing adolescent sexting (McGraw, 2013: 25). Sexting can be used to initiate or even maintain a romantic relationship and adolescents are not exempt from this utility of sexting. Adolescents may use sexting as a learning and socialising tool and, therefore, engage in the behaviour (Lenhart, 2009: np). Sexting behaviour allows for an adolescent to “gain” sexual experience, albeit across a digital medium and also to maintain both interpersonal and sexual communication (Lenhart, 2009: np; McGraw, 2013: 22). Adolescents investigate various sex-related topics online and part of that exploration means forming a framework of what constitutes sexual attractiveness, intimate relationships and sexual behaviour (Brown, Keller & Stern, 2009: 12). Sexting gives adolescents the time to compose intimate responses, which in face-to-face contact they would not have, and the concept of hiding behind a screen or online disinhibition allows more freedom in terms of expression of feelings and desires (Hudson, 2011: 23; Speno, 2016: 113). In essence, sexting could provide for adolescents to be both social and sexual, but within a safe, non-threatening or embarrassing arena because they are able to avoid face-to-face communication. However, instances of revenge porn and “slut-shaming” within the context of sexting are not uncommon and can have severe negative consequences, such as anxiety, depression and suicide ideation (Englander, 2016: S338). The very nature of adolescent sexting lies not only within the confines of technological affordability, but also in cultural and gender

acceptability (Ringrose et al, 2013: 308). Here the significant difference of social context and the gendered nature of sexting cannot be ignored. The role gender plays in peer dynamics, social learning and the rational and intuitive decision-making process cannot be underplayed.

### **Adolescent sexting and the law**

Internationally, law enforcement agencies intervening in adolescent sexting cases have often disregarded privacy rights afforded to adolescents and the negotiations that are needed in order to recognise the technologically driven society in which adolescent sexual maturation and exploration take place (Ringrose et al, 2013: 306). In the USA, for example, each state has its own laws governing adolescent sexting and many of these fall within the ambit of child pornography statutes (Hindaju & Patchin, 2015: np). All states in the USA have variations of the law, which govern the sending or depicting of explicit or indecent images of minors, and 20 states have specific “sexting” laws (Hindaju & Patchin, 2015: np). Specific sexting laws are important because they recognise that adolescent sexting cannot simply fall under child pornography legislation because of the negative consequences that it may have, especially considering their developmental life stage. In the USA, adolescent sexting carries a range of punishments, including informal, diversionary punishment, misdemeanour punishment and most severely the possibility of a felony punishment (Hindaju & Patchin, 2015: np; Lorang, Dale, McNiel & Binder, 2016: 74). The inclusion of a felony punishment seems overly harsh, considering how common the practice of sexting is among adolescents, and more so, the fact that many adolescents may unknowingly, according to the law, be creating, distributing and possessing child pornography.

In England, in instances of adolescent sexting, the police may decide it is not within public interest to prosecute, but they can still record that a crime has been committed. British laws, which could be applied to adolescent sexting include The Protection of Children Act of 1978, The Criminal Justice Act of 1988 Part XI, The Sexual Offences Act of 2003, Section 33 of the Criminal Justice and Courts Act of 2015, and lastly, Section 67 of the Serious Crimes Act of 2015 (National Society for the Prevention of Cruelty to Children [NSPCC], 2018: np). All these laws govern elements of child pornography in terms of it being illegal to take, make, show, distribute or possess any indecent image or pseudo-image of a child under the age of 16. These laws criminalise the sharing of private sexual photographs or videos with the intent to cause distress or to engage any child in sexual communication (NSPCC, 2018: np). There are no sexting specific laws in England and as such, adolescents who sext are subject to the provisions stipulated within the laws that govern child pornography specifically.

South Africa, similarly, suffers a legislative lag concerning adolescent sexting – there is no law that deals specifically with illegal adolescent sexting and, as such, it falls within laws which govern the offence of child pornography. These include the Films and Publications Amendment Act (s1 Act 3 of 2009) and the Criminal Law (Sexual Offences and Related Matters) Amendment Act (ss15-22 Act 32 of 2007), both of which forbid child pornography (Badenhorst, 2011: 9). The Cybercrimes and Cybersecurity Bill (2016) proposes a description and legal penalties for online offences, amongst others, the distribution of harmful electronic communication or disclosure of pornography (Department of Justice and Constitutional Development, South Africa, 2016: np). The fact that sexts are defined as explicit means that the creation, distribution or possession of a sext depicting a minor would automatically constitute child pornography and be punishable in terms of the South African legal system.

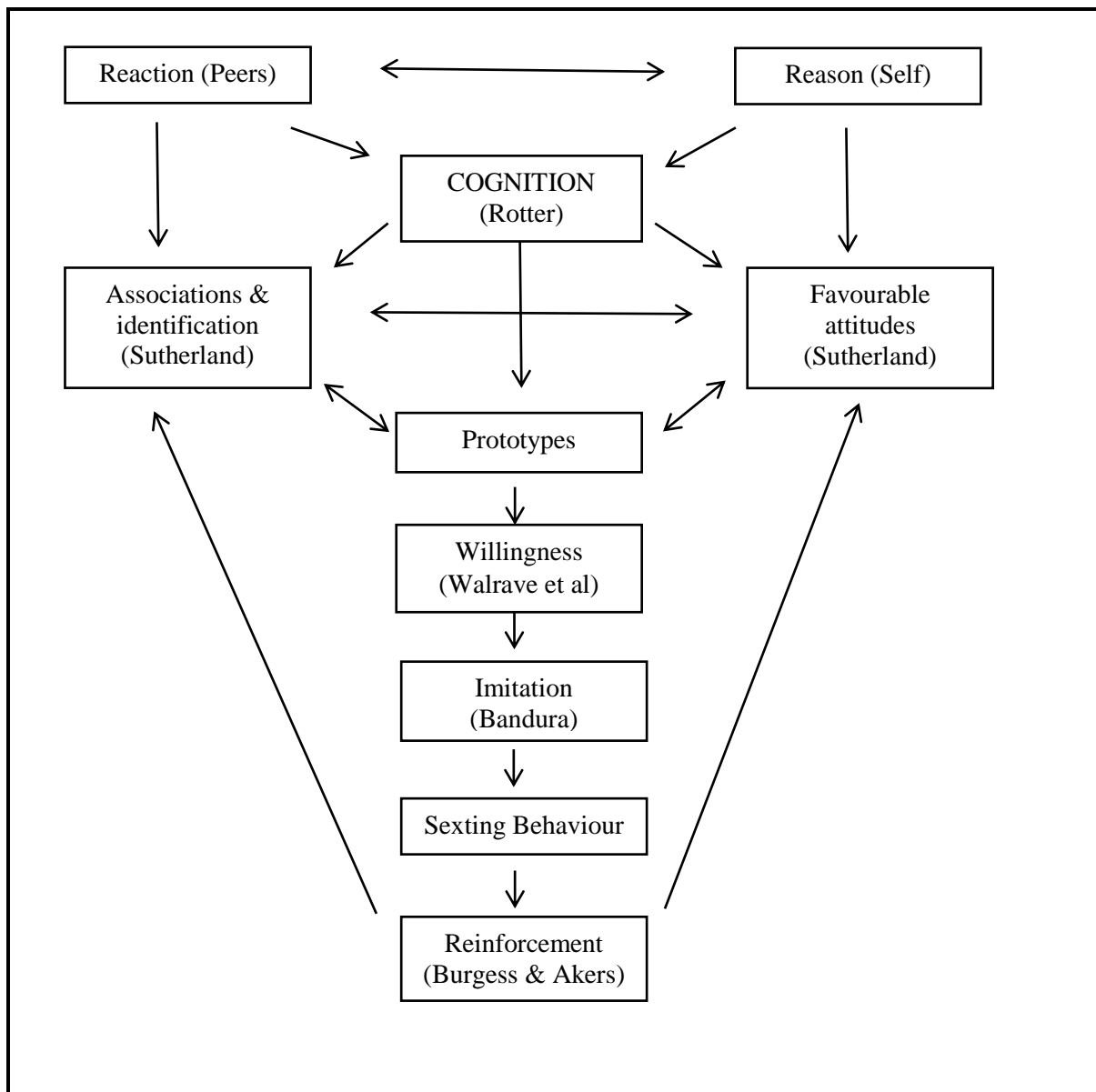
The legal response to adolescent sexting has sparked much controversy (Salter, Crofts & Lee, 2013: 301). Many countries have not maintained pace with the ever-developing world of technology. Thus, their legal systems are not equipped to deal effectively with adolescent sexting. This begs the question of whether a more integrated approach including social and

educational responses would not be more appropriate when addressing adolescent sexting behaviours?

**THEORETICAL CONTEXTUALISATION**

There is a lack of theoretical contextualisation regarding adolescent sexting, although the widespread nature of the phenomenon is apparent (Eraker, 2010: 556; Lorang, McNeil & Binder, 2016: 376-377; Klettke, Hallford & Mellor, 2014: 46; Rodríguez-Castro et al, 2017: 376). Adolescent sexting can possibly be linked to numerous variables, including neurodevelopmental maturation, the sexualisation of girls, previous victimisation, strained parental relationships, cyberbullying and various other psychosocial and environmental factors (Judge, 2012: 91-93). The authors amalgamated cognition theory (Rotter), social learning theory (Bandura, Sutherland and Burgess and Akers) and the prototype willingness model (Walrave et al) into the reason and reaction model, to provide a more integrated explanation of adolescent sexting from a gendered perspective.

**Figure 1: Gendered Reason and Reaction Model of Sexting Behaviour**



The Gendered Reason and Reaction Model attempts to explain the possible pathways of cognition, which could lead to sexting behaviour. In this way, it takes into account both the reasoned pathway as well as the social reaction pathway. The reasoned pathway posits that decisions are made based on rational thought and a cost/benefit analysis (Cummings & Corney, 1987: 190; Walrave et al, 2015: 7), which takes place within the individual. In addition, it considers intentions and personal attitudes, as well as if the behaviour constitutes a subjective norm in a decision to engage in a certain behaviour or not (Fishbein, 1979: np; Walrave et al, 2015: 8). There is a noticeable variance in the subjective norms in relation to gendered experiences of sexual behaviours such as sexting. This sexual double standard suggests that males are socially rewarded for increased sexual experiences, whereas females are penalised for engaging in similar behaviours (Lippman & Campbell, 2014: 374).

The social reaction pathway assumes that there is an intuitive and spontaneous element associated with decision-making (Walrave et al, 2015: 7), and may be based on the reaction of the peer group. These two pathways allow for the various elements of *cognition* to be taken into account when reviewing decision-making. Research on adolescent brain development highlights increased emotional processing capacity in females rather than males, which may well have an impact on decision-making; female adolescents also display higher cognitive measures of inhibitory control compared to their male counterparts (Yurgelun-Todd, 2007: 252-253; 255).

In Rotter's (1954: 240) adaptation of the social learning theory, it was posited that an individual's decision to engage in a specific behaviour can be determined by the individual's expectancy about the outcome of the behaviour, as well as the value placed on that outcome. If an individual believes the act to be justified or has a positive expectancy, it would result in *favourable attitudes* (Van Ouytsel et al, 2017: 288; Williams, 2012: 281). Previous work by the authors demonstrates a positive sexting expectancy for males (i.e. sexy, confident, excited, admired and wanted), but not for females (i.e. disgusted, turned off, awkward, insulted and embarrassed) (Harris & Steyn, 2018: 23). Favourable attitudes are informed by the reasoned pathway, as well as the associations the person has and whether or not they identify with those *associations or peers*. Sutherland outlined nine propositions in his theory of differential association, and it is the third proposition, which states that the learning of criminal behaviour occurs within close personal groups. The sixth proposition refers to favourable definitions in terms of violating the law (Sutherland & Cressey, 1970: 75-76). Thus, associations with peers who engage in certain behaviour would influence an individual and favourable definitions would impact on an individual's attitudes. More specifically, higher correlates of risk-taking behaviour are associated with alignment to their peer group for male adolescents. Conversely, the risk-taking behaviour of female adolescents is more strongly influenced with parental relationships (Michael & Ben-Zur, 2007: 17).

Furthermore, favourable attitudes about behaviour would inform the *prototype* of the typical person who engages in such behaviour as well as be informed by the prototype. If someone associates with others who engage in deviant behaviour, they are more likely to identify with those peers and hold similar attitudes towards the behaviour in which the peer group engages (Van Ouytsel et al, 2017: 288). Associations and prototypes thus speak to, and reinforce, each other. If the prototype is a favourable one, then combined with associations and favourable attitudes, an individual is likely to display a greater *willingness* to engage in certain behaviour (Walrave et al, 2015: 9). The chance of actually engaging in an at-risk behaviour is higher if an individual shows a willingness to do so (Gerrard, Gibbons, Stock, Vande Lune & Cleveland, 2005: 306). It is anticipated that higher positive expectancy of sexting behaviour would correlate with an increased willingness to engage in the behaviour (Harris & Steyn, 2018: 21). From a willingness to engage comes the element of imitation in that adolescents, if they experience greater exposure to the deviant behaviour, are more likely to imitate it (Van



Ouytsel et al, 2017: 288). Bandura postulates that cognition serves as a guide for action and that individuals develop the ability to envision the likely outcomes of a particular behaviour (Bandura, 1997: 35,116). In turn, the behaviour occurs. Differential reinforcement introduces the idea that individuals evaluate their own behaviour through interactions with significant others or groups (Akers, Krohn, Lanza-Kaduce & Radosevich, 1979: 638). Bandura (1969: 118) further states that learning comes from actively *imitating* others' behaviour. In the case of adolescents, the peer group is the primary group which is imitated and plays a significant role in the sources and control of *reinforcement* as well as favourable definitions or attitudes towards a specific behaviour. Dependent on the reaction to the behaviour – positive or negative – the behaviour will impact the attitudes and associations of the individual. There is evidence that the feedback filter linked to reinforcement is more resistant to change in males than females (Ding, Wong, Zou, Song, Xiao, Huang & Li, 2017: 16). The behaviour will then either re-occur or cease. The authors fully acknowledge that the Gendered Reason and Reaction Model proposed here represents preliminary theorising in an attempt to accommodate the numerous factors and processes that influence sexting behaviour.

## METHODS

The present article stems from a broader mixed methods study, more specifically the quantitative leg, which aims to develop a policy for secondary schools on how to prevent and address sexting among learners. A descriptive research purpose was followed in order to present the gendered opinions of learners regarding, amongst others, sexting behaviour, internet use and the consequences of sexting. A self-administered survey design was deemed appropriate as the strategy enhances honesty in responses, especially when dealing with sensitive matters such as the sexting behaviour of minors. In addition, the strategy reduces interviewer error, is more cost-effective and can be completed in a short space of time (Maree & Pietersen, 2016: 176).

The sampling strategy amounted to the purposive selection of four co-educational and two single-sex secondary schools in Gauteng. The inclusion criteria were outlined in the explanatory statement prior to the survey, and the purpose of the survey was explained during school assembly. Criteria for inclusion in the study entailed similar access to internet and mobile phone technologies, multi-cultural/racial and English as the language of tuition. The four schools could yield a potential 1 000 respondents. For various reasons, a much smaller sample (n=83) resulted from one co-educational and one single-sex school only. Firstly, although they initially agreed to participate in the survey, the management of two schools withdrew willingness to participate in the survey, at a very late stage, due to the sexual nature of the topic, and, allegedly, time constraints of the school calendar. Secondly, many learners did not take the letters of informed consent home for their parents to sign, possibly due to fear that the letter might arouse suspicion by their parents about their online activities, such as viewing pornographic material and sexting. The sampling process was most frustrating and disappointing, and future researchers should take note of the challenges associated with gathering data on sex-related topics among school-going youth.

As for the data gathering process, consent forms were distributed two weeks prior to the scheduled surveys. On the day of data collection, assent forms were handed out to respondents who had secured parental consent. These forms were collected before respondents completed the self-administered questionnaire. Respondents were gathered into one venue and sufficient space was ensured between them so that they could not discuss the questions or look at each other's answers. The survey took 45 minutes and upon completion, respondents were asked to double fold their questionnaires to ensure anonymity during the collection of the questionnaires. The first author was present during the surveys and clarified the questions that a few respondents had.

The sexting behaviour scale (SBS) was developed by Dir, Coskunpinar and Cyders (2011a) to assess the prevalence and frequency of sexting in terms of sending, receiving, forwarding or sharing sexts. The SBS also measures the use of social media platforms to exchange sexts or to post sexually suggestive or explicit content online (Dir, 2012: 30). An adapted version of the SBS was included in the questionnaire to obtain numeric data on adolescents' sexting behaviour and perceptions toward sexting. The questions on teenagers' opinions and views about sexting stem from a survey by Goodson, McCormick and Evans (2000: 129), which aims to gauge adolescents' attitudes towards the use of the internet in order to obtain sex-related information, to establish relationships and for arousal purposes. The section of the questionnaire, which explored the regulation of sexting originated from the same study. It was included to aid in the development of a draft sexting policy for schools. The statements in the scale, relating to specific opinions regarding sexting, were developed by the authors in order to assess gendered attitudes and perceptions towards sexting. In terms of the internal reliability of the two scales, the SBS yielded a Cronbach's alpha coefficient of 0.935 and the Internet Use and Sexting Opinions Scale an alpha coefficient of 0.891, thus well above the minimum expected level of 0.7 (Tavakol & Duggan, 2011: 54).

The data was manually coded and captured in MS Word Excel and exported to the Statistical Package for the Social Sciences (IBM Corp, 2017: np). Considering the smaller than anticipated number of completed questionnaires (83 as opposed to roughly 1 000), the n-values per response category were at times very low and the researchers opted for a data reduction strategy to draw more meaningful comparisons between the sexting behaviour and sexting opinions of female and male learners. Therefore, the variables of both scales were recoded into new variables. For the Sexting Behaviour Scale, "Never" was recoded as "No" and the remaining categories (Rarely, Occasionally, Often and Frequently) were recoded as "Yes", since they all imply that the respondent has in the past presented or engaged in such behaviour, regardless of the frequency of that behaviour. With the Opinions Scale, "Strongly agree" and "Agree" were recoded together to only "Agree" and similarly "Strongly disagree" and "Disagree" were recoded into "Disagree". A visual inspection of normality curves and both the Kolmogorov-Smirnoff and the Shapiro-Wilk tests ( $p < 0.05$ ) showed that the data was not normally distributed. Also, a non-probability sampling approach was followed to address the limitations associated with random samples amongst adolescent populations. Moreover, a non-random strategy was opted for in anticipation of non-consent by parents due to the nature of the study. These realities dictate that non-parametric measures had to be used to determine any statistically significant differences between female and male respondents' sexting behaviour and opinions about sexting. Following the data reduction process, the SBS data was analysed using Pearson's chi-square or Fisher's exact test (depending on the number of responses per category), while the Mann-Whitney  $U$  test was used to compare gender differences on the Opinions Scale. Effect sizes ( $r$ ) were calculated whenever a statistically meaningful gender difference featured in order to indicate any practical significance of such results (Pietersen & Maree, 2016: 233). The results are presented in table-format; those of the Opinions Scale, due to its length (56 items), are clustered around particular themes.

Due regard was paid to responsible research practice throughout the study, in particular, obtaining parental consent and learners' assent to complete the questionnaire. Participation was voluntary and both anonymity and confidentiality prevailed. The questions did not present any physical or mental harm, although the first author arranged with the schools' counsellors to be available in case debriefing was necessary. The researchers obtained ethical clearance to conduct the survey from the Ethics Committee of the Faculty of Humanities, University of Pretoria.

## RESULTS

### Background characteristics

The average age of respondents was 14.74 years with a standard deviation of 1.40 years. Three respondents did not specify their sex, with the remaining 80 equally divided between male and female learners (n=40; 50% respectively). Nearly a third of respondents (n=26; 31.3%) were in Grade 8 and Grade 9 respectively, followed by 18.1% (n=15) in Grade 10, 12% (n=10) in Grade 11 and 7.2% in Grade 12. More than two-thirds of respondents (n=64; 77.1%) indicated their home language to be English, with the remainder (n=19; 22.9%) spread across nine local and foreign languages. Nearly two-thirds of respondents (n=60; 73.2%) were White, followed by Black (n=17; 20.7%), Indian/Asian (n=3; 3.7%) and Coloured (n=2; 2.4%) respondents. The greater proportion of respondents (n=53; 63.9%) considered themselves to come from middle-income households and slightly more than a third (n=30; 36.1%) from high-income households.

### Sexting Behaviour Scale

Nearly half of female respondents (n=19; 47.5%) have received a written sext and nearly a third (n=12; 30.8%) have responded to a written sext (Table 1). More than half of the male respondents (n=21; 52.5) have responded to a written sext. Compared to their female counterparts, male respondents were significantly more likely to have sent a written sext and to have had a sext shared with them when they were not the intended recipients. One in eight female respondents (n=5; 12.5%) has posted a nude/semi-nude photo/video of herself on a social media platform.

**Table 1: Sexting behaviour (results relate to “yes” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<i>n</i>	%	<i>n</i>	%		
I have received a:						
Written sext	19	47.5	25	62.5	0.178	-
Nude/semi-nude media picture	17	42.5	22	55	0.263	-
Nude/semi-nude photo/video of friend/acquaintance	12	30	19	47.5	0.108	-
I have responded to:						
Written sext	12	30.8	21	52.5	0.050	-
Nude/semi-nude picture/photo/video	8	20.5	13	33.5	0.202	-
I have forwarded a:						
Written sext	9	22.5	8	20	0.785	-
Nude/semi-nude picture/photo/video	5	12.5	5	12.5	1.000	-
I have sent a:						
Written sext	7	18.4	19	47.5	0.006**	-0.30
Nude/semi-nude media picture	9	22.5	11	28.2	0.560	-
Nude/semi-nude photo/video of myself	6	15	7	17.9	0.724	-
Someone shared a sext with me when I was not the intended recipient	8	21.1	16	42.1	0.048*	-0.22
Someone responded to a written sext I sent	10	25	16	41	0.130	-
Someone responded to a nude/semi-nude picture/photo/video sent by me	6	15	11	28.2	0.153	-
I posted a nude/semi-nude media picture on BBM, WhatsApp, Snapchat or Facebook	3	7.5	4	10	0.692	-
I posted a nude/semi-nude photo/video of myself on BBM, WhatsApp, Snapchat or Facebook	5	12.5	3	7.5	0.456	-

\* *p* <0.05; \*\* *p* <0.01

**Internet use and sexting opinions scale**

Respondents were asked specific questions as to why they use the internet (Table 2). One in four male respondents (n=10; 25%) agreed to using the internet to learn about sex-related topics and nearly half (n=19; 47.5%) have used the internet to flirt with someone.

**Table 2: Reasons for using the internet (results relate to “agree” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>		
To learn about sex-related topics	2	5	10	25.6	0.091	-
To learn about sex-related topics because I can remain anonymous	4	10	10	25	0.016*	-0.27
It is OK to use the internet to:						
Meet new people	9	23.1	13	32.5	0.415	-
Develop meaningful relationships	3	7.5	7	17.5	0.022*	-0.26
Meet a romantic partner	2	5	6	15	0.121	-
I have flirted with someone over the internet	11	27.5	19	47.5	0.159	-
Someone has flirted with me over the internet	18	45	22	55	0.494	-
* <i>p</i> < 0.05						

In general, male respondents presented more positive sentiments toward sexting compared to their female counterparts (Table 3). Male respondents were significantly more likely to agree with the statement that sexting is used as a way to fulfil fantasies.

**Table 3: Sentiments toward sexting (results relate to “agree” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>		
Sexting is used as a way to fulfil fantasies	15	37.5	24	61.5	0.033*	-0.24
Sexting satisfies curiosity about sex	12	31.6	17	42.5	0.091	-
Sexting is an expression that poses no physical risk	4	10.3	10	25	0.716	-
Sexting is an expression that poses no emotional risk	3	7.7	1	2.5	0.517	-
Sexting increases the older you are	7	17.5	11	27.5	0.156	-
Sexting increases the more sexually experienced you are	9	23.7	20	50	0.002**	-0.35
* <i>p</i> < 0.05; ** <i>p</i> < 0.01						

The majority of male (n=35; 87.5%) and female (n=29; 72.5%) respondents agreed that both boys and girls sext (Table 4). Male respondents were significantly more likely to agree that it is in order for girls to send sexts, although nearly half of female respondents (n=18; 45%) agreed that girls who send sexts are sluts. Interestingly, none of the respondents agreed with the statement that sexting is okay when one cannot see the face of the sender.

**Table 4: Gendered perceptions about sexting (results relate to “agree” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<i>n</i>	%	<i>n</i>	%		
Teenagers often sext	26	65	27	69.2	0.731	-
Boys tend to sext more than girls	14	35	13	32.5	0.220	-
Both boys and girls sext	29	72.5	35	87.5	0.089	-
Girls send more sexts than boys	9	23.7	9	23.7	0.737	-
It is OK for girls to send sexts	3	7.7	12	30	0.033	-0.24
Girls who send sexts are sluts	18	45	14	37.8	0.530	-
It is OK for your boyfriend to ask for a sext of you	5	12.5	12	30	0.012	-0.28
It is OK for your girlfriend to ask for a sext of you	5	12.5	12	30	0.004	-0.32
Sexting is OK if you cannot see the face of the sender	0	0	0	0	0.503	-

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Seen broadly, respondents generally agreed that sexting can have negative consequences (Table 5). The greater part agreed that sexting can lead to risky/inappropriate sexual behaviour, sexually unhealthy behaviour in adolescence and bullying. Female respondents were significantly more likely to agree with the statement that sexting makes them feel unhappy with their bodies.

**Table 5: Negative consequences of sexting (results relate to “agree” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<i>n</i>	%	<i>n</i>	%		
Sexting can lead to other risky behaviour such as alcohol or substance abuse	21	53.8	14	36.8	0.188	-
Sexting can lead to risky/inappropriate sexual behaviour	23	57.5	29	72.5	0.163	-
Sexting can lead to sexual violence	23	57.5	18	45	0.294	-
Sexting is a sexually problematic behaviour in adolescence	17	47.2	28	70	0.150	-
Sexting is sexually unhealthy behaviour in adolescence	21	55.3	22	56.4	0.561	-
Sexting can lead to bullying	30	75	31	77.5	0.907	
Sexting makes me feel unhappy with my body	23	60.5	8	20.5	0.003*	-0.34
I know someone who has been harassed by sexting	13	33.3	10	25	0.591	-

\*  $p < 0.01$

Very few respondents agreed with the statement that it would be okay if their parents found out they were sexting (Table 6). One in five female respondents ( $n=8$ ; 20.5%) felt that teenagers should have access to sexually explicit material and a third of male respondents ( $n=13$ ; 32.5%) agreed that sexting is normal sexual experimentation. Male respondents were significantly more likely to agree that sexting builds/maintains romantic relationships and that sexting is a form of intimate communication.

**Table 6: Opinions about sexting (results relate to “agree” answers)**

	Female		Male		<i>p</i>	<i>r</i>
	<i>n</i>	%	<i>n</i>	%		
It would be OK if my parents found out I sext	2	5	0	0	0.286	-
It would be OK for my parents to check my phone	20	50	24	61.5	0.337	-
Teenagers should be able to sext/have access to sexually explicit material	8	20.5	7	17.9	0.542	-
Sexting is a mutual expression of sexual desire	16	40	14	35	0.713	-
Sexting is normal sexual experimentation	11	27.5	13	32.5	0.214	-
Sexting builds/maintains romantic relationships	2	5	10	26.3	0.010*	-0.29
Sexting is a form of intimate communication	6	16.2	19	48.7	0.003**	-0.34
Sexting is part of teenage development	7	17.9	11	27.5	0.196	-
The media over-reacts about teenage sexting	7	17.9	8	20	0.728	-
I would like to know more about sexting	8	21.1	9	22.5	0.434	-
I know someone who sexts	23	59	24	60	0.857	-

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Nine questions were posed to respondents who have engaged in sexting regarding the reasons they sext (Table 7). More than a third of respondents ( $n=33$ ; 39.8%), of whom were 19 (47.5%) were male and 14 (35%) were female, completed the questions. Since no gender differences featured, global responses are presented. One in four respondents ( $n=13$ ; 39.4%) stated that they enjoy sexting and nearly a third of respondents ( $n=10$ ; 30.3%) were asked to sext.

**Table 7: Reasons for sexting**

	<i>n</i>	%
I enjoy it	13	39.4
I trust my partner	12	36.4
It is easier than face-to-face contact	10	30.3
I was asked to	10	30.3
I am in a committed relationship	10	30.3
Even though I know it is wrong	10	30.3
All my friends do it too	6	18.2
I am insecure/shy	6	18.2
To be popular	1	3.3

Respondents were asked to share their views on the regulation of sexting (Table 9). No gender differences prevailed hence the total number of responses is presented below. Less than half of respondents ( $n=34$ ; 46.6%) agreed that government should regulate sexually explicit material on the internet. Slightly more than a third of respondents ( $n=29$ ; 36.7%) agreed that sexting is against the law.

**Table 9: Regulating sexting (results relate to “agree” answers)**

	n	%
Government should regulate sexually explicit material on the internet	34	46.6
Government should regulate the age at which sexually explicit material can be viewed	47	58.8
Schools should ban all sexually explicit material	45	57
The media should be censored	35	44.9
Parents/schools/government overreact to sexting	18	22.8
Sexting is against the law	29	36.7

## DISCUSSION

The purpose of the study was to generate local insights into adolescents' gender differences in both sexting behaviour and their opinions regarding sexting. While the authors acknowledge that the limited number of respondents negatively impacts on the generalisability of the results, the study still provides noteworthy insights into adolescent sexting behaviour and their personal views surrounding the practice. Overall, the survey shows some gender differences, which are supported by literature.

Very few of the surveyed adolescents were in committed relationships (7.2%) and yet a greater proportion engaged in sexting, which suggests that adolescent sexting is not necessarily about forging intimate relationships or even introducing intimacy into a current romantic relationship, but rather that sexting should be linked to adolescent development and sexual curiosity during this life phase (Feldman & Middleman, 2002: 489). The current study is inconclusive in terms of gendered reasoning for sexting, but it is evident that some girls do engage in sexting. García-Gómez (2017: 396, 399) offers the narrative that girls may engage in sexting outside of relationships in order to enhance their self-esteem by taking control of their own sexuality and femininity. Girls, therefore, sext because they claim mutual ground with other girls, where sexting is seen as a common practice, which highlights the importance of the peer group in sexting and because they feel liberated and sexually comfortable to do so.

Viewed broadly, the survey agrees with existing evidence (Johnson et al, 2014; Patchin & Hinduja, 2011) that boys engage more in general sexting behaviour than girls. More male than female respondents reported having received and responded to sexts, which suggests that female respondents might have underreported their incidence of sending sexts since boys must receive sexts from somewhere. In fact, several studies (AP-MTV, 2009; Cox Communications, 2009; Mitchell et al, 2012) show that girls are more likely to send sexts possibly because they feel flattered when asked to despite them running the risk of being “slut-shamed” for doing so. The explanation is supported by the finding that 30.8 percent of the surveyed female adolescents reported sending a sext because someone had asked them to, which, in part, speaks to the view that sexting has become a new way of expressing feminine desirability (Ringrose et al, 2013: 7). Also, girls more readily find justifications for their sexting behaviour compared to their male counterparts (García-Gómez, 2017: 400). The argument further links to the proposition that sexting is an expression of female sexual awareness and liberation. While female respondents in the present study did not necessarily describe such freedom or awareness, sexting may be used in an attempt to be more liberated and in control of their femininity and sexuality, in other words, they attempt to move sexting from the realm of exploitation into the realm of emancipation.

Notably, male respondents (42.1%) were significantly more likely than female respondents (21.1%) to have had a sext shared with them even though they were not the intended recipients ( $r = -0.22$ ). Research refers to boys using sexts as a “popularity currency”

(Owens, 2017: 9; Walrave et al, 2015: 2). They share pictures sent to them as a way of demonstrating their capacity to belong (McGraw, 2013: 115) and thus indicate their status and popularity within the peer group. Boys (30%) in the present sample were significantly more likely than girls (7.7%) to believe that it is not problematic for girls to send sexts ( $r = -0.24$ ), which possibly counters the argument of a sexual double standard, thereby introducing the notion that girls respond to a perceived sexual double standard, but not necessarily boys. While the survey revealed low percentages for both genders in terms of acknowledging posting a nude or semi-nude photo of themselves, the fact remains that some adolescents engage in the practice. Definitional issues can also not be ignored since different individuals may construe certain photos as sexually explicit and others may not.

Most adolescents indicated that they do not want their parents to know about their sexting activities and that they make use of acronyms such as POS (parent over shoulder) and KPC (keeping parents clueless) in order to exclude their parents from their conversations (*cf.* <https://www.ihatethemedia.com/99-texting-acronyms-parents-should-know>). The finding is salient, in that it could explain the under-participation of learners in the survey, since they did not want to ask for parental consent and, as such, alert their parents to behaviour they may not have known about otherwise. Speculatively, the presence of the “Ostrich Syndrome” and not believing that adolescent sexting is a local phenomenon may be a result of a generation gap regarding technology abilities. This “head-in-the-sand” approach may have further resulted in the reluctance of some schools to participate in the study.

The survey indicates that some respondents use the internet to learn about sex and sex-related matters, which is understandable given their developmental stage and the curiosity around sex during adolescence (Feldman & Middleman, 2002: 489). The finding supports studies (Jones & Fox, 2009; Peter & Valkenburg, 2006) done on adolescent internet usage internationally. However, a significant difference was revealed in terms of the importance of anonymity. Boys (25%) appear to value the anonymity afforded by the internet more than girls (10%) do ( $r = -0.27$ ). A tentative assumption is that boys do not openly communicate about sexual matters with parents or their peers for fear of embarrassment or ridicule, or because they ascribe to the notion that they *should* be sexually knowledgeable and experienced. In addition, there is a significant difference present in male (17.5%) versus female (7.5%) ( $r = -0.26$ ) adolescents’ opinions that the internet is a good avenue to develop meaningful relationships. Another significant finding was that boys (26.3%) in comparison to girls (5%) ( $r = -0.29$ ) feel sexting can build or maintain relationships and 48.7 percent of boys versus 16.2 percent of girls ( $r = -0.34$ ) percent see sexting as a form of intimate communication. These findings show a potential distortion of perception for some adolescent boys in terms of what constitutes intimacy and a valuable relationship, but moreover the possibility of enjoying an online reality more than an actual one. In fact, boys present more online gaming addiction and alternative digital realities compared to girls (Gross, 2004: 634; Van Bavel, 2016: 15). Much of the time that adolescents spend on the internet is devoted to social communication and interactions (Mishna, McLuckie & Saini, 2009: 107). The amount of time spent on the internet in an “alternative reality” could heighten distorted perceptions of actual social communication or interactions – a worrying notion in terms of future relationships and adolescents’ expectations thereof.

Nearly two thirds of the boys (61.5%) in the current sample engaged in online flirting and sexting in order to fulfil sexual fantasies. The finding proved to be significantly ( $r = -0.24$ ) different for female participants (37.5%) and could possibly be linked to the result that boys send more sexts and they may ask for, or even expect, a photo sext in return. The results speak to boys feeling that it is acceptable to both ask and be asked for a sext within a relationship, but, considering most of the respondents reported not being in a relationship, that this is simply hypothetical. Interestingly, there was a significant ( $r = -0.35$ ) difference in the finding that boys



(50%) as opposed to girls (23.7%) feel sexting increases as sexual experience increases, which concurs with evidence that adolescents use sexting to gain sexual experience (Lenhart, 2009: np; McGraw, 2013: 22). The postulation is then that boys still value actual sexual experience and believe such experience to be important before initiating or engaging in online sex.

Approximately two thirds of the overall sample reported that adolescents often sext, thus confirming that sexting is a part of their everyday lives (García-Gómez, 2017: 392; Ringrose et al, 2013: 15; Strassberg et al, 2012: np). As mentioned, the present study does not dispute the contradictory findings of existing evidence in terms of gendered differences in the prevalence of sexting. However, one in three boys in the survey placed more importance on sexting and sees it as essential to adolescent development in comparison to female participants. A gender-neutral finding was that 60 percent of the sample knew an adolescent who sexts, even if they did not report sexting themselves, which again confirms the reality of adolescent sexting. A third of those respondents who acknowledged that they engage in sexting admitted doing so even though they believe the behaviour to be wrong. Roughly one in four adolescents surveyed stated that sexting is part of sexual experimentation, which may well point to sexting becoming normalised adolescent behaviour and it accentuates the leap in thinking about adolescent development in previous generations, in comparison to the present-day technological era.

Both male and female adolescents reported being aware of the negative consequences of sexting. Three quarters of the sample cited cyberbullying as the most common negative consequence associated with sexting, a finding supported by existing evidence (Klettke et al, 2014: 45; Van Ouytsel et al, 2017: 287). Therefore, some adolescents are not oblivious to the consequences of sexting. This type of information can direct schools, communities and policy makers in addressing sexting in an efficient and effective manner. Furthermore, the results show that girls experience higher sexting anxiety in relation to body image, and the literature confirms that girls experience more negative consequences than boys do (Cooper et al, 2016: 712-713; Owens, 2017: 5). The survey found that one in four girls knew of someone who had been harassed as a result of sexting and girls also appear to be more afraid of sexual violence. Again, the question must be asked why girls engage in the practice of sexting when they are both aware of the consequences and potentially live to experience them first-hand. Lastly, as much as the surveyed adolescents reported certain positive sentiments towards sexting and engaging in sexting practices, approximately half of the respondents support government and school regulation regarding sexually explicit material, a finding which bodes well for the implementation of a school sexting policy.

## **THEORETICAL APPLICATION**

As indicated in the theoretical literature section of the paper, the authors recognise that the Gendered Reason and Reaction Model is a tentative attempt at explaining adolescent sexting behaviour and fully acknowledge that the Model may not encapsulate all variables involved in the phenomenon. In the Gendered Reason and Reaction Model, both the individual reasoned pathway and the social reaction pathway are taken into account when attempting to explain the cognitive process behind adolescent sexting. There is a sexting “double standard”, which could account for the different subjective norms to which boys and girls ascribe. It may be that boys and girls follow different decision-making strategies due to the variance in their emotional processing capacity and inhibitory control and, as such, the individual reasoned pathway and the social reaction pathway would differ. If an adolescent has a positive perceived expectancy towards the outcome of sexting, then the chances increase that that adolescent will engage in the behaviour. The claim is supported by the finding that one in three adolescents who reported engaging in sexting do so because they enjoy it. It would appear that boys experience more positive expectancies regarding sexting outcomes and thus there is the potential that they would

engage more in sexting behaviour. Similarly, nearly half of respondents stated that sexting fulfils sexual fantasies and a third noted that sexting satisfies adolescents' curiosity about sex. The positive expected outcome would result in the adolescent having favourable attitudes towards the behaviour from a personal standpoint, but could be further strengthened by associating with peers who sext. In this regard, the survey shows that a third of respondents who sext do so because they were asked to, therefore, they are associating with adolescents who sext and are close enough to them to have exchanged personal information, such as mobile phone numbers. Furthermore, 60 percent of the sample reported knowing someone who sexts. Considering the relatively private domain of sexting, if an adolescent knows of someone engaging in the behaviour, then they are probably acquaintances, if not friends. The influence of peers in sexting behaviour is further supported by the finding that nearly a third of respondents had a sext shared with them when they were not the intended recipient. Again, the sexual "double standard" present in adolescent sexting may influence more favourable attitudes displayed in boys. Moreover, boys tend to display higher risk-taking behaviour, which stems from their peer relationships, whereas female adolescent risk-taking behaviour appears to correlate with negative parental relationships.

The Model continues that if no negative outcomes are perceived, then the attitudes become more favourable, as does the expected outcome. Interestingly, adolescents in the study were aware of the negative consequences of sexting and yet still chose to engage in the behaviour. The finding then questions the role of the perceived outcome in the Gendered Reason and Reaction Model, which requires further exploration. Adolescents may learn from each other what is "acceptable" in terms of sexting, and importantly, because many of them either do not recognise the illegality of adolescent sexting, or do not believe it should be illegal, they may not feel as though they are breaking the law. Again, association with a peer group that holds the same values and opinions surrounding sexting would impact favourable attitudes directly. Approximately half of the surveyed adolescents believe that sexually explicit material should be regulated by the government, which speaks to the illegality of sexting, but it is unclear whether these adolescents were referring to pornography itself or whether they were including adolescent sexting within the scope of sexually explicit material. While no specific gender differences were noted in the survey, further research may indicate that girls are more likely to express positive sentiments towards government and school regulation, which speaks to the subjective norms as well as the individual reasoned pathway and the gendered difference perceived in adolescent sexting.

Positive perceptions, in turn, speak to a positive prototype or mental image of someone who sexts and the result would be an identification with that individual, a willingness to engage in sexting and a possible desire to emulate the behaviour they condone (i.e. sexting). This is supported from the standpoint of the current study in which adolescents did not appear to experience "slut-shaming" to the same degree as their international counterparts (*cf.* Ringrose et al, 2013). Slightly more than a third of the international respondents – and more so female respondents – referred to those who sext as "sluts" or "skets". Therefore, the adolescents surveyed here do not appear to offer the same negative prototype compared to adolescents surveyed elsewhere. These associations and prototypes reinforce each other continuously until something happens, which would change the perception of the prototype or the associations kept. With sexting, if an adolescent was to experience something negative such as bullying or be a victim of revenge porn, then the prototype, associations and attitudes towards sexting would change through the process of negative reinforcement. It may be that girls are more likely to be victims of revenge porn and, therefore, negative reinforcement would be stronger and they would be less likely to engage in the behaviour. Moreover, girls appear to be more sensitive to reinforcement, and thus, their prototypes, associations and attitudes could change more readily. Applying the Gendered Reason and Reaction Model to adolescent sexting allows

for a more comprehensive understanding of the issue at hand, which provides for policy makers to gain insight into the motives behind and the consequences of adolescent sexting, thus innovating prevention and intervention practices.

### **RECOMMENDATIONS**

Recommendations from the present study amount to the need for a comprehensive definition of sexting, in order to avoid misunderstandings in terms of what is considered sexting from both a policy making perspective, but equally important, from an adolescent perspective. Many adolescents consider sexting to be normalised sexual experimentation in a technological age, which needs to be taken into account by schools, communities and policy makers. Perhaps it is not so much a case of trying to prevent adolescent sexting, but rather to adapt prevention measures to the reality of the behaviour and to minimise the negative consequences associated with the behaviour, by providing sound education and support for adolescents to make informed decisions. Also, it is apparent that the typical profile of male and female sexters differ, which should be taken into account when drafting school policies regarding sexting.

### **LIMITATIONS AND FUTURE RESEARCH**

The limitations associated with the present investigation are inherently tethered to the research methods followed and the challenges experienced in securing the active participation of a large number of adolescents on a topic, which they evidently did not wish their parents or school authorities to know about. Despite the researchers having followed an acceptable and methodologically authentic sampling strategy, very few learners volunteered to participate in the survey, which constrains the generalisability of the results and conclusions. It was equally alarming that some schools refused to accommodate the survey despite strong motivations that sexting is a reality that affects learners under their care. Further, the researchers acknowledge the shortfalls tied to self-report research, particularly so on sensitive matters such as sex and sexuality, which generally results in underreporting (Langhaug, Sherr & Cowan, 2010: 2).

Future research should focus on the relationship between adolescent sexting and actual sexual behaviour, teenagers' motivations for sexting and the different online platforms that facilitate sexting, as well as the role of peers in shaping online sexting activities. The observation that sexting may well become a normalised part of adolescent sexual development in a digital world deserves particular research attention. Finally, the present survey was conducted at two private schools and should be extended to public schools where learners might, due to socioeconomic disparities, not have access to the internet via the latest, cutting edge online mobile technologies.

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### **ENDNOTES**

1. Texting language meaning: "*Thanks for the intense text sext ☺ Get naked on camera later?*".

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