

# The relevance of technology to the nature, prevalence and impact of Adolescent Dating Violence and Abuse: A research synthesis

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**Author post-print (accepted) deposited in CURVE August 2014**

**Original citation & hyperlink:**

Stonard, K. , Bowen, E. , Lawrence, T. and Price, S.A. (2014) The relevance of technology to the nature, prevalence and impact of Adolescent Dating Violence and Abuse: A research synthesis. *Aggression and Violent Behavior*, volume 19 (4): 390–417.

<http://dx.doi.org/10.1016/j.avb.2014.06.005>

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The Relevance of Technology to the Nature, Prevalence and Impact of Adolescent  
Dating Violence and Abuse: A Research Synthesis

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### Abstract

While an established literature has documented the nature and prevalence of traditional forms of Adolescent Dating Violence and Abuse (ADVA), less research has investigated the relevance of Electronic Communication Technology (ECT) such as mobile phones and communication tools via the Internet to ADVA and to psychological/emotional abuse and monitoring or controlling behaviors in particular. This paper reviews the literature on the nature, prevalence and impact of ADVA and what will be termed Technology Assisted Adolescent Dating Violence and Abuse (TAADVA). The review revealed a broad range of prevalence estimates for physical, psychological/emotional, and sexual dating violence in addition to abuse experienced or performed via ECT. Inconsistencies in prevalence reports are likely to be due to the various measures and methods used to investigate this phenomenon, however; this leads to difficulties when attempting to make accurate comparisons and generalizations. Limited research was found to have explored the impact of TAADVA compared to that of traditional ADVA. Nevertheless, ADVA and TAADVA were prevalent in a substantial number of adolescent romantic relationships in these studies. It is suggested that ECT provides a new avenue for ADVA rather than representing a new, unique form of abuse. Further research is needed to explore the nature, prevalence, and impact of ECT use for both abusive and non-abusive purposes within adolescent dating relationships, in addition to whether this creates new victims or perpetrators of such abuse. Implications of the findings of the review are discussed.

*Keywords:* Adolescent; Dating Violence and Abuse; Technology; Media; Prevalence;

Impact

The Relevance of Technology to the Nature, Prevalence and Impact of Adolescent  
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The term 'adolescence' has been defined as consisting of three developmental periods: early adolescence (typically ages 10–13), middle adolescence (ages 14–17), and late adolescence (age 18 until the early twenties) (Smetana, Campione-Barr, & Metzger, 2006). During this developmental period of maturation, romantic relationships become increasingly central to the social life of most teenage youth through which adolescents seek to form a sense of both their self-identity and sexuality (Furman & Shaffer, 2003; Sorensen, 2007; Connolly & McIsaac, 2011). Research suggests that most adolescents begin initiating romantic relationships during early adolescence, which gradually progress from fewer, short, casual, and potentially frequent dating relationships, to more steady ones, or to a single steady relationship that becomes more dyadic as partners become more emotionally and sexually involved (Collins, 2003; Connolly, Craig, Goldberg, & Pepler, 2004; Connolly & McIsaac, 2011; Davies & Windle, 2000; Furman & Shaffer, 2003; Meier & Allen, 2009; Shulman & Scharf, 2000). International evidence from both the United Kingdom (UK) and the United States (US) has reported the prevalence of adolescent involvement in dating activities. In the UK, between 83-88% of adolescents aged between 12-17 years old report that they have had at least one romantic relationship experience with a boyfriend or girlfriend (Barter, McCarry, Berridge & Evans, 2009; Fox, Corr, Gadd & Butler 2013; Schütt, 2006). Researchers in the US have found that around 50% of adolescents aged 11-12 report having a boyfriend or girlfriend in the

past three months (Miller, Gorman-Smith, Sullivan, Orpinas, & Simon 2009; Simon, Miller, Gorman-Smith, Orpinas, & Sullivan, 2010). This percentage increases with regards to a slightly older sample of young people with 72% of adolescents aged between 13 and 16 years reporting that they are dating or have experience with dating (Eaton et al., 2010). It is clear from these statistics that a significant number of adolescents are involved in romantic relationships and dating activities, which appear to become increasing prevalent as young people move through this developmental period of maturation.

Following surveys and interviews with adolescents, researchers have reported a range of dating activities, both non-sexual and sexual, that take place both in and outside of school (Carlson & Rose, 2012; Connolly et al., 2004; Fredland et al., 2005; Manning, Giordano, & Longmore, 2006; Waylen, Ness, McGovern, Wolke, & Low, 2010). These studies have highlighted the importance and progression of dating activities among adolescents both within group and personal settings, and in the exploration of sexually intimate behaviors from the early stages of adolescence. Involvement in dating activities during the adolescent time of relationship exploration may however, have both positive and negative outcomes. Adolescent romantic relationships have been reported to be an integral part of the social scaffolding on which young-adult romantic relationships rest (Meier & Allen, 2009). Romantic partners can also be a major source of emotional support for adolescents in addition to such relationships providing a training ground for youth to develop interpersonal skills enabling them to learn how to form and maintain intimate relationships (Sorensen, 2007). Maintaining steady relationships over time, as opposed to following pathways into multiple casual relations, has also been associated with positive emotional adjustment and declines in

depressive symptoms and problem behaviors (Davies & Windle, 2000). However, while romantic relationships have the potential to affect adolescent development positively, they can also place young people at risk for problems such as increased risk of sexually transmitted infections and pregnancy (Furman, 2002) and relationships that include dating violence (Hickman, Jaycox, & Aronoff, 2004).

Certain dating behaviors have been reported to place young people at risk of Adolescent Dating Violence and Abuse (ADVA). ADVA victimization has been associated with having ever had sexual intercourse (Eaton, Davis, Barrios, Brener, & Noonan, 2007) and having an increasing number of lifetime sexual partners has been associated with both victimization and perpetration of ADVA (Rivera-Rivera, Allen-Leigh, Rodríguez-Ortega, Chávez-Ayala, & Lazcano-Ponce, 2007). It has also been reported that is not uncommon for adolescent girls to engage in romantic relationships with young men who are older than themselves (Barter et al., 2009; Fredland et al., 2005). Barter et al. (2009), for example, found that 58% of female respondents aged 13-17 years old reported having older partners, with 11% of partners being categorized as “much older”. Notably, Barter et al. (2009) identified that as the age difference between partners increased, so did girls’ negative evaluations of their relationships. Young women have also described pressures from their peers and the media to have boyfriends and develop committed relationships at a young age; pressures that seem to amplify their willingness to remain in relationships that include violence (Ismail, Berman, & Ward-Griffin, 2007). Concerningly, Smith, White, and Holland (2003) have also found that women who were physically assaulted as adolescents (from age 14 through their college years) were also at greater risk for revictimization during their college years (average age 21.4 years), highlighting

concerns for the risk that experiencing ADVA during adolescence will lead to an increased chance of multiple abusive relationships in the future. In the US, ADVA has been recognised as a serious public health concern (Teten, Ball, Valle, Noonan, & Rosenbluth, 2009). Similarly, in the UK in September 2012, the Government agreed to amend the current definition of domestic violence to ‘domestic violence and abuse’, which now includes young people aged 16-17 years old in addition to adults aged 18 and over (Home Office, 2012a, p.19). The amendment also included changing the wording of the definition to incorporate coercive control and threatening behaviors as well as psychological, emotional, physical, sexual, and financial violence or abuse. However, while this new definition is more inclusive of young people aged 16-17 who may be at risk of dating violence, this definition still excludes those under the age of 16 who may be exposed to or involved in violent or abusive dating relationships.

A growing body of literature has begun to acknowledge the positive and negative impacts of Electronic Communication Technology (ECT) use in young people’s social lives (e.g., David-Ferdon & Hertz 2007; Davis, 2012; Hasebrink, Livingstone, Haddon, & Ólafsson, 2009; Jones, Mitchell, & Finkelhor, 2012; Livingstone, 2003; Livingstone, Haddon, Görzig, & Ólafsson, 2011; Sharples, Graber, Harrison, & Logan, 2009; Valkenburg & Peter, 2011; Wolak, Mitchell, & Finkelhor, 2006). ECTs, such as the mobiles phones and methods of communication via the Internet (e.g., Social Networking Sites (SNS), Instant Messenger (IM), Chatrooms, Websites, and Email) have been reported to provide opportunities for adolescents in terms of social development (Valkenburg & Peter, 2011), identity development, and increased opportunities for participation, education, learning, and literacy (Livingstone, 2003).

ECTs also provide opportunities for online communication with family and friends (David-Ferdon & Hertz, 2007) and for social networking and sharing experiences with distant others (Hasebrink et al., 2009). In addition, ECT provides adolescents with greater accessibility to a broad range of information (David-Ferdon & Hertz, 2007) and can be used for entertainment purposes such as for gaming (Hasebrink et al., 2009). Increased use of the Internet is also reported to facilitate digital literacy and safety skills such as blocking an unwanted contact, changing privacy settings on social networking accounts and finding information about safety advice online (Livingstone et al., 2011), thereby representing a positive role of such technology in young people's lives.

Despite the benefits offered by developments in ECTs, the use of such technologies may also place young people at risk. It has been recognized that young people may be placed at risk of being exposed to inappropriate content, abuse of children by adults, online bullying, cheating within the school system (Sharples et al., 2009), unwanted sexual solicitations, harassment, exposure to pornography (Wolak et al., 2006; Mitchell, Wolak, & Finkelhor, 2007), disclosing personal information (Hasebrink et al., 2009), meeting online contacts offline, and exposure to potentially harmful user-generated content (e.g., hate, pro-anorexia, self-harm, drug-taking or suicide) (Livingstone et al., 2011). Of particular importance to this discussion is the recent interest in bullying between peers via ECT. Online bullying may consist of for example, the creation of Websites or sending Email or text messages that are intended to insult, embarrass or harass a peer and/or to threaten physical harm (David-Ferdon & Hertz, 2007). While the recognition of online bullying within a peer context has received increasing media, academic and political attention, the relevance of

technology to bullying or abusive behaviors within adolescent romantic or dating relationships has only recently been acknowledged.

The Center for Disease Control and Prevention (2012) has recognized the relevance of technology within its definition of ADVA, whereby emotionally abusive and controlling behaviors may be perpetrated electronically, in addition to behaviors such as stalking. This highlights the role of ECT in the performance of bullying and harassment behaviors within the context of adolescent romantic relationships. Empirical study however, has only recently investigated the role of such technologies in the perpetration of ADVA (Associated Press and MTV 2009, 2011; Barter et al., 2009; Cutbush, Ashley, Kan, Hampton, & Hall, 2010; Cutbush, Williams, Miller, Gibbs, & Clinton-Sherrod, 2012; Draucker & Martsof, 2010; Fox et al., 2013; Hinduja & Patchin, 2011; Korchmaros, Ybarra, Langhinrichsen-Rohling, Boyd, & Lenhart, 2013; Picard, 2007; Tompson, Benz, & Agiesta, 2013; Zweig, Dank, Yahner, & Lachman, 2013a). This is surprising given the recognition that technology is used, at least daily or weekly, by the majority of adolescents (see e.g., CHILDWISE, 2013; Livingstone & Bober, 2005; Ofcom, 2011). Furthermore, ECT has been recognized as an important aspect of adolescent social life and notably, in the establishment, maintenance, ending, and reconnection of adolescent romantic relationships (Draucker & Martsof, 2010). The extent to which such technologies place adolescents at risk for unhealthy or abusive dating behaviors, needs further investigation in order to explore the nature, prevalence and impact of ECT use for both non-abusive and abusive purposes within adolescent dating relationships.

### **1.1: Definitions of Dating Violence**

It has been argued that the lack of consensus of an operational definition of dating violence complicates the investigation of this public health concern (Lewis & Fremouw, 2001). A review of the ADVA literature found 10 definitions of dating violence (see Table 1). A date restriction was not applied here in order to demonstrate the changing nature of definitions as they develop over time. All but one of the current definitions found to date have yet to specifically identify an age at which such behaviors can be classified, which has led to some lack of clarity as to what populations this precisely includes. As can be seen in Table 1, only three of these definitions refer to ‘adolescents’ or ‘teens’ specifically (Centre for Disease Control and Prevention, 2012; National Institute of Justice 2011; Schütt, 2006), and generally discuss dating violence while referring to the criteria that this behavior occurs between romantic couples who are unmarried or non-cohabiting. Sugarman and Hotaling’s (1989) definition, however, incorporates a range of relationships from the first dates to cohabitation and engagement, and the absence of a specification of age means that this could be applied to both adolescents and young adults or adults. As definitions have developed over time, they can be seen to incorporate a wider range of behaviors starting with physical violence and progressing to incorporate psychological violence and abuse and threats, sexual violence, and controlling behaviors, with later definitions acknowledging the role of technology in dating abuse and stalking.

Table 1  
Definitions of Dating Violence

	Definitions of Dating Violence
1984)*	of physical aggression directed at one dating partner by another dating partner” (p. 268; *p. 5).
erson (1986)*	acts and/or threat of acts that physically and/or verbally abuse another

- person". "And that occur during any social interaction related to the dating and/or mate selection process" (p. 165-166; \*p. 5).
- n (1987)\*  
 nce in unmarried couples who are romantically involved" (p. 17; \*p. 5).
- nan & Hotelling  
 (1989)  
 radic interaction that involves the perpetration or threat of an act of psychological, physical or sexual violence by at least one member of an unmarried dyad on the other within the context of the dating process" (p. 5).
- use or threat of physical force or restraint carried out with the intent of causing pain or injury to another" within a dating relationship" (p. 4).
- le & Wolfe (1999)  
 ebehavior that is intended to "...control or dominate another person physically, sexually, or psychologically, causing some level of harm" (p. 436).
- o, Robitaille, &  
 Hébert (2000)  
 y behavior that is prejudicial to the partner's development or health by compromising his or her physical, psychological, or sexual integrity" (p. 8).
- ian et al. (2002)  
*al Violence*: is the intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to: scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, poking, hair-pulling, slapping, punching, hitting, burning, use of a weapon (gun, knife, or other object), and use of restraints or one's body, size, or strength against another person. Physical violence also includes coercing other people to commit any of the above acts.
- l Violence*: is divided into three categories:  
 of physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is completed.  
 attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act (e.g., because of illness, disability, or the influence of alcohol or other drugs, or due to intimidation or pressure).  
 sive sexual contact
- ological/Emotional Abuse*: involves trauma caused by acts, threats of acts, or coercive tactics. For example, humiliating, controlling or isolating the victim, or deliberately doing something to make the victim feel diminished or embarrassed. Other behaviors may be considered emotionally abusive if they are perceived as such by the victim.
- t of Physical or Sexual Violence*: is the use of words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm. Also the use of words, gestures, or weapons to communicate the intent to compel a person to engage in sex acts or abusive sexual contact

when the person is either unwilling or unable to consent (p. 11-13).

- (2006) controlling, abusive, threatening and/or aggressive behavior towards a partner or previous partner. But unlike in the cases of domestic violence among adults, adolescent domestic violence can occur between non-cohabiting partners” (p. 16).
- nal Institute of Justice (2011) dating violence — also called intimate relationship violence or intimate partner violence among adolescents or adolescent relationship abuse — includes physical, psychological or sexual abuse; harassment; or stalking of any person ages 12 to 18 in the context of a past or present romantic or consensual relationship” (p. 1).
- for Disease Control and Prevention (2012) dating violence is defined as the physical, sexual, or psychological/emotional violence between two people within a close or dating relationship, as well as stalking. It can occur in person or electronically such as repeated texting or posting sexual pictures of a partner online and may occur between a current or former dating partner” (p. 1).

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**Note**

\* As cited in Sugarman & Hotaling (1989).

The available definitions of dating violence and in particular ADVA appear to represent the same abusive and controlling behaviors as those identified in adult definitions of domestic violence and intimate partner violence (see e.g., Home Office, 2012a, as referred to in the Introduction). Dating violence is generally recognized as encompassing a range of violent, abusive, or threatening behaviors including physical, psychological, or emotional and sexual violence or abuse, in addition to behaviors which may be considered as controlling or dominating towards a romantic or dating partner and that cause harm, pain or injury to the victim. However, adolescent dating relationships are reported to differ from adult relationships in their power dynamics, which is reported to be evidenced by findings that such relationships are often characterized by mutual dating aggression (Mulford & Giordano, 2008). Studies have reported prevalence rates of mutual physical ADVA from 49% (e.g., Giordano, Soto, Manning, & Longmore, 2010) to 79% (e.g., O’Leary, Smith, Avery-Leaf, & Cascardi, 2008; Williams, Connolly, Pepler, Craig, & Laporte, 2008), and for

psychological/emotional ADVA at 94% (O'Leary et al., 2008). Other reasons put forward for the argument that violence in adolescent dating relationships is different to that in adult couples are that compared to women in adult relationships, adolescent girls in the early stages of dating and are less dependent on dating partners for financial stability, are less likely to have children with that partner, and may lack the social skills development to negotiate romantic relationships (Mulford & Giordano, 2008). Wekerle and Wolfe (1999) have previously argued that this has implications for prevention to acknowledge the coercive and violent dynamic of mutual dating violence during adolescence compared to the unequal and typically gendered power imbalance characterized by adult abusive relationships.

The Center for Disease Control and Prevention's (2012) definition of teenage dating violence is critical to the current discussion as this was the only definition of dating violence that acknowledged other means for abusive dating behaviors to take place other than in person, by including the possibility that such behaviors may also be perpetrated electronically. While violence of a direct physical or sexual nature can not be perpetrated electronically, threat of physical or sexual violence, or the perpetration of psychologically/emotionally abusive, controlling or harassment behaviors can be performed with the use of ECTs such as mobile phones or communication tools via the Internet. This definition also identifies stalking behaviors which have been defined as "harassing or threatening behavior that an individual engages in repeatedly, such as following a person, appearing at a person's home or place of business, making harassing phone calls, leaving written messages or objects, or vandalizing a person's property" (Tjaden & Thoennes, 1998, p. 1). After a consultation during November, 2011 and February, 2012 regarding whether the Protection from Harassment Act 1997

and other legislation provides adequate protection to victims of stalking, the British Government has taken action on key recommendations and introduced new legislation naming stalking (and cyber-stalking) as a specific criminal offense (Home Office, 2012b). The risk of stalking in both the traditional and the “cyber” form is significant to both current and former intimate relationships as contact can continue easily through ECTs if partners are not within close geographical proximity of one another or even once a relationship has ended.

This recognition of technology is critical to the current review as it identifies the relevance of ECT to the perpetration of dating violence not as a new behavior itself, but as another means for abusive behaviors, which are typically conducted in person, to be perpetrated from a distance. A more comprehensive and inclusive definition of ADVA is needed which incorporates all possible violence typologies that may be performed or experienced in person or via ECT, that may be relevant to abusive adolescent romantic relationships. The following definition of ADVA is therefore provided, which attempts to draw together the findings from definitions of dating violence found in this review:

“any behaviors that are threatening, controlling, violent, abusive, harassment or stalking that are directed towards a current or former romantic partner by the other within the context of an adolescent (10-18 years old) dating relationship. This can include either or a combination of physical, psychological/emotional and sexual behaviors and can take place in person or electronically via technology (such as a mobile phone or online) and occurs regardless of gender or sexuality”.

## **1.2: Purpose of the Review**

The purpose of this paper is to review and synthesize the literature on the prevalence and impact of ADVA with a focus on evaluating the relevance of technology to

adolescent romantic relationships and to those that are abusive. Following an overview of the methodology for this review, the subsequent sections of this paper will provide a systematic review of the current status of the traditional ADVA literature to have reported on the prevalence of physical, psychological/emotional, and sexual dating violence and abuse, an exploration of the relevance of technology to adolescents and romantic relationships, an exploration of the relationship between bullying, cyberbullying, ADVA and Technology Assisted Adolescent Dating Violence and Abuse (TAADVA), and a systematic review of studies to have investigated the prevalence of TAADVA. In particular, the question of whether TAADVA should be considered as a new form of abuse or whether this is, in fact, not distinct enough to be recognized as its own unique category of abuse will be deliberated. Consideration will also be given to whether violence via technology creates new victims or perpetrators, or whether this rather creates another avenue for abusive or bullying dating behaviors to take place within relationships that are already abusive. Finally, consideration will be given as to whether the psychological impact of TAADVA is comparable to the psychological impact of traditional forms of ADVA.

### **1.3: Methodology for Review**

Bibliographic databases (e.g., Academic Search Complete, PsychINFO, and Science Direct) in addition to Google Scholar were searched for peer-reviewed journals with the inclusion criteria that these were published in English. Key search terms such as ‘adolescent(ce)’, ‘teen(age)’ and ‘youth’ were used interchangeably with the following terms to identify the target population of the focus in the review. Terms such as ‘dating’, ‘intimate’, ‘relationship’, ‘romantic’, and ‘partner’ were used in

conjunction with 'activities', 'abuse', 'aggression', 'behavior', 'bullying', 'harassment', 'stalking', and 'violence', in addition to 'prevalence' and 'impact' in a combination of ways in order to gather data on the nature, prevalence and impact of ADVA. An example of this search technique is provided as follows; 'adolescent' OR 'teenage' AND 'dating' AND 'violence' AND 'prevalence'. When broadening the search to capture the relevance of technology within this context, terms such as 'communication', 'cyber', 'digital', 'electronic', 'media', 'net(work)', 'online', 'technology', and 'wired' were also included interchangeably. Spelling variations were adapted when searching international journals and databases by using both American and English variants of terms such as 'behavior' and 'behaviour'. Following exhaustive searches, reference lists were also scanned from gathered literature in order to maximize the collection of as many available studies relevant to the review as possible. A number of reports, posters and a factsheet were also obtained which were found to report on the prevalence of TAADVA. A total of 56 studies were found to report on traditional forms of ADVA and twelve on TAADVA accounting for a total of 65 different studies.

The literature obtained was categorized as being conducted in the US, Canada, the UK, Europe, and New Zealand. There were two European studies that were included in the review when reporting prevalence rates for ADVA that could either not be accessed (e.g., Krahe, 2009), or were not published in English (e.g., Narring et al., 2004), but which had their prevalence statistics reported in a previous North American and European review of ADVA (Leen et al., 2013). These studies are only referred to in the summary tables reporting percentages of the prevalence of dating violence. It was deemed essential to include these studies due to the disparity between

the numbers of studies available from the US compared to those in Europe. A date restriction was applied when searching for literature reporting the prevalence of ADVA that limited the search to studies published since the year 2000 in order to make the reviewable material more manageable. This also meant that the most modern and up to date literature was included in the review. This was a tactful decision that ensured that any pivotal research was not excluded, for example, the earliest study found to be conducted in the UK (Hird, 2000) was therefore included. There were no studies pre-2007 to report on TAADVA behaviors. Criteria for inclusion also required the study samples to be of adolescent age, which has been identified in the literature as ranging from age 10 until the early twenties (Smetana et al., 2006). However, there were some exceptions, for example, some studies with adolescent samples also included young people and young adults up to the age of 24 years (e.g., Associated Press & MTV., 2009, 2011; Danielsson, Blom, Nilses, Heimer, & Hogberg, 2009; Tompson et al., 2013), and age 29 (e.g., Krahe & Berger, 2005). It was decided to include these studies as they still included adolescents under the age of 18 years old and due to the limited number of European studies and those to explore TAADVA specifically. Methodological features relevant to the studies reviewed are noted within the summary tables provided.

## **2: Prevalence of Adolescent Dating Violence and Abuse**

A total of 56 studies met the requirements for inclusion reporting prevalence rates for physical and/or psychological/emotional and/or sexual ADVA. Accounting for the majority of the literature, 34 studies were conducted in the US. Eight studies originated from Canada, eight from Continental Europe, five from the UK and one in New Zealand. For some studies the prevalence of dating violence was the sole focus

of inquiry while for others, reporting prevalence was part of a broader investigation. Prevalence rates are generally calculated by victimization and/or perpetration and/or by gender for both males and females for each typology of violence. Not all studies however report all types of aggression and so these are reported accordingly. The number of studies reporting physical dating violence (n=51) far outnumbers those reporting psychological/emotional dating violence (n=21) and sexual dating violence (n=23). The prevalence for physical, psychological/emotional, and sexual dating violence will now be discussed in relation to the summary tables for each theme. These tables are organized as to summarize studies based on the type of instrument used to measure dating violence (see Tables 2-12). These instruments are categorized as follows: Conflict Tactics Scale (CTS); Youth Risk Behavior Survey (YRBS); ad hoc measures; and other established instruments. Additional information regarding noteworthy methodological features of individual studies is provided in the table summaries.

### **2.1: Physical Dating Violence and Abuse**

A total of 51 studies were found to report on the prevalence of physical dating violence. A summary of all studies found reporting the prevalence of physical dating violence is provided in Tables 2-5. Out of the 51 studies where the prevalence of physical dating violence was reported, 17 of these included measures of violence using variants of the CTS (see Table 2), 11 used the YRBS (see Table 3), 16 employed ad hoc measures (see Table 4), and seven used other established instruments (see Table 5). These findings will now be discussed in terms of victimization, perpetration and mutual violence accordingly, followed by a discussion

of the methodological features of studies relevant to the interpretation of prevalence data.

--- Insert Table 2 ---

--- Insert Table 3 ---

--- Insert Table 4 ---

--- Insert Table 5 ---

### **2.1.1: Victimization**

With regards to the studies reporting the prevalence of physical dating violence victimization among general population samples, the means of surveys using the CTS, ad hoc measures, or other established instruments reported fairly consistent prevalence rates ranging from 20-25% (see Tables 2, 4, and 5). The mean score of those using the YRBS was half this however, being calculated at 10% (see Table 3). For female victimization, again the means of those studies using the CTS, ad hoc measures, or other established instruments report prevalence rates ranging from 22-29%, while the YRBS reports a lower percentage at 10% (see Tables 2, 3, 4, and 5). For male victimization a slightly different pattern emerges. Those studies using the CTS or ad hoc measures report prevalence rates ranging from 19-27% (see Tables 2, and 4). The YRBS reports a much lower percentage at 10% (see Table 3) and those in the other established instrument category report a much higher rate for male victimization of up to 46% (see Table 5). Interestingly the YRBS scores are equal for

both male and female victims. This category of measure, like others, asked respondents about typical physical violence behaviors such as being hit, slapped, or physically hurt by their dating partner. However, physical violence victimization is only measured by one question with a timeframe of 12 months that may account for the lower percentage. The high percentage identified for male victimization with regards to the other established instruments category is accounted for by Danielsson et al.'s (2009) particularly high finding as when excluding this study, the mean percentages for victimization are roughly equal for both genders (see Table 5). This study did not just measure violence experienced by a dating partner but also included violence by parents, partners, ex-partners friends/acquaintances, and strangers. In this study, the young men were more often exposed to physical (and emotional) violence by a stranger, while young women were more often exposed to physical (and mild emotional) violence by someone close to them such as a parent, partner or ex-partner. The value of the data from this study, particularly regarding male adolescent victims of dating violence, therefore, needs to be considered with caution.

When looking at the means of prevalence rates across measures, with regards to victimization by gender, while those studies employing the CTS or the YRBS report a fairly equal percentage of victimization for males and females, ad hoc measures and other established instruments however report a higher statistic for males compared to females. This difference is more notable in the other established instrument measure category. Two studies within the ad hoc measure category (see Table 4) reported significantly higher rates for male victimization with prevalence rates for males of up to double that of those reported for females (e.g., Burman & Cartmel 2005; Simon et al., 2010). These studies measured physical dating violence victimization with 6-7

items respectively, ranging from behaviors such as hitting to holding or restraining. Interestingly, Burman and Cartmel (2005) measured this behavior over the participants' lifetime experience, while the Simon et al. (2010) measured that in the past three months. It is worth noting here that there were two studies within the CTS measure category (see Table 2) that were conducted with participants with previous experience of being in the care of Child Protection Services (CPS) (Collin-Vézina, Hébert, Manseau, Blais, & Fernet, 2006), or with previous experience of sexual abuse (Cyr, McDuff, & Wright, 2006), and one study within the other established instruments category (see Table 5) that was conducted with samples with previous experience of being in the care of CPS (Wekerle et al., 2009). The mean of the studies within general population samples in both category of measure reporting on female victimization was less than half of that for female victimization with regards to the non-general population samples. These studies suggest that those with such previous histories are twice as likely to experience physical dating violence than those without them. This difference between sample types, however, was not as significant for males when comparing Wekerle et al.'s, (2009) non-general population sample with those with general population samples. This high percentage for male victimization however, as noted, is likely to have been influenced by the particularly high score reported by Danielsson et al. (2009) at 59% in this category of victimization.

### **2.1.2: Perpetration**

With regards to perpetration, the mean of surveys using the CTS, ad hoc measures and other established instruments reported fairly consistent prevalence rates ranging from 21-23% (see Tables 2, 4, and 5). The average score of those using the YRBS was almost a third of this with a mean of 8% (see Table 3). For female perpetration,

the same three types of measure reported fairly consistent prevalence rates ranging from 28-30% (see Table 2, 4, and 5). The YRBS however was found to have a much lower mean statistic at 5% (see Table 3). For male perpetration, those studies using the CTS, ad hoc measures or other established instruments report fairly consistent prevalence rates ranging from 17-19% (see Tables 2, 4, and 5). Those employing the YRBS however report a much lower percentage at 4% (see Table 3). The YRBS measurement approach consistently reports a significantly lower percentage than the other type of measure. The CTS, ad hoc measure and other established instruments categories however appear to report fairly consistent prevalence ranges when looking at the means of studies in the tables. It is not clear exactly why this disparity exists although it would seem to be a result of the measure used.

With regards to perpetration across measures, all are consistent in reporting higher rates for female perpetration compared to males. This difference is more significant in the CTS, ad hoc measure and other established instrument categories however, where the percentage for females is considerably higher than that of males. In some studies, rates for female perpetration are nearly double that of males (Barter et al., 2009; Foshee, Linder, MacDougall, & Bangdiwala, 2001; McDonell, Ott, & Mitchell, 2010 (lifespan measure only); Reeves & Orpinas, 2012; Sears, Byers, & Price, 2007). It is worth noting here that participants with previous experiences of CPS care within the other established instruments category (Wekerle et al., 2009), were more than two times as likely to report perpetrating this type of violence than participants in those studies with general population samples (see Table 5). It is not clear why prevalence reports of female perpetration are so high compared to males. Simon et al. (2010) suggest that gender differences in prevalence reports could be due to sex differences

in the willingness of adolescents to report victimization or perpetration, which is likely to be influenced by the perceived social acceptability of violence. As such, the authors argue that girls may be less willing to disclose victimization and boys less willing to disclose perpetration due to the notion that male violence is less socially acceptable.

### **2.1.3: Mutual violence**

With regards to mutual violence, that is when both partners perform and experience dating violence over the course of their romantic relationship (Giordano et al., 2010); three studies provided prevalence estimates for mutual physical dating violence involvement. These studies used versions of the CTS (see Table 2) and reported prevalence statistics ranging from 49-79% with a combined mean of 62.5% (see O'Leary et al., 2008; Williams et al., 2008; Giordano et al., 2010). This is markedly high and indicates that more qualitative research is needed to understand whether this type of violence is characterized by a power imbalance between partners or what Johnson (2006) refers to as 'situational couple violence', whereby both partners may be violent in the relationship, although this violence is not characterized by control of one partner by the other. As noted in the discussion of definitions of dating violence, this high percentage of mutual aggression suggests that ADVA may be less likely to be characterized by the gendered nature of power dynamics often associated with adult abusive relationships or influenced by factors such as economic or child dependency (Mulford & Giordano, 2008) that may make leaving an abusive relationship more difficult. It has been suggested however, that adolescent relationships may contain elements of intimacy and perceived importance that makes it difficult to withdraw easily from them (Giordano et al., 2010). It has previously

been argued that individuals in mutually violent relationships report receiving and perpetrating significantly more violence than individuals involved in one-sided violent relationships and have been found to be more accepting of dating violence than victims only (Gray & Foshee, 1997). Interestingly, while a considerable percentage of adolescents reported engaging in mutual dating violence or aggression, males reported more exclusive victimization while females reported more exclusive perpetration (Giordano et al., 2010; O'Leary et al., 2008). This has implications for the development prevention and intervention efforts in terms of understanding more about the nature and dynamics of ADVA in order to effectively address the issue, as previously recognized by Wekerle and Wolfe (1999).

#### **2.1.4: Methodological factors relevant to the interpretation of prevalence data**

There are some notable methodological features within the studies reviewed deemed important for discussion and which may need to be considered with caution when trying to compare and generalize prevalence data findings. Interestingly, one study reported significantly high percentages for physical victimization and perpetration within the last three months compared to that reported by the same study on a lifetime measure deemed noteworthy. McDonnell et al. (2010) measured both lifetime victimization and perpetration of violence and that in the past three months, with the latter reporting physical violence victimization and/or perpetration of up to around 60% for both males and females, a percentage which is consistently significantly higher than that reported for male and female victimization and/or perpetration for the former lifetime measure. This is surprising as one would expect the higher estimate to be accounted for in the longer lifetime measure and it is not clear why this disparity

exists, although this could be due to greater memory recall. The mean of both timeframes of the measure was calculated before working out the mean of all studies in that category.

On the other hand, one investigation within the ad hoc measure category reported noticeably low rates of physical dating violence victimization for both females and males, but particularly for males (Ackard & Neumark-Sztainer, 2002). It is likely that this is due to the wording of questions and the way behaviors were measured in this study for example, Ackard and Neumark-Sztainer (2002) specifically asked respondents whether they had experienced violence from someone they have “been on a date with”. It has been recognized by Leen et al. (2013), that this may be viewed as asking about specific events rather than a long-term experience in a relationship generally. The severity of violence measured may also impact on the rates of violence reported as more serious forms of violence are often reported less frequently than those considered less serious in nature. Ackard and Neumark-Sztainer (2002) measured dating violence, date rape, and dating violence, and date rape, which represents a more serious category of violence measured and may therefore account for the lower percentage. This pattern is particularly evident in Krahé and Berger’s (2005) findings that ranged from 2-44.4%, with the behaviors measured at the higher end representing less serious forms of violence victimization such as “pushing”, while the behaviors accounted for in the lower percentage capture the more serious forms of violence such as “burning the victim”. Such methodological features need to be considered when attempting to compare and evaluate prevalence estimates as methodological differences in terms of the behaviors measured (i.e., seriousness),

terminology, question wording, timeframes, and samples used make meaningful comparisons between studies and attempts at generalizations challenging.

## **2.2: Psychological and Emotional Dating Violence and Abuse**

A total of 21 studies were found to report the prevalence of psychological/emotional dating violence. In comparison to physical violence, studies reporting prevalence rates for psychological, emotional, or verbal victimization are less well established. A summary of all studies found reporting the prevalence of psychological/emotional dating violence is provided in Tables 6-8. Out of the 21 studies where the prevalence of psychological/emotional dating violence was reported, 12 of these included measures of violence using variants of the CTS (see Table 6), six employed ad hoc measures (see Table 7), and three used other established instruments (see Table 8). These findings will now be discussed in terms of victimization, perpetration and mutual violence accordingly, followed by a discussion of the methodological features of studies relevant to the interpretation of prevalence data.

--- Insert Table 6 ---

--- Insert Table 7 ---

--- Insert Table 8 ---

### **2.2.1: Victimization**

With regards to the studies reporting the prevalence of psychological/emotional dating violence victimization of general population samples, the means of surveys

using the CTS and ad hoc measures reported consistent prevalence rates of 35-36% (see Tables 6, and 7). There were no studies within the other established instrument measure category to report prevalence rates for victimization overall. For female victimization, all types of measure are fairly consistent in reporting prevalence rates with a mean ranging from 51-55.5% (see Tables 6, 7, and 8). For male victimization, the mean of studies for each type of measure range from 45-54%. The mean scores of studies employing various measures appear to report fairly consistent rates of psychological/emotional violence victimization. Interestingly, however, the percentage of involvement in such victimization is notably higher when broken down by gender than when reported on overall, although unfortunately it is not clear why this is.

While both genders report a significant amount of victimization, there was a general trend for slightly more girls to report being a victim of psychological/emotional dating violence compared to boys. Some studies employing CTS measures or ad hoc measures have reported a notably higher rate of victimization for females compared to males. In Barter et al.'s (2009) study girls were 20% more likely to report being a victim than boys (72% vs. 51%). In Haynie et al. (2013) study, females reported being a victim of this type of aggression twice that of males. Burman and Cartmel's (2005) and Schütt's (2006) findings however did not follow this trend, and slightly more boys reported being victims of psychological/emotional aggression. The means of studies within the other established instruments category also reported a slightly higher statistic for male victimization compared to females, although limited data was available in this category of measure. It is worth noting here that when compared to the two non-general population sample studies within the CTS measure category

(Collin-Vézina et al., 2006; Cyr et al., 2006), the mean score for female victimization for the general population sample studies was considerably lower than that of the non-general population samples. As noted with regards to physical violence victimization, it appears that such populations are more likely to report experiencing psychological/emotional dating violence than those without such previous histories.

### **2.2.2: Perpetration**

With regards to psychological/emotional dating violence perpetration by measure, the mean of surveys using the CTS was reported at 49% (see Table 6). The mean statistic of those studies employing ad hoc measures or other established instruments however report perpetration rates from 20-25% (see Tables 7, and 8). When broken down by gender, for female perpetration, the mean of those studies employing the CTS report a prevalence rate of 69% (see Table 6), while ad hoc measures report a lower prevalence rate with a mean of 44% (see Table 7). Studies using other established instruments do not provide a breakdown of perpetration by gender. For male perpetration, those studies using the CTS report prevalence rates with a mean of 57% (see Table 6). Ad hoc measures report male perpetration at 33.5% (see Table 7). It is not clear why prevalence rates for perpetration are significantly higher for those using CTS measures than those using ad hoc measures. It is possible that this is due to the measures used; however, the means of studies across measures were fairly consistent with regards to victimization of psychological/emotional abuse, suggesting that this may possibly be due to individual differences in reporting by respondents. All measures reporting this category of behavior (CTS and ad hoc) are consistent in reporting higher rates for female perpetration compared to males. Rates for female perpetration were double that of males in Haynie et al.'s (2013) study. Interestingly,

like for victimization, prevalence reports when broken down by gender are higher than when reported on overall; however, it is not clear why this disparity occurs.

### **2.2.3: Mutual violence**

Only one study reported the prevalence of mutual psychological/emotional dating violence using a version of the CTS (see Table 6), and this was reported at 94% (O'Leary et al., 2008). This percentage is notable and concerning high; however, the authors do not offer any suggestions as to why this may be. It is possible that respondents may be reporting on behaviors that may have been performed in response to or in retaliation to psychological/emotional abuse experienced by a partner. It is also possible that such adolescent romantic relationships are characterized by poor communication skills or an inability to express emotions in a positive, healthy way (Mulford & Giordano, 2008), resulting in verbal aggression and psychological/emotional aggression. More in-depth research is needed in order to explore the context and impact of psychological/emotional ADVA and of that which is experienced and perpetrated mutually.

### **2.2.4: Methodological factors relevant to the interpretation of prevalence data**

There are some notable methodological features deemed important for discussion and which may need to be considered with caution when trying to compare and generalize these findings. Three studies with general population samples reported remarkably high percentages of psychological/emotional dating violence victimization and/or perpetration (e.g., Muñoz-Rivas et al., 2007; O'Leary et al., 2008; Tschann et al., 2009). Interestingly, these studies all used versions of the CTS however, there are

other studies within this measure category that did not report such high prevalence rates and so it is not clear why the prevalence statistics in these particular studies are inconsistent with the rest. These higher percentages may be due to differences in the way the questions were asked in each study or because of personal or cultural differences in the individual samples or place of origin. Nevertheless, it is clear from the reported prevalence rates across behavior types that this category of violent or abusive behavior represents the most commonly reported type of abuse when compared to physical and sexual dating violence.

### **2.3: Sexual Dating Violence and Abuse**

A total of 23 studies were found to report the prevalence of sexual dating violence. A summary of all studies found reporting the prevalence of sexual dating violence is provided in Tables 9-12. Out of the 23 studies where the prevalence of sexual dating violence was reported, two of these included measures of violence using variants of the CTS (see Table 9), six used the YRBS (see Table 10), eight employed ad hoc measures (see Table 11), and seven used other established instruments (see Table 12). These findings will now be discussed in terms of victimization, perpetration and mutual violence accordingly, followed by a discussion of the methodological features of studies relevant to the interpretation of prevalence data.

--- Insert Table 9 ---

--- Insert Table 10 ---

--- Insert Table 11 ---

--- Insert Table 12 ---

### 2.3.1: Victimization

With regards to studies reporting the prevalence of sexual dating violence victimization for general population samples by measure, the mean of those surveys that used ad hoc measures reported a prevalence rate of 20% (see Table 11). Those employing the YRBS however reported a prevalence rate half of this at 9.5% (see Table 10). Studies employing the CTS or other established instruments did not report on sexual dating violence victimization overall. When broken down by gender, for female victimization, those studies using the YRBS and other established instruments report fairly consistent prevalence rates with a mean ranging from 12-19% (see Tables 10, and 12). Those employing a version of the CTS or ad hoc measures however report a much higher average score for female victimization ranging from 26-33% (see Tables 9, and 11). For male victimization, the mean of studies using the YRBS or other established instruments are consistent ranging from 5-6% (see Tables 10, & and 12). Ad hoc measures on the other hand report a mean of 23% (see Table 11). Studies using the CTS did not report on male victimization. Once again those studies employing the YRBS appear to report lower estimates for sexual violence victimization when compared to the other measures. In this case, however, those using other established instruments also appear to report fairly low prevalence rates when compared to the CTS and ad hoc measures, particularly for male victimization when compared with ad hoc measures. With regards to victimization by gender, the YRBS, ad hoc measures or other established instruments are consistent in reporting a higher rate of victimization for females compared to males. This is true for all studies

with the exception of Schütt (2006), where male victims exceeded females in reports of sexual dating violence victimization. One of the two studies reporting prevalence rates for female victimization in this category of measure was conducted with a non-general population sample (Collin-Vézina et al., 2006), which reported a prevalence rate almost three times that of the general population sample. A clear trend is evident which suggests that special samples with previous histories of CPS care or sexual abuse report higher rates of dating violence victimization across the three violence typologies.

### **2.3.2: Perpetration**

With regards to sexual dating violence perpetration by measure, only those studies using ad hoc measures report this category of perpetration overall with a mean of 10.5% (see Table 11). For female perpetration, the mean of surveys using the YRBS and other established instruments report fairly consistent prevalence rates ranging from 2.5-5% (see Tables 10, and 12). Ad hoc measures however report rates with a mean of up to 10% (see Table 11). For male perpetration, the mean of surveys employing the YRBS report prevalence rates of around 4% (see Table 10). Ad hoc measures and other established instruments however report consistent prevalence rates with means of 17-18% (see Tables 11, and 12). Surveys using the CTS do not provide statistics for male and female perpetration of sexual dating violence. The YRBS continues to consistently report a lower percentage for sexual violence perpetration when compared with the other types of measures used to investigate the prevalence of dating violence. This would suggest that this is likely to be due to the measure used, however it is difficult to know for certain unless the same populations were tested on the various measures. With regards to perpetration by gender, all

measures are consistent in reporting a higher rate for male perpetration compared to females. In Schütt's (2006) investigation, not one single female reported perpetrating such behavior.

### **2.3.3: Mutual violence**

De Bruijn, Burrie, and van Wel (2006) identified that victims of unwanted sexual behavior are often perpetrators of unwanted sexual behavior, and perpetrators are often victims. The authors assert that as adolescents push their own boundaries at a time of sexual exploration, in doing so they run the risk of transgressing boundaries and thereby becoming a victim or perpetrator of unwanted sexual behavior. Lavoie, Robitaille, and Hébert (2000) have also noted remarkable examples of violence proposed by teens who referred to the consensual use of violence in sexual relationships, or what is called 'rough sex'. These findings highlight the presence of risky sexual behaviors within adolescent romantic relationships that may arise at a time of sexual exploration. Such behaviors, however, may potentially place adolescents at risk for sexual dating violence or behaviors that may be considered as abusive; more research is needed to understand the context and meaning of such experiences.

### **2.3.4: Methodological factors relevant to the interpretation of prevalence data**

There are some notable methodological features within the studies reviewed deemed important for discussion when concerned with prevalence data which may need to be considered with caution when trying to compare and generalize these findings. Fairly high rates of victimization were found in Jackson, Cram, and Seymour's (2000) study

in New Zealand (females: 77%; males: 67%). This study's sexual coercion items covered a continuum of sexual activities ranging from kissing, hugging and genital contact to sexual intercourse that were defined as unwanted. Research by de Bruijn et al. (2006) in the Netherlands also reported particularly high percentage of sexual violence involvement, although this study had a large range in its findings that measured a variety of behaviors. For example, de Bruijn et al. (2006) measured sexually abusive behavior in terms of 'verbal', 'non-verbal/intimidating', and 'physically violent' behavior incorporating a broader range of abusive conduct. The authors report sexual dating violence victimization prevalence rates ranging from 1.6-75%, depending on the seriousness and type of sexual violence measured. The higher percentage accounts for less serious forms of behaviors, such as verbal remarks, and the most serious form of violence, forced sexual intercourse, was reported in 1.6% of cases of victimization. Similarly with regards to perpetration, 0.8% report perpetrating the most serious form of violence, forced sexual intercourse, while 63% reported perpetrated the less severe types of sexual violence. Ackard and Neumark-Sztainer's (2002) findings also support this trend in lower rates reported for the most serious forms of sexual violence victimization (1.2-1.8% for girls and 1-1.3% for boys) which was measured by the specific question: "Have you ever been the victim of date rape?". On the other hand, both Coker et al. (2000) and Schütt (2006) also used serious measures including forced sexual intercourse but found higher prevalence rates of around 15%. The seriousness of violence measured and the way questions are asked are certainly likely to affect the type of responses. However, it may be that methodological differences in the samples used such as genuine differences in experience may also account for such variations.

#### 2.4: Summary

Despite the use of a variety of measures and methodologies to investigate the prevalence of ADVA, a review of current research suggests that a significant number of young people experience, perpetrate, or are mutually involved in some form dating violence within their romantic relationships. With regards to general population samples, rough estimates based on the means of studies across measures range between 10-30% for physical violence victimization and 5-30% for physical violence perpetration (see Tables 2, 3, 4, & 5); 35-55% for psychological/emotional violence victimization, and 20-70% for psychological/emotional violence perpetration (see Tables 6, 7, & 8); and 5-30% for sexual violence victimization and 5-20% for sexual violence perpetration (see Tables 9, 10, 11, & 12). There was a clear trend throughout violence typologies for non-general population samples to report experience of victimization and/or perpetration of up to two-to-three times that of the general population sample studies. While there are some considerable variations in prevalence rates reported both within and between measures, it is apparent from this review that the most frequently reported type of dating violence is psychological/emotional abuse, followed by physical dating violence and sexual abuse. It is not clear, however, to what extent these findings are due to genuine differences in experiences or willingness to report on or whether these are due to nature of the scales, questions, terminology, and timeframes used to measure dating violence. It is also possible for example, that adolescents may be more willing to disclose experience or involvement in psychological/emotional aggression than physical or sexual abuse.

While both genders reported a notable amount of physical violence involvement, there was a general trend in the ad hoc measure and other established instrument

category for slightly more boys to report experiencing this type of abuse whilst more girls reported perpetrating it. The observation of higher rates of male victimization and female perpetration reflects Simon et al.'s (2010) suggestion that this may result from the perceived reduced social acceptance of male violence towards women. These social norms are characterized by what Felson (2002) defined as chivalry, which refers to the notion of societal norms that endorse the protection of women from harm by men, discouraging the attacking or abuse of women. This may mean that male perpetrators are less willing to disclose any involvement in abusive behaviors due to the perception that such behavior is disapproved of societally. Female respondents on the other hand may be more willing to disclose perpetration due to the perceived reduced social disapproval of female violence towards males. However, Hird's (2000) findings revealed that physical acts such as slapping, hitting and punching were described as a "normal" part of adolescent relationships, with most girls reporting being hit, held down, slapped, kicked, or punched by their boyfriends. Notably, girls as young as 13 in Barter et al.'s (2009) study were as likely as those aged 16 to have experienced physical violence from their partners. With regards to psychological/emotional abuse, girls generally reported both experiencing and perpetrating this type of dating violence more frequently than boys. The other established instruments category, however, reported slightly more males as being a victim, but there are limited data available for this measure and typology of violence. Some of the most frequent forms of psychological aggression reported were name-calling (Hird 2000), swearing (Halpern, Oslak, Young, Martin, & Kupper, 2001), and being made fun of (Barter et al., 2009; Kinsfogel & Grych 2004). A notable amount of both physical and psychological/emotional dating violence was reported to be mutual. More girls reported experiencing sexual violence victimization, whilst boys

reported more sexual violence perpetration within dating relationships. Sexual violence was also highlighted by de Bruijn et al. (2006) to consist of mutually abusive behaviors that ranged from verbal, and non-verbal to physical sexually abusive behavior that was considered to arise as a result of the transitional period of adolescent sexual exploration.

Inconsistencies in prevalence statistics reported across studies that have investigated the prevalence of ADVA leads to challenges when attempting to generalize and compare findings of studies, even when similar measures are used. For example, there are various versions of the CTS used by individual researchers, which may be amended or refined to include a selected number of chosen items. It has also been suggested that researchers need to bear in mind definitional issues when concerned with ADVA and the specific terminology used in surveys (Barter, 2009). The way questions are asked for example may influence the way participants respond, as could be seen in Ackard and Neumark-Sztainer's (2002) investigation where participants were asked specially about experiences on 'dates', rather than long-term relationship experiences. This appears to have resulted in the much lower prevalence ratings for physical and sexual dating violence victimization compared to other studies within that measure category and in general. Another methodological consideration to bear in mind is the timeframe in which respondents are asked to report experienced or perpetrated behavior. This time period varies from 3-18 months, to lifetime measures of experience or perpetration. In one study the experiences of respondents with regards to their current or most recent dating partner were reported (Tschann et al., 2009). McDonnell et al. (2010) reported on both lifetime physical dating violence involvement and involvement in the past three months, with the lifetime measure

being significantly lower than that reported in the past 3 months for female victimization (27% vs. 56.4%), male victimization (17.8% vs. 60%), female perpetration (20.4% vs. 66.7%), and male perpetration (8.4% vs. 60%). It is possible that this could be due to greater memory recall within this timeframe however, it is not clear exactly why this difference occurred as one would expect the reverse. Each study regardless of the methods, measure, and timeframe used, have their own justifications for the particular methodologies employed, however, this makes attempts to compare and synthesize the findings more challenging. What is clear from the summary tables is that those investigations employing the YRBS measure tend to report consistently lower prevalence estimates than those employing versions of the CTS, ad hoc measures, or other established instruments.

Another issue to bear in mind when concerned with prevalence studies relying on self-report measures is the risk that data will be affected by socially desirable responding (Simon et al., 2010). As noted, the perceived social rejection of male violence towards females may potentially mean that girls are more willing to disclose or admit to dating violence involvement. Male perpetrators may also not participate in dating violence research or may not accurately report their aggressive behavior leading to the collection of inaccurate data due to individuals responding in the socially desirable direction (Lewis & Fremouw, 2001). Furthermore, Edelen, McCaffrey, Marshall, and Jaycox (2009) have found that adolescents appear to be more forgiving of their partners than of themselves, which could lead to under reporting of dating violence or the minimization of the seriousness of the incident. Researchers need to acknowledge the limitations of self-report measures and be aware of strategies that can be used to identify and eliminate these limitations as much as

possible (Wekerle & Wolfe, 1999). In order to try and manage such risks posed to the authenticity of data collected, investigators should incorporate social desirability scales within or alongside dating violence measures specifically designed for the target age group of respondents. Shortened social desirability scales for children and young people have been developed (see for example, Crandall, Crandall, & Katkovsky 1965, 1991). This would enable researchers to assess the extent to which participants are likely to respond in a socially desirable way. Another strategy would be to build in test-retest questions within measures, or to test and retest the measure with the same sample on another occasion (Bryman, 2012), in order to enhance confidence in the reliability of respondents' answers to self-report surveys. The difficulty with such self-report methods is that researchers must ultimately acknowledge the risks of socially desirable responding or the risks of participants not wanting to partake in research of a sensitive nature (Rosenbaum & Langhinrichsen-Rohling, 2006).

More research is needed to explore the impact and meaning of ADVA victimization and perpetration in order to understand the dynamics of such abusive behaviors in relationships during adolescence. It has been suggested that the use of discreet behavioral measures may not fully capture the complexity of the dynamics involved in adolescent dating relationships or the contextual factors such as gender (Mulford & Blachman-Demner, 2013). The CTS for example is not intended to measure attitudes about conflict or violence or the causes or consequences of using different tactics (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Therefore, prevalence studies should be combined with qualitative investigations in order for an in-depth understanding of the context, meaning and impact of ADVA that is also supported by

quantitative findings. More uniform definitions and measures would enable the collection of more comparable data that would allow broader generalizations to be made.

### **3: The Relevance of Electronic Communication Technology to Adolescents and Adolescent Romantic Relationships**

Advancements in ECTs have enabled fast-paced, inexpensive, mobile, and online communication, which is rapidly changing and redefining the social networks of young people (Bryant, Sanders-Jackson, & Smallwood, 2006). In a study by the PEW Internet and American Life Project it was reported that 75% of teenagers aged 12-17 have a mobile phone and that 93% were online (Lenhart, Purcell, Smith, & Zickuhr, 2010). This represented the same usage as 18-29 year olds and a higher percentage than adults. Furthermore, 73% of online teens in the US reported use of SNS, a significant increase from previous surveys. Some popular SNS include sites such as 'Facebook' and 'Twitter'. In a large European study of children and their Internet usage, Livingstone et al. (2011) found that 93% of 9-16 year old users go online at least weekly and that 60% go online every day or almost every day. In the UK, Mobile Youth (2004, as cited in Tesco Mobile & NCH, 2005) reported that 97% of 12-16 year olds own a mobile phone and W2F Mobile Youth (2005, cited in Tesco Mobile & NCH, 2005) report that almost four million young people in the UK own a camera-enabled handset. Ofcom (2011) has also reported that home Internet use stands at 90% for 12-15 year olds. The CHILDWISE (2013) Monitor Report 2012-2013 found that 94% of 5-16 year olds go online, spending around 1.5 hours online each day. Furthermore, 60% of youth reported going online in their bedroom and 73% report owning their own PC or laptop, with 41% also having access to the Internet on

their mobile phones. It was also noted that a 62% of young people had visited a SNS in the previous week and that 30% had visited a SNS on their mobile phone. Young people most commonly report using mobile and Internet technologies for social networking in addition to gaming, watching videos and listening to music (CHILDWISE, 2013). In Livingstone and Bober's (2005) study, adolescents identified that technological tools were used for passing time, making arrangements, getting advice, gossiping, and flirting. Such findings highlight the wide range of technologies and communication tools used by adolescents and the range of purposes for which these technologies are used.

ECTs provide many potential benefits to young people in terms of allowing adolescents to talk to others worldwide, in addition to enabling easier contact with family and peers, which is reported to have the potential to translate into a stronger sense of safety and connectedness with significant others (David-Ferdon & Hertz, 2007). Additionally, existing research suggests that online communication may present several opportunities for young people's social development in terms of enhanced self-esteem, relationship formation, friendship quality, and sexual self-exploration (Valkenburg & Peter, 2011). Davis (2012) explored the role of digital media technologies in adolescents' (aged 13-18) experiences of friendship and identity. A thematic analysis of their responses revealed that online peer communications promote adolescents' sense of belonging and self-disclosure, two important peer processes that support identity development during adolescence. Casual exchanges, whether through texting, Facebook, or IM, help adolescents to maintain a sense of connection and belonging to their closest friends and appear to also widen adolescents' circle of friendships (Davis, 2012). Subrahmanyam and

Greenfield (2008) conducted a review of the role of online communication activities to adolescent relationships with their friends, romantic partners, strangers, and their families and found that adolescents participated in online communication activities to reinforce existing relationships, both with friends and romantic partners, while integrating these online tools into their “offline” worlds. In an analysis of anonymous posts (346 posts extracted from 35,000) made by children and young people aged 11-24 years old to a free, 24-hour, national, phone and Web counseling, referral, and information service, adolescents were found to readily develop both friendships and romantic relationships online, relationships that were highly valued and considered as important as relationships in “real” life (Mishna, McLuckie & Saini 2009). Furthermore, some of these relationships were established and maintained exclusively online.

It has been acknowledged that adolescents commonly use ECT to keep in contact with their romantic partners for day-to-day non-abusive communication (Barter et al., 2009; Carlson & Rose, 2012; Draucker & Martsolf, 2010; Picard, 2007; Toscano, 2007). Furthermore, Draucker and Martsolf (2010) found that adolescents used communication tools to establish, maintain, and end relationships in addition to reconnecting after a breakup. Carson and Rose (2012) found that 87.9% of 10-17 year old adolescents in a romantic relationship reported communicating with their partner with a mobile phone. The use of Emails and IMs were also reported by 50.7% of adolescents in a romantic relationship. Teenagers have been reported to communicate with their dating partners late or throughout the night. Picard (2007) for example, found that 24% of 13-18 year old teens in a relationship communicated with their partner via mobile phone or texting hourly between midnight and 5:00am. Seventeen

per cent admit to having communicated with their partner via mobile phone or texting 10 or more times per hour between midnight and 5:00am, or from 10 pm to midnight, and 30% say they have communicated with their partner via mobile phone or texting 10 to 30 times or more hourly. For many of the young people, the Internet was an integral component of their romantic and sexual experiences. Mishna et al. (2009) also found that teenagers as young as 13 years old depicted being involved in intense online sexual and romantic relationships, describing encounters that ranged from explicit sexual dialogue (referred to as “cybering”) and displaying nudity via Webcams (referred to as “flashing”) to long-term monogamous relationships that either progressed to actual meetings or remained within a cyber context. According to the young people in this study, these online relationships were sustained through “almost daily” contact through Email, Webcam, and in some cases via a phone.

A relatively new phenomenon involving ECTs among adolescents is the practice of “sexting”. Lenhart (2009, p. 3) has defined “sexting” as ‘the creating, sharing and forwarding of sexually suggestive nude or nearly nude images by teens’. In a review of quantitative research on sexting, Ringrose, Gill, Livingstone, and Harvey (2012) reported that between 15-40% of young people are involved in sexting, depending on their age and the way sexting is measured. The authors also found that few teens wished to be excluded from sexual banter, gossip, discussion or from the flirtatious activity that is endemic in youth culture and that sexting was not just practiced on a one-to-one basis but as a group, networked phenomenon. It has been suggested that adolescence is a time of sexual exploration not only in real-life situations, but also in the virtual reality of online sex through media such as the Internet, Chatrooms and webcams (de Bruijn et al., 2006). In the Associated Press and MTV’s (2011) study on

digital abuse, one in three 14-24 year olds report having engaged in some form of sexting, while 71% regard sexting a serious problem for people their age. While such practices may be used on a voluntary or mutual basis, sexting has been reported to place adolescents at risk of behaviors that are coercive, linked to harassment, bullying and violence (Ringrose et al., 2012). Sexting may, therefore, present a risk factor for abusive behaviors to be perpetrated within the context of a dating relationship. Adolescents may be unaware of the risks they are placing themselves in by for example, sending nude or partially nude images of themselves and the potential that such material could be used for blackmail or for abusive purposes. More research into the nature of the relationship between those who participate in sexting practices and the extent to which this is considered harmless or intrusive would inform the extent to which this occurs within the context of romantic or dating relationships and whether this may place adolescents at risk for abusive dating behaviors within this context.

It has been asserted that the effect of online communication on psychosocial development (e.g., identity, intimacy and sexuality) depends on technological, situational, and personal factors such as the type and frequency of use, the nature of the relationship one is communicating with, and the motivations of the individuals in contact online (Valkenburg & Peter, 2011). Higher rates of Internet usage have been reported to place young people at an increased risk of experiencing some form of cyberbullying (Fredstrom, Adams, & Gilman, 2011; Hinduja & Patchin, 2008; Smith et al., 2008). While there are clear benefits of advancements in ECT in terms of both peer, family and romantic relationship establishment, maintenance and development, identified risks of online aggression, bullying, and harassment presented by modern forms of ECTs raise concerns for the use of technology in the perpetration of abusive

behaviors within the context of adolescent romantic relationships. ECTs are an important component of communication in all stages of adolescent romantic relationships, some of which are reported to be maintained exclusively online, highlighting the risk of technology to be used for abuse within these contexts.

#### **4: The Relationship between Bullying, Cyberbullying, Adolescent Dating Violence and Abuse, and Technology Assisted Adolescent Dating Violence and Abuse**

##### **4.1: The Relationship between Bullying and Cyberbullying**

A recent acknowledgement of the risk of cyberbullying to children and young people has generated a growing research literature that has begun to highlight the nature, prevalence and impact of online bullying and harassment among school-aged populations in the UK (Rivers & Noret, 2010; Smith et al., 2008), the US and Canada (Hinduja & Patchin, 2008; Hoff & Mitchell, 2009; Kowalski & Limber, 2007; Li, 2007; Mishna, Saini, & Solomon, 2009; Patchin & Hinduja, 2006; Schneider, O'Donnell, Stueve, & Coulter, 2012; Wade & Beran, 2011; Wolak, Mitchell, & Finkelhor, 2007) and Europe (Gradinger, Strohmeier, & Spiel, 2009; Slonje & Smith, 2008). Some ECTs that have been identified in such literature include mobile phones, SNS, IM, Email, Chatrooms and Websites. Smith et al. (2008) have defined cyberbullying as:

“an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself” (p. 376).

Smith et al.'s (2008) definition of cyberbullying reflects that proposed by Olweus (1993) with regards to traditional bullying, but with the additional emphasis on such behaviors being performed through electronic forms of contact. It has been

increasingly acknowledged that young people who experience or engage in traditional bullying in their peer networks are also more likely to experience or engage in the same behaviors within the cyber environment (Dempsey, Sulkowski, Dempsey, & Storch, 2011; Hinduja & Patchin, 2008; Katzer, Fetchenhauer, & Belschak, 2009; Li, 2007; Schneider, O'Donnell, Stueve, & Coulter, 2012; Steffgen & König, 2009; Twyman, Saylor, Taylor, & Comeaux, 2010; Wang, Iannotti, Luk & Nansel, 2010). Ybarra et al. (2007) on the other hand reported that although some overlap exists, the majority (64%) of youth who were harassed online in their study were not also being harassed or bullied at school. It has also been identified by Beran and Li (2007) that students who were bullied in cyberspace were also likely to bully their peers in cyberspace. As there is some evidence to suggest an overlap between those involved in bullying in the traditional and cyber environment, it seems reasonable to question whether the same behavior might occur within the context of ADVA. Current cyberbullying literature does not specifically consider the relationship between victims and perpetrators, meaning the occurrence of such behaviors within a dating context have not been identified, despite it being likely that they have inadvertently been included.

#### **4.2: The Relationship between Bullying and Dating Violence and Abuse**

It has been argued that dating violence can be viewed as bullying within a dating relationship as it occurs when one partner uses violence or threats of violence to gain and maintain power and control over the other and is repeated and intentional, often leaving the victim fearful of what will happen next (Roberts, 2001, p. 3). Concern has been expressed for the risk that young people who use power and aggression in relationships with their peers may then transfer these behaviors in their romantic relationships (Connolly, Pepler, Craig, & Taradash, 2000; Fredland, 2008). If dating

relationships provide a context in which bullies can experience their power and dominance, interactions in these relationships may lay the foundation for later relationship violence (Pepler, Craig, Connelly & Henderson, 2002). Connolly et al. (2000) found that young adolescents who were identified as bullies started dating earlier and engaged in more advanced dyadic dating than adolescents who had not bullied others. In a number of studies a connection between bullying behaviors towards peers and bullying or violent behaviors in dating relationships has also been identified (e.g., Connolly et al., 2000; Espelage & Holt, 2007; Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004; Ozer, Tschann, Pasch, & Flores, 2004; Renner & Whitney, 2012). De Bruijn et al. (2006) also found that adolescents who reported being victims or perpetrators of bullying and violent behavior with friends were more likely to report that they were victims or perpetrators of unwanted sexual behavior. Similar findings were reported by Basile, Espelage, Rivers, McMahon, and Simon (2009) with regards to bullying and sexual violence perpetration and Espelage and Holt (2007) with regards to bullying and peer sexual harassment victimization. It has, therefore, been suggested that youths who engage in or experience bullying and in particular sexual bullying are at greater risk of engaging in more serious forms of dating violence (Fredland, 2008).

#### **4.3: The Relationship between Cyberbullying, Adolescent Dating Violence and Abuse and Technology Assisted Adolescent Dating Violence and Abuse**

As there is evidence to suggest a link between involvement in peer bullying and in dating violence, and that involvement in traditional forms of bullying is associated with engaging in the same behaviors in the cyber environment, it seems reasonable to suggest that dating violence may also be transferred within the context of ECT. Hoff

and Mitchell (2009) investigated cyberbullying among 351 young adults (mean age 19.9 years old) and found that such abuse emerged from relationship problems such as break-ups, envy, intolerance, and ganging up. Furthermore, students reported that romantic break-ups caused feelings of rejection and anger that resulted in retaliation by cyberbullying, whereby current or former boyfriends and girlfriends and also friends not involved in the relationship became involved in the bullying. Such findings highlight that some cyberbullying is likely to actually occur in the context of ADVA. Hinduja and Patchin (2011) found that young people who were cyberbullied were 3.6 times as likely to experience electronic teen dating violence than those who were not cyberbullied. Furthermore, victims and/or perpetrators of traditional or offline dating violence were significantly more likely to be victims and/or perpetrators of electronic forms of dating violence. Zweig, Dank, Lachman, and Yahner (2013b) also found that those victimized by cyberbullying were almost three times as likely to also report cyber dating abuse victimization (38%, compared to 13%); and those who reported perpetrating cyberbullying were almost four times as likely to also report cyber dating abuse perpetration (26%, compared to 7%).

### **5: Prevalence of Technology Assisted Adolescent Dating Violence and Abuse**

The relevance of technology to abusive behaviors among young adults and adults has received increasing research attention on what has been termed electronic victimization (e.g., Bennett, Guran, Ramos, & Margolin, 2011; Jerin & Dolinsky, 2001), cyber-harassment (e.g., Dimond, Fiesler, & Bruckman, 2011; Finn, 2004; Melander, 2010), cyber-teasing (e.g., Madlock & Westerman, 2011), cyberstalking (e.g., Bocij, 2004; Lee, 1998; Pittaro, 2007; Southworth, Finn, Dawson, Fraser, & Tucker, 2007; Southworth & Tucker, 2006; Spitzberg & Hoobler, 2002), or

controlling and monitoring behaviors via technology (e.g., Burke, Wallen, Vail-Smith, & Knox, 2011). Only 12 studies, however, were found to empirically investigate the nature and prevalence of TAADVA (Associated Press/MTV 2009, 2011; Barter et al., 2009; Cutbush et al., 2010; Cutbush et al., 2012; Draucker & Martsof, 2010; Fox et al., 2013; Hinduja & Patchin, 2011; Korchmaros et al., 2013; Picard, 2007; Tompson et al., 2013; Zweig et al., 2013a). A summary of these studies is provided in Table 13. The majority of these studies focused specifically on the role of ECT in ADVA while Barter et al. (2009) examined this issue as part of a larger investigation into the nature and prevalence of ADVA. In another UK study, Fox et al. (2013) also asked one question regarding a dating partner checking phone call and message histories. Studies that have considered TAADVA have all used ad hoc self-report measures adapted for the individual studies. Cutbush et al. (2010) and Cutbush et al. (2012) both used 8 items from Picard's (2007) investigation. Of the 16 items in Zweig et al.'s (2013) ad hoc measure, six items were also adapted from Picard's (2007) study. Barter et al. (2009) asked two questions regarding emotional abuse and technology regarding monitoring, and humiliating and threatening behaviors. Barter et al. (2009) also explored TAADVA qualitatively with adolescents using semi-structured interviews. Draucker and Martsof (2010) explored the transcribed narratives of young adults' (age 18-21) retrospective experiences of ADVA at age 13-18. Draucker and Martsof (2010) identified six ways in which technology was used in participants' experiences of ADVA or aggression although not all of these consisted of ways in which this was abusive. These consisted of: arguing with a partner; monitoring or controlling the activities or whereabouts of a partner; perpetrating emotional or verbal aggression against a partner; seeking help during a

violent episode; limiting a partner's access to oneself; and reconnecting with a partner after a break-up or violent episode.

--- Insert Table 13 ---

### **5.1: Victimization and Perpetration**

Broadly, depending on the behavior type measured and the way the questions were asked, prevalence rates reported for TAADVA victimization and perpetration across studies range from 12-56% and 12-54% respectively. When specific individual behaviors measured are broken down further, these range between 2-35.5% for victimization and 3-20% for perpetration. However, most studies tend to report estimates that fall within the range of 10-30% for victimization and 5-15% for perpetration. With regards to TAADVA of a sexual nature, 4-22% report being victimized and 3-5% report perpetrating it. For studies that provide a breakdown of reported prevalence rates by gender, Barter et al. (2009) found that females were more likely to be a victim of psychological/emotional TAADVA than males. Zweig et al. (2013) found that females were more likely to be a victim of sexual cyber dating abuse than males. With regards to non-sexual cyber dating abuse however, while females reported slightly more victimization than males, this difference was only marginal. With regards to perpetration, males were more likely to report perpetration of sexual cyber dating abuse while females were more likely to report perpetration non-sexual cyber dating abuse (Zweig et al. 2013). Interestingly, a significant percentage (over 60% for all behavior types) of the 13-18 year olds in Picard's (2007) investigation report dating abuse via ECT to be a serious problem for teenagers their age who are in relationships. This statistic is much higher than that reported for personal experience in this study (10-30%) indicating that either prevalence reports

for TAADVA are underestimated or that there may be heightened perceptions of concern about such issues which does not equate to the reality. TAADVA is clearly something that many adolescents are aware of and/or see as a problem for people their age, regardless of disclosure of personal experience or involvement in such abuse.

## **5.2: Media of Technology Used in Adolescent Dating Violence**

Draucker and Martsof (2010) are one of the only authors to breakdown experiences of abusive behavior by technology type with regards to the transcribed narratives of respondents and found that out of the 53.6% of young adults who reported adolescent experiences of technology-assisted monitoring and controlling behaviors, the most common technologies used were by phone call (44.6%), followed by SNS (12.5%), and text messaging (8.9%). Notably a 45% of the total sample provided references to this type of behavior via a mobile phone. Less popular methods, albeit still present, were via emails, Websites, and Key-loggers. A similar pattern emerged with regards to perpetration of emotional or verbal aggression against a partner, with a mobile phone being the most frequently identified technology (41.1%), followed by text message, SNS, and IM. The most frequently reported type of behavior in Zweig et al.'s (2013) investigation, however, was a romantic partner's use of a young person's SNS account without permission. Draucker and Martsof (2010) provided some examples of behaviors described by respondents in their transcribed narratives. Most commonly, the participants described how their partner had checked up on them by calling their phone multiple times. Many participants admitted going through voice mail recordings or stored text messages in their partners' phones to determine whom they had been talking to. Participants also provided examples of romantic partners leaving threatening voice mail or text messages threatening to harm them if they did not

return their partner's calls. The verbal aggression experienced by respondents was sometimes reported to be posted online in public, and was described as being insulting, demeaning and threatening.

Korchmaros et al. (2013) also provided a breakdown of psychological ADVA via four different media including that which occurred in person and found that of the 46% of respondents who reported psychological abuse perpetration, the most commonly used method was in person (71.1%) followed by text message (37.6%), phone call (30.2%), and online (13.2%). Korchmaros et al. (2013) assert that the use of these ECTs may not be equal, evidenced by their finding that psychological ADVA perpetration was almost three times more frequent via text messaging compared to online. Similarly, Draucker and Martsof (2010) reported mobile phones as the most commonly reported technology used. Korchmaros et al. (2013) suggest that this may be a result of having continuous access to texting via a mobile phone compared to that of the Internet, which may vary throughout the day unless one has constant access to such tools on their phone or via for example, a smartphone. It has been identified, however, that adolescents increasingly have access to such tools. Findings from a nationally representative survey of 802 teens aged 12-17 years old in the US for example, has shown that 37% of teens have smartphones, an increase of 14% from 2011 (Madden, Lenhart, Duggan, Cortesi, & Gasser 2013). Furthermore, 74% teens say they access the Internet on cell phones, tablets, and other mobile devices at least occasionally (Madden et al., 2013). Interestingly, 24% of respondents in Korchmaros et al.'s (2013) study said that they had used both traditional and technology-assisted methods in the perpetration of psychological dating violence. This suggests that dating

violence experienced or performed via technology is not distinct from that conducted in a face-to-face context but often experienced as a continuum of abusive behavior.

### **5.3: Continuum of Abuse?**

Interestingly, TAADVA has been associated with other forms of ADVA of a traditional nature in the limited available studies to address this relationship. Cutbush et al. (2012) for example, found that electronic dating aggression perpetration was associated with psychological, physical, and sexual dating violence and abuse perpetration, and that electronic dating aggression victimization was associated with psychological dating abuse victimization and perpetration, physical dating violence perpetration, and sexual dating abuse victimization. Zweig et al. (2013a) similarly identified that those who experienced cyber dating abuse were seven times more likely to experience sexual coercion and that those who report cyber dating abuse perpetration are 17 times more likely to perpetrate sexual coercion. There is some existing literature that suggests that technology-assisted psychologically/emotionally abusive and controlling behaviors are not distinct forms of abuse to those performed in person (Barter et al., 2009). Barter et al. (2009) for example, identified that technologies provided an extra mechanism by which partners could exert control for those young people who were already in a violent relationship. Girls commonly reported that such control was often associated with a partner's wish to restrict their communication with peers they met online, especially males. Notably, the use of technologies such as the Internet enabled control by partners to extend into every aspect of adolescents' social lives and was often experienced as a continuum of behavior in both the online and offline environment. The adolescent girls, however, reported varying views on what was seen as acceptable levels of contact and therefore

considered as a sign of caring or rather what was viewed as intrusive (Barter et al., 2009). For example, some girls justified their partner's monitoring or controlling behaviors based on feeling loved rather than checked up on, whereas others recognized that such control might progress from being nice to become annoying and uncomfortable. Draucker and Martsof (2010) similarly found that some participants reported that controlling or monitoring behaviors were motivated by care or concern however, most acknowledged that such behaviors were often due to concerns for infidelity or relationship insecurity.

It is worth noting here that the prevalence statistics reported for TAADVA are considerably lower than those reported for psychological/emotional ADVA victimization of a traditional nature when comparing studies that reported on both. See for example, Barter et al. (2013) (Females: 12-31%; Males: 4-21% vs. Females: 72%; Males: 51%), and Zweig et al. (2013) (Overall: 22%; Females: 23%; Males: 21% vs. Overall: 47%; Females: 50%; Males: 44%). With regards to perpetration, a similar pattern emerges; see for example, Zweig et al. (2013) (Overall: 10.5%; Females: 13%; Males: 7% vs. Overall: 26%; Females: 32%; Males: 19%). It is possible that reports of traditional ADVA are underestimated as psychological/emotional abuse via technology may not have been directly included in the measures of such behaviors. A slightly different pattern occurred within Zweig et al.'s (2013) findings with regards to sexual cyber dating abuse when compared to direct sexual dating abuse, see for example, (Overall: 11%; Females: 15%; Males: 7% vs. Overall: 13%; Females: 16%; Males: 9%) with regards to victimization and (Overall: 3%; Females: 2%; Males: 4% vs. Overall: 3%; Females: 1%; Males: 4%) for perpetration. Interestingly, with regards to sexual dating violence victimization and

perpetration in this study, reports of this type of behavior are fairly consistent regardless of whether reported in a traditional or technology related context. It is not clear, however, whether behaviors experienced or performed via technology have been reported on in studies investigating traditional sexual dating violence. More research is needed in order to explore whether TAADVA is experienced as a continuum of violence and abuse or whether this may in fact create new victims and/or perpetrators of dating violence and abuse via ECT.

#### **5.4: Methodological Factors Relevant to the Interpretation of Prevalence Data**

Due to differences in the way each study measures, collects and reports their data such as the various reporting timeframes and the wide range of behavior items and questions used, attempts at making generalizations and accurate comparisons once again becomes a difficult task. An established instrument is needed which will enable future assessment to be more consistent and comparable. The instrument needs to be comprehensive in terms of distinguishing between various media of ECT as well as the different types of abusive and controlling behaviors. It would be useful to include measures of behaviors that may be conducted in person or via ECT in order to explore whether ADVA via ECT is connected to that in the offline realm and to compare these experiences of involvement. It would also be useful to measure experience of victimization and perpetration in general as well as by gender in order to compare experiences of TAADVA among male and female adolescents. Despite differences in measures across studies investigating TAADVA, it is clear that a significant number of adolescents report experiencing and/or perpetrating TAADVA within their dating relationships, highlighting the relevance of ECT to ADVA. ECT appears to provide six avenues of abusive behavior: psychological/emotional abuse (e.g., mean, hurtful

or insulting comments or put downs); threatening comments; embarrassing/humiliating behaviors (e.g., spreading rumors or sharing private pictures); control through harassment or excessive contact (e.g., checking behaviors); sexual harassment or coercion; and monitoring or controlling ECT use and contacts or the restriction of ECT use. While these abusive and bullying dating behaviors are able to be experienced or performed in person or via ECT, the extent to which ECT creates new victims and perpetrators of ADVA or whether this occurs as a continuum of psychologically/emotionally abusive or controlling behaviors within already abusive relationships needs further empirical investigation. The psychological impact of TAADVA compared to that of traditional ADVA is also yet to be determined.

### **5.5: Summary**

While increasing access to affordable, fast passed methods of ECT has led to many positive opportunities for adolescents in terms of relationship development and maintenance, this has also created new risks in which ECTs can be used for abusive or controlling behaviors within adolescent dating relationships. A relatively new area of research has highlighted the relevance of ECT to ADVA as a prevalent concern. Despite inconsistencies in the prevalence reports between the individual studies reviewed, it is clear that TAADVA is an issue for a significant number of the adolescent respondents in these studies with 12-56% reporting some form of victimization and 12-54% reporting some form of perpetration of TAADVA. Females were more likely to report being a victim of both non-sexual and sexual TAADVA. While females were more likely to report perpetrating non-sexual TAADVA, males were more likely to report perpetrating sexual TAADVA. These gender differences are consistent with reports of traditional psychological/emotional, and sexual ADVA.

Reports of psychological/emotional ADVA were considerably higher than those reported for TAADVA however, those of a sexual nature were fairly consistent regardless of whether reported on in a traditional or technology-assisted context.

With regards to the individual technologies used, mobile phones, and calls, in particular, appear to be the most commonly reported media used, followed by text message and SNS. It has been argued by Korchmaros et al. (2013) however, that the epidemiology of TAADVA is largely unknown. More research is needed to determine the degree to which different media of technology is used within the context of TAADVA. Some evidence has suggested that ADVA is experienced as a continuum of violence in person and via ECT (e.g., Barter et al., 2009; Korchmaros et al., 2013). TAADVA involvement has also been associated with ADVA of a traditional nature (e.g., Cutbush et al., 2012; Zweig et al., 2013). Further research is needed to explore the relationship between ADVA in both the traditional and online realm. It is important to examine the extent to which this is experienced or performed as a continuum of abusive behavior and the extent to which this creates new victims or perpetrators of dating abuse as while there was inevitably some overlap, a significant number of respondents in the studies reviewed did not report experience ADVA in both contexts. The limited data available, in addition to inconsistencies in measures used by studies, like traditional measures of ADVA, makes meaningful comparisons difficult to conclude. More consistent measures are needed in order to allow for these generalizations between studies to be made. Further research is needed to investigate the role of technologies in adolescent romantic relationships for both abusive and non-abusive purposes, before, during, and after these relationships have ended in order to understand how such tools are used within the context of ADVA.

## **6: The Relevance of Electronic Communication Technology to the Psychological**

### **Impact of Adolescent Dating Violence and Abuse**

There has been evidence to suggest that the impact of cyberbullying may be perceived as comparable to that of traditional bullying (Kubiszewski, Fontaine, Huré, & Rusch, 2013; Ortega et al., 2010; Smith et al., 2008;). Fredstrom, Adams, and Gilman (2011) for example, reported that school-based and electronic victimization were associated with lower self-esteem and self-efficacy as well as higher stress, anxiety, and depressive symptoms. Some studies, however, have reported that the impact of cyberbullying is distinct from traditional forms of bullying and is associated with increased depressive symptoms and suicidal ideation (Bonanno & Hymel, 2013; Wang, Nansel, & Iannotti, 2011). Campbell, Spears, Slee, Butler, and Kift (2012) found that although students (aged 9-19) who had been victimized by traditional bullying reported that they felt their bullying was harsher and crueler and had more of an impact on their lives than those students who had been cyberbullied, the correlates of the participants' mental health revealed that cyber-victims reported significantly more social difficulties, and higher levels of anxiety and depression than traditional victims. Some young people's perceptions of the impact of cyberbullying have suggested that cyberbullying results in greater harm to the victim than that of traditional forms of bullying (e.g., Spears, Slee, Owens, & Johnson, 2009). Slonje and Smith (2008) found that most adolescents in their Swedish sample of 360 12-20 year olds thought that text message and email bullying had less of an impact than traditional bullying, while phone call bullying was perceived as comparable in impact to traditional bullying. A high impact factor was, however, given to picture/video clip bullying which was attributed to the breadth of the audience and the concreteness

effect (i.e., actually seeing the picture/clip) (Slonje & Smith 2008). It is possible that the psychological impact of ADVA will be comparable to the impact of TAADVA. However, to date, no research was found to consider this with regards to adolescents and more specifically in terms of the individual technologies used.

The psychological impact of ADVA has been identified to include effects on young people's psychological/emotional wellbeing which may include emotional problems such as feelings of anger, fear, hurt, confusion, sadness, guilt/shame and embarrassment (e.g., Barter et al., 2009; Burman & Cartmel, 2005; Ismail et al., 2007; Jackson et al., 2000; O'Keefe & Treister, 1998). Respondents have also reported depressive symptoms, suicidal thoughts, higher levels of posttraumatic stress, sleep disturbances, and anxiety (e.g., Ackard, Eisenberg, & Neumark-Sztainer, 2007; Banyard & Cross, 2008; Callahan, Tolman, & Saunders, 2003; Ismail et al., 2007; Silverman, Raj, Mucci, & Hathaway, 2001). Behavioral problems associated with the effects of ADVA victimization include health risk behaviors such as cigarette smoking, suicide attempts, binge-eating, smoking marijuana, high substance use, and unhealthy weight control behaviors (e.g., Ackard et al., 2007; Silverman et al., 2001). Such impacts may also effect adolescents' concentration or performance at school (Banyard & Cross, 2008; Ismail et al., 2007). Adolescent females have reported that the emotional (and physical) health problems they experienced as a result of ADVA persisted beyond the termination of the abusive relationship (Ismail et al., 2007), the length of time during which these effects persisted however was not identified.

The impacts of ADVA are sometimes reported to vary for males and females (e.g., Callahan et al., 2003) with females reporting more effects of emotional hurt or fear

than males (e.g., Barter et al., 2009; Jackson et al., 2000; O'Keefe & Treister, 1998). A substantial percentage of adolescents in Barter et al.'s (2009) study (69% girls and 94% boys) who experienced emotional violence stated that it had no impact on them compared to that of physical and sexual dating violence. Barter et al. (2009) suggest the significantly larger percentage of girls reporting negative effects as a result of emotional violence supports Stark's (2007) assertion that components of emotional abuse such as coercion and control may be more significant when this abuse is underpinned by other forms of inequality and gendered power within intimate relationship violence. The authors also identify that the potential impact of emotional dating abuse may be related to the severity of violence experienced, as those young participants who did state that the emotional abuse they experienced had an impact were more likely to report more forms of emotional violence which occurred with greater regularity than those young people who reported that they were unaffected (Barter et al., 2009). While these reports identify females as the gender most affected by dating violence, it is not clear to what extent this reporting by males may be influenced by stereotypical gender norms. It has been asserted for example, that young people appear to perceive a double standard of behavior associated with boys' and girls' use of physical violence where girls' use of physical aggression is considered as less serious and more acceptable, subsequently being laughed off or justified as 'joking around' (Bowen et al., 2013; Sears, Byers, Whelan, & Saint-Pierre 2006). This highlights the need for more research that considers the nature, context and impact of ADVA in order to understand the dynamics of such relationships that are abusive.

While research exploring the impact of TAADVA is scarce, it was apparent from many of the accounts in Barter et al.'s (2009) study that new technologies may facilitate, and possibly exacerbate the problem of partner control in the lives of teenagers, in addition to transcending into a wider repertoire of online and offline control strategies. ECTs appear to provide more opportunities for abusive, controlling, and coercive dating behaviors to take place in what may be already abusive relationships. This may suggest that both the behaviors and the impact of those behaviors are linked. It was found within the TAADVA literature that adolescents reported being afraid not to respond to phone calls, text messages, Emails or IMs by their girlfriends/boyfriends because of threats by their partners (Cutbush et al., 2010; Draucker & Martsof, 2010; Picard, 2007). One participant in Barter et al.'s, (2009) study described that sometimes girls felt unable to discuss the level of surveillance and control being exercised by their partner with him for fear of hurting his feelings. The ability of technology to provide fast paced, instant communication from a distance leaves speculation to whether this leads to a unique type of impact compared to that of psychologically/emotionally abusive or controlling behaviors performed in person. It has been recognized that technology influences the dynamics of dating violence by redefining the boundaries of romantic relationships in ways that provide a fertile ground for conflict and abuse and through providing opportunities for constant contact through mobile or online communication technology (Draucker & Martsof, 2010). Consequently, due to new methods of online communication, geographic and spatial boundaries no longer present a barrier for one to communicate, contact or locate another globally (Hand et al., 2009). Mobile and online communication tools, for example, enable partners to maintain contact even when a relationship had ended. Abuse via technology may, therefore, take place while one is in a relationship with an

abusive partner and continue once that relationship is ended, contact which would be much more difficult without advancements in ECT.

Concerns have been expressed that adolescents may not recognize abuse via ECT as serious and may, therefore, be unlikely to seek help from appropriate adults. Picard (2007) found that the majority of young people who had been asked to engage in sexual activity (82%), been harassed or embarrassed on a SNS (78%), or been repeatedly checked up on via e.g., Email or text messaging (72%) by a dating partner, report that they did not tell their parents. The most common reasons reported for this were that the young people did not believe that the behaviors were serious enough to justify telling an adult or because of fears that parents may limit or take away their use of their computer, mobile phone or prevent them from seeing their partner. Only one in 10 adolescents victims of TAADVA sought help in Zweig et al.'s (2013b) study. Forty-eight percent of teens and 53% of parents also believe that computers and mobile phones make abuse easier to conceal from parents (Picard, 2007). Worryingly, 18% of parents in Livingstone and Bober's (2005) survey said that they did not know how to help their child use the Internet safely. Furthermore, 69% of 9-17 year old daily and weekly users say they mind their parents restricting or monitoring their Internet use and 63% of 12-19 year old Internet users have taken action to hide their online activities from their parents, highlighting concerns for a potential lack of help-seeking for experiences of TAADVA among teenagers.

The perceived impact of technology-assisted domestic violence, online harassment, or cyber-stalking has been seen as vulnerable to being minimized in relation to physical violence due to the perceived distance separating the victim from immediate physical

harm (Hand, Chung, & Peters, 2009; McCall, 2004). However, research with young adult and adult samples has found that constantly receiving harassing messages from an intimate partner may heighten perceptions of vulnerability, potentially escalating the threat of physical violence (Dimond, Fiesler, & Bruckman, 2011; Melander 2010). In Madlock and Westerman's (2011) study of young adult (18-33 years old) experiences of cyber-teasing in romantic relationships, the authors found that such experiences often resulted in retaliation by one partner to another in both the online and offline environment, which sometimes escalated into verbal and/or physical aggression. Some identified impacts of ECT-based abuse and harassment with regards to adult samples have been identified to include depression, helplessness, feeling sick, extremely anxious, annoyed, distressed, or fearful for one's safety (Logan, 2010; Truman, 2007). It is not clear to what extent these impacts may be applicable to victims of TAADVA, however these psychological and emotional impacts reported by young adult victims of such harassment reflect those identified in the ADVA literature regarding the psychological impacts of traditional forms of abusive dating behaviors. More longitudinal studies are needed in order to determine the nature of both short and long-term impacts of ADVA and of that experienced via ECT.

## **7: Discussion**

Dating relationships have been shown to be an integral part of adolescents' lives, being prevalent from early adolescence and progressing in intensity and seriousness throughout this period of maturation. According to Straus (2004), dating couples are at greater risk of violent behavior than married couples. This review of studies reporting the prevalence of ADVA indicates that indeed, violence in dating relationships is certainly not a rare occurrence, with evidence that some adolescents

report that such behaviors are normal parts of romantic relationships (e.g., Hird 2000). This highlights the importance of understanding more about the nature, prevalence, and impact of dating violence and abuse among adolescent couples, as has been widely researched with adults with regards to terms more commonly referred to as 'domestic violence' or 'intimate partner violence'. While the issue of dating violence in adolescent romantic relationships has received increasing academic attention, particularly in the US, few studies were found to have explored this matter in the UK (Barter et al., 2009; Burman & Cartmel 2005; Fox et al., 2013; Hird, 2000; Schütt, 2006), and wider Europe.

The number of studies reporting the prevalence of physical dating violence far outnumbered those reporting any other type of abuse. The most prevalent form of dating violence behavior, however, appears to be psychological/emotional abuse, followed by physical and then sexual violence. A notable amount of violence was reported to be mutual in the limited number of studies to have measured this. Generally, girls reported more psychological/emotional and sexual violence victimization while boys reported more physical violence victimization. Girls reported more physical and psychological/emotional violence perpetration, while boys reported more sexual violence perpetration. Limited references to the use of technology were found in these traditional dating violence studies and only 12 studies were found to investigate or ask about TAADVA directly. Prevalence reports for TAADVA are lower than that reported for psychological/emotional dating violence when studies looked at both contexts of violence. Reports of sexual TAADVA and sexual ADVA, however, were fairly consistent. The prevalence estimates of studies to report on TAADVA are notable, highlighting the relevance of ECT to ADVA as a

present concern. The limited studies to have investigated TAADVA are surprising, however, given the international recognition of the significance and risks of ECT use to adolescents both in general and with regards to romantic relationships. Given that TAADVA may be considered as psychologically/emotionally abusive behavior, it seems reasonable to suggest that current prevalence rates of psychological/emotional ADVA are underestimated. It may for example, be possible that respondents do not report or recognize ECT-based behaviors in a survey if such questions are asked in a face-to-face context. As a result of inconsistencies in methodologies between prevalence studies in terms of the measures, timeframes, terminology, and samples used, accurate comparisons and generalizations are difficult to make.

ECT appears to enable the perpetration of psychologically/emotionally or sexually abusive and controlling behaviors to take place through a new avenue, a new media which has some distinguishing features such as the affordability, detachment, and fast paced instant ability to communicate with others. This has implications for victims of dating violence even when the relationship has ended as ex-partners can often still contact them through electronic means and may, therefore, have a unique impact. It is not clear, however, to what extent new opportunities for abuse provided by ECT creates new victims and/or perpetrators of abuse through ECT. Importantly, ECTs were not just used within abusive contexts and adolescents reported that such technologies were commonly used to keep in contact with their romantic partners and for non-aggressive day-to-day communication. ECTs for example, were found to be used in all stages of adolescent romantic relationships in Draucker and Martsolf's (2010) study, from establishing to ending a relationship, in addition to reconnecting after a break up, signifying the importance of online communication technologies to

teenage romantic relationships even once a relationship has ended. More research is needed to investigate the relevance of technology to abusive and non-abusive behaviors within adolescent dating relationships.

There is some evidence to suggest that the impact of cyberbullying is comparable to that of traditional bullying. However, evidence has also indicated that this may differ depending on the nature of the bullying behavior and the particular technology used. It is not clear to what extent the psychological impact of ADVA may be applicable to adolescent victims TAADVA. It is likely that the psychological impact of ADVA is comparable to TAADVA. However, more research is needed to explore whether the unique features of ECT leads to distinctive impacts as a result of the media through which dating violence and abuse is experienced. More research is needed in order to explore the impact of TAADVA compared to that of traditional ADVA in addition to whether the impact of TAADVA differs depending on the individual technology type used.

### **7.1: Limitations and Strengths**

Literature gathered for this review was obtained primarily through searching bibliographic databases in order to obtain relevant studies. Only those studies that could be accessed and that were published in English unless stated otherwise were included. Limiting the date restriction of ADVA prevalence literature to the year 2000 means that research to have been published before this date was not included, although attempts were made while making this decision to not exclude any pivotal research prior to this date. The decision to not exclude samples which included young adults and adults in addition to adolescents may be viewed as a limitation; however,

these were included based on the fact that limited data are available for the continent from which these were published. The majority of studies obtained in this review employed cross-sectional designs, meaning that cause and effect relationships cannot be firmly concluded (Mann, 2003). Furthermore, the use of convenience samples means such findings may be limited in terms of generalizability (Cutbush et al., 2012). The nature of self-report data is also subject to bias not only in decisions to take part (Johnson, 2006), but also in answering questions about personal involvement in ADVA or TAADVA honestly (Simon et al., 2010). Nevertheless, the decision to adopt a standardized approach when reviewing ADVA and TAADVA prevalence studies provides a new and insightful analysis of available prevalence statistics allowing some general observations to be made. In particular, the categorization of studies according to the type of measure used has enabled observations to be made both within and between the instruments adopted. This paper also provides an original contribution by exploring the relevance of ECT to ADVA, in addition to reviewing the small, albeit growing literature to report the prevalence of TAADVA.

## **7.2: Implications of Review Findings**

It has been argued by Lee (1998) with regards to a college-aged sample of students that being in a romantic relationship may decrease one's ability to recognize cyber-aggression as abusive behavior. Concerningly, Barter et al. (2009) found that adolescents had varying evaluations of what was considered a sign of caring concern or rather an intrusive act by a partner, which highlights concerns for adolescents who may not recognize the severity of abusive behaviors perpetrated via ECT and who, therefore, may be less likely to seek help. Young people may think that such behaviors are a normal part of relationships unless educated about the potential risks

of abusive behaviors within this context and the subsequent strategies to prevent it. Adolescents need to be aware of how they can protect themselves from victimization and/or perpetration of traditionally identified abusive behaviors and those via technology, in addition to awareness of where to seek help and support if they find themselves in such a situation. Research has found that some students believe that there is no way to reduce or prevent cyberbullying due to the perceived lack of consequences for the cyberbully and the perpetrator's ability to find another way to cyberbully the person (Parris, Varjas, Meyers, & Cutts, 2012). Most students in this study were more likely to report avoidance strategies such as deleting messages, deleting online accounts, blocking numbers, or ignoring the situation (Parris et al., 2012). Such findings highlight the need for formal procedures to be followed when such experiences are disclosed in order for victims to be assured that action has been taken. While cyberbullying is not a specific offense, there are criminal laws that can apply in terms of harassment, and threatening or menacing communications (Cowie, 2009). Cowie (2009) highlights that schools can contact the police if they feel that the law has been broken or wish to obtain advice about legal support available to them when applying sanctions. Furthermore, schools also provide the opportunity to create an e-learning environment through which to provide education and training on e-safety (Cowie, 2009). As young people express that they would not like their parents to restrict or monitor their technology use (Picard, 2007), it might be also beneficial to encourage open communication between parents and their children in order to enhance trust and knowledge of safety strategies in the event that these should be needed.

Another possible approach may be to inform adolescents about how they can help

their peers if confided in about dating violence involvement, in order to access the appropriate support, given that friends are the most commonly reported people adolescents told about their violent or abusive experiences of traditional ADVA (Ashley & Foshee, 2005; Barter et al., 2009; Black, Tolman, Callahan, Saunders, & Weisz 2008; Jackson, Cram, & Seymour, 2000; Molidor & Tolman, 1998). Prevention and intervention efforts are needed to prevent the cycle of violence in adolescent romantic relationships in both the traditional and mobile and online realms. These efforts need to focus on raising awareness through education of ADVA and bullying, and the risks posed by modern forms of ECT to both adolescent romantic and peer relationships, in addition to general risks regarding Internet use and safety. Adler-Baeder et al. (2007) suggest that patterns of intimate relationship attitudes and behaviors are learned and developed well before engagement and marriage, highlighting scope for ADVA/TAADVA prevention and intervention efforts. Research has reported positive effects of dating violence interventions aimed at preventing ADVA through education and raising awareness of dating violence and available services (see for example, Adler-Baeder, Kerpelman, Schramm, Higginbotham, & Paulk, 2007; Antle, Sullivan, Dryden, Karam, & Barbee, 2011; Ball et al., 2012; Foshee et al., 1998; Gardner & Boellaard, 2007; Gardner, Giese, & Parrott, 2004; Wekerle & Wolfe, 1999; Wolfe et al., 2003). An innovative game-based primary intervention has been developed to raise awareness of and change attitudes towards dating violence and is currently being evaluated (Bowen et al., 2014). This has shown promise for the use of technology in the development of dating violence interventions through an educational interactive game or what is known as a serious game-based primary intervention. This is a Daphne III funded project and the game “Green Acres High”, consists on five 50-minute sessions regarding healthy and

unhealthy dating relationships. Such findings highlight scope for prevention efforts to target young people before they begin initiating dating relationships during the early stages of adolescence.

## 8: Conclusion

In summary, while an increasing amount of literature has emerged from the US investigating the prevalence of ADVA in response to the recognition of its potential health consequences, less research has addressed this issue in the UK and wider Europe. Even less research both nationally and internationally, has considered the role of ECTs in the perpetration of TAADVA. This is surprising considering the acknowledgement of the use and risks of technology not only in young people's social lives generally, but also within the context of their romantic relationships. Inconsistencies in available prevalence data in terms of various measures and methodologies used makes accurate comparisons and generalizations between studies challenging. Nevertheless, ADVA and TAADVA are prevalent in a substantial number of adolescent romantic relationships in the studies reviewed. Research appears to indicate that TAADVA does not occur in isolation from that in the physical realm, although the use of ECTs may be characterized by a number of distinctive features. It is important, therefore to view dating violence as a continuum of abusive behaviors that may be experienced or performed in person and/or through electronic means. However, further research is needed to investigate whether TAADVA creates new victims and/or perpetrators of a unique form of dating abuse. More empirical and longitudinal studies are needed in order to explore the nature, prevalence and impact of TAADA both quantitatively and qualitatively in order to inform and target future policy and intervention efforts.

### Acknowledgements

The Faculty of Health and Life Sciences, Coventry University have funded this research.

Thanks to Dr Sarah J. Brown, Department of Psychology and Behavioural Sciences, Coventry University, for her feedback on an earlier draft of this review.

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**Table 2**  
Prevalence of physical dating violence and abuse: Conflict Tactics Scales.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Victim	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Black et al. (2008)	US N=526 14-18 years old	Cross-sectional	Revised Conflict Tactics Scales	29%	-	-	-	-	-	-
Collin-Vézina et al. (2006)	Canada N=220b, c 12-18 years old	Cross-sectional	Revised Conflict Tactics Scales Lifetime	-	-	-	46.0- 59.6% <sup>aa</sup>	-	-	-
Cyr et al. (2006)	Canada N=126b,d 13-17 years old	Cross-sectional	Revised Conflict Tactics Scales Lifespan	-	-	-	45.2%	-	-	-
Giordano et al. (2010)	US N=956 12-17 years old	Cross-sectional	Revised Conflict Tactics Scale Previous 12 months	-	-	49%	-	-	19%	15%
Haynie et al. (2013)	US N=2,203 Mean age 16 years	Cross-sectional	Revised Conflict Tactics Scale Previous 12 months	10.7%	9.1%	-	9.8%	11.7%	11.4%	6.3%
Halpern et al. (2001)	US N=6,897 14-17 years old	Cross-sectional Longitudinal study	Conflict Tactics Scale Lifespan	12%	-	-	12%	12%	-	-
Halpern et al. (2004)	US N=117f 12-21 years old	Cross-sectional	Conflict Tactics Scale Previous 18 months	11.3%	-	-	13.1%	8.8%	-	-
Hird (2000)	UK N=487 13-19 years old	Cross-sectional	Conflict Tactics Scales Previous 12 months	-	-	-	14%	15%	-	-
Josephson and Proulx (2008)	Canada N=138 12-15 years old	Cross-sectional	Couple Form R of the Conflict Tactics Scales Lifespan	-	34%	-	-	-	-	-
Krahé and Berger (2005)	Germany N=648 17-29 years old	Cross-sectional	Revised Conflict Tactics Scales Lifespan	2%-44.4% <sup>aa</sup>	-	-	2%- 44.4% <sup>aa</sup>	5.3%- 43.5% <sup>aa</sup>	-	-
Lavoie et al. (2002)	Canada N=717g, h 10-18 years old	Longitudinal	Conflict Tactics Scales Previous 12 months	-	-	-	-	-	-	2.9%



**Table 3**  
Prevalence of physical dating violence and abuse: Youth Risk Behaviour Survey.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Victim	Perp	Mutual	Victim Girls	Victim Boys	Perp Girls	Perp Boys
Banyard and Cross (2008)	US N=2,101 12-17 years old	Cross-sectional	Youth Risk Behavior Survey Lifespan	16.9%	-	-	16.8%	17.1%	-	-
Coker et al. (2000)	US N=5,414 14-17 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	7.7% <sup>aa</sup>	7.6% <sup>a</sup>	-	5.5% <sup>aa</sup>	3.0% <sup>aa</sup>	4.7% <sup>aa</sup>	3.8% <sup>aa</sup>
Eaton et al. (2007)	US N=15,214 14-18 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	9%	-	-	-	-	-	-
Eaton et al. (2008)	US N=14,103 14-18 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	9.9%	-	-	8.8%	11.0%	-	-
Eaton et al. (2010)	US N=16,460 14-18 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	9.8%	-	-	9.3%	10.3%	-	-
Howard et al. (2007)	US N=7,179 <sup>b</sup> 14-17 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	-	-	-	10.3%	-	-	-
Howard and Wang (2003a)	US N=7,434 <sup>d</sup> 14-17 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	-	-	-	-	9.1%	-	-
Howard and Wang (2003b)	US N=7,824 <sup>b</sup> 14-17 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	-	-	-	9.2%	-	-	-
Olshen et al. (2007)	US N=8,080 14-17 years old	Cross-sectional	Youth Risk Behavior Survey Previous 12 months	-	-	-	10.6%	9.5%	-	-
Silverman et al. (2001)	US N=4,163 <sup>b</sup> 14-17 years old	Retrospective population-based survey	Youth Risk Behavior Survey Lifespan	-	-	-	8.9- 10.1% <sup>c</sup>	-	-	-
Silverman et al. (2004)	US N=6,864 <sup>c</sup> 14-17 years old	Retrospective population-based survey	Youth Risk Behavior Survey Previous 12 months	-	-	-	9.8%	-	-	-

<b>Mean</b>	10.7%	7.6%	-	10%	10%	4.7%	3.8%
<b>Range</b>	7.7-16.9%	-	-	5.5-16.8%	3-17.1%	-	-

**Notes**

- a** Severe physical violence measured only.
- b** All female sample.
- c** Two intervals of data reported
- d** Male sample

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**Table 4**  
Prevalence of physical dating violence and abuse: Ad hoc measures.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Ackard and Neumark-Sztainer (2002)	US N=81,247 14-17 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	4.2%	2.6%	-	-
Arriaga and Foshee (2004)	US N=526 13-15 years old	Longitudinal study	Ad hoc measure Lifespan	36-48% <sup>ad</sup>	20-32% <sup>od</sup>	-	-	-	-	-
Barter et al. (2009)	UK N=1,353 13-17 years old	Cross-sectional	Ad hoc measure and semi-structured interviews Lifespan	-	-	-	25%	18%	25%	8%
Burman and Cartmel (2005)	UK N=1,395 14-18 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	9-16% <sup>aa</sup>	19-32% <sup>aa</sup>	6-16% <sup>aa</sup>	4-12% <sup>aa</sup>
Foshee et al. (2001)	US N=1,186 13-15 years old	Longitudinal Cross-sectional	Ad hoc measure Dating partner	-	-	-	-	-	25.7% <sup>aa</sup>	13.9% <sup>aa</sup>
Fox et al. (2013)	UK N=855-869 13-14 years old	Cross-sectional	Ad hoc measure Previous 12 months	17-21% <sup>aa</sup>	7-8% <sup>aa</sup>	-	-	-	-	-
Hamby et al. (2012)	US N=1,680 12-17 years old	Cross-sectional	Ad hoc measure Lifespan	6.4%	-	-	-	-	-	-
Howard et al. (2003)	US N=444 12-17 years old	Cross-sectional	Ad hoc measure Previous 3 months	7%	-	-	-	-	-	-
Jackson et al. (2000)	New Zealand N=373 16-18 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	17.5% <sup>b</sup>	13.3% <sup>b</sup>	-	-
McDonnell et al. (2010)	US N=351 11-18 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	27% <sup>f</sup>	17.8% <sup>f</sup>	20.4% <sup>f</sup>	8.4% <sup>f</sup>
Miller et al. (2009)	US N=2,824 11-12 years old	Cross-sectional	Ad hoc measure Previous 3 months	-	29%	-	56.4% <sup>g</sup>	60% <sup>g</sup>	66.7% <sup>g</sup>	60% <sup>g</sup>

Reeves and Orpinas (2012)	US N=624 14-15 years old	Cross-sectional	Ad hoc measure Previous 3 months	30%	25%	-	23%	37%	33%	17%
Schlitt (2006)	UK N=135 16-24 years old	Cross-sectional	Ad hoc measure Lifespan	21.7%	17.7%	-	21.8%	21.6%	17.9%	17.5%
Simon et al. (2010)	US N=5,404 11-12 years old	Cross-sectional	Ad hoc measure Previous 3 months	42.1%	28.6%	-	27.4%	53.7%	31.5%	26.4%
Wingood et al. (2001)	US N=522c,e 14-18 years old	Retrospective survey	Ad hoc measure Lifetime	-	-	-	18.4%	-	-	-
Zweig et al. (2013)	US N=3,745 12-18 years old	Cross-sectional	Ad hoc measure Previous 12 months	30%	20.5%	-	24%	36%	25.5%	14%
				<b>Mean</b> 24.8%	22%	-	21.6%	27.4%	26.7%	17.4%
				<b>Range</b> 6.4-42.1%	7.5-29%	-	4.2-41.7%	2.6-53.7%	11-43%	8-34.2%

**Notes**

- a** Dependent on the specific types of the violence.  
**b** Severe physical violence measured only.  
**c** All female sample.  
**d** Two intervals of data reported  
**e** African American females  
**f** Lifespan measure  
**g** Past 3 months measure

**Table 5**  
Prevalence of physical dating violence and abuse: Other established instruments.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict Girls	Perp Boys	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Danielsson et al. (2009)	Sweden N=3,170 15-23 years old	Cross-sectional	NorVald abuse questionnaire. Lifespan	-	-	-	43% <sup>ae</sup>	59% <sup>ae</sup>	-	-
Gagné et al. (2005)	Canada N=622b 14-20 years old	Cross-sectional	VIFFA (Violence faite aux Filles dans les Fréquentations à l'Adolescence) Previous 12 months	-	-	-	25- 29% <sup>aa</sup>	-	-	-
Harrykissoon et al. (2002)	US N=570b, f 12-18 years old	Prospective cohort design	Abuse Assessment Screen (modified) Previous 24 months	-	-	-	13- 21% <sup>ad</sup>	-	-	-
Kinsfogel and Grych (2004)	US N=391 14-18 years old	Cross-sectional	Conflict in Relationships Scale Lifespan	-	17- 19% <sup>aa</sup>	-	-	-	-	-
Spencer and Bryant (2000)	US N=2,094 12-17 years old	Retrospective survey	Assessment Project (TAP) questionnaire Lifetime	8-16% <sup>f</sup>	-	-	-	-	-	-
Swahn et al. (2008)	US N=2,888 12-17 years old	Cross-sectional	The Youth Violence Survey Previous 12 months	30.7%	24.8%	-	28.8%	32.6%	30.3%	18.6%
Wekerle et al. (2009)	Canada N=402c 14-17 years old	Cross-sectional	Conflict in Adolescent Dating Relationships Inventory (CADRI) Previous 12 months	-	-	-	63%	49%	67%	44%
			<b>Mean</b>	21.4%	21.4%	-	35.8%	46.9%	48.7%	31.3%
			<b>Range</b>	12-30.7%	18,24.8 %	-	17-63%	32.6-59%	30.3-67%	18.6-44%
			<b>General population mean</b>	-	-	-	29%	45.8%	30.3%	18.6%
			<b>General population range</b>	-	-	-	17-43%	32.6-59%	-	-

**Notes**

**a** Dependent on the specific types of the violence.

**b** All female sample.

**c** All participants were in care of Child Protective Services.

**d** Two intervals of data reported

**e** Not just dating partner (e.g. stranger, someone close, partner or expartner)

**f** Adolescent mothers

**Table 6**

Prevalence of psychological/emotional dating violence and abuse: Conflict Tactics Scales.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Collin-Vézina et al. (2006)	Canada N=220a,b 12–18 years old	Cross-sectional	Revised Conflict Tactics Scales Lifespan	-	-	-	58.8 – 81.5%	-	-	-
Cyr et al. (2006)	Canada N=126a,c 13–17 years old	Cross-sectional	Revised Conflict Tactics Scales Lifespan	-	-	-	81.7%	-	-	-
Haynie et al. (2013)	US N=2,203 Mean age 16.2 years	Cross-sectional	Revised Conflict Tactics Scale Previous 12 months	24.2%	21.4%	-	30.5%	16.5%	28.2%	13.0%
Halpern et al. (2001)	US N=6,897 14–17 years old	Cross-sectional longitudinal study from 1994 - 1996	Conflict Tactics Scale Lifespan	29%	-	-	29%	28%	-	-
Halpern et al. (2004)	US N=117d 12–21 years old	Cross-sectional	Conflict Tactics Scales Previous 18 months	13%	-	-	-	-	-	-
Hird (2000)	UK N=487 13–19 years old	Cross-sectional	Conflict Tactics Scales Previous 12 months	-	-	-	54%	49%	-	-
Lavoie et al. (2002)	Canada N=717e, f 10–18 years old	Longitudinal	Conflict Tactics Scales Previous 12 months	-	-	-	-	-	-	40.7%
Muñoz-Rivas et al. (2007)	Spain N=2,416 16–20 years old	Cross-sectional	Modified Conflict Tactics Scales Previous 12 months	-	-	-	-	-	95.3%	92.8%
O'Leary et al. (2008)	US N=2,363 14–20 years old	Cross-sectional	Modified Conflict Tactics Scale Previous 12 months	-	-	94%	88%	85%	92%	85%
Sears et al. (2007)	Canada N=633 12–18 years old	Cross-sectional	Modified Conflict Tactics Scales Lifespan	-	-	-	-	-	47%	35%
Spriggs et al. (2009)	US N=10,650 12–18 years old	Cross-sectional	Conflict Tactics Scales 2 Previous 18 months	-	-	-	13.8%	13.6%	-	-



**Table 7**  
Prevalence of psychological/emotional dating violence and abuse: Ad hoc measures.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Barter et al. (2009)	UK N=1,353 13-17 years old	Cross-sectional	Ad hoc measure and semi-structured interviews Lifespan	-	-	-	72%	51%	59%	50%
Burman and Cartmel (2005)	UK N=1,395 14-18 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	32- 40% <sup>aa</sup>	28- 51% <sup>aa</sup>	53%	40%
Fox et al. (2013)	UK N=855-869 13-14 years old	Cross-sectional	Ad hoc measure Previous 12 months	38% <sup>aa</sup>	20% <sup>aa</sup>	-	-	-	-	-
Jackson et al. (2000)	New Zealand N=373 16-18 years old	Cross-sectional	Ad hoc measure Lifespan	-	-	-	81.5%	76.3%	-	-
Schütt (2006)	UK N=135 16-24 years old	Cross-sectional	Ad hoc measure Lifespan	20.2%	28.1%	-	17%	24.4%	30.4%	25%
Zweig et al. (2013)	US N=3,745 12-18 years old	Cross-sectional	Ad hoc measure Previous 12 months	47%	26%	-	50%	44%	32%	19%
			<b>Mean</b>	35.1%	24.7%	-	51.3%	47%	43.6%	33.5%
			<b>Range</b>	20.2- 47%	20- 28.1%	-	17- 81.5%	24.4- 76.3%	30.4- 59%	19-50%

**Notes**

<sup>a</sup> Dependent on the specific types of the violence.

**Table 8**  
Prevalence of psychological/emotional dating violence and abuse: Other established instruments.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Danielsson et al. (2009)	Sweden N=3,170 15-23 years old	Cross-sectional	NorVald abuse questionnaire Lifespan	-	-	-	66% <sup>b</sup>	54% <sup>b</sup>	-	-
Gagné et al. (2005)	Canada N=622a 14-20 years old	Cross-sectional	VIFFA (Violence faite aux Filles dans les Fréquentations à l'Adolescence) Previous 12 months	-	-	-	37%	-	-	-
Kinsfogel and Grych (2004)	US N=391 14-18 years old	Cross-sectional	Conflict in Relationships Scale Lifespan	-	20%	-	-	-	-	-
			<b>Mean</b>	-	20%	-	51.5%	54%	-	-
			<b>Range</b>	-	-	-	37-66%	-	-	-

**Notes**

**a** All female sample.

**b** Not just dating partner (e.g. stranger, other)



**Table 10**  
Prevalence of sexual dating violence and abuse: Youth Risk Behavior Survey.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Banyard and Cross (2008)	US N=2,101 12–17 years old	Cross-sectional	Youth Risk Behavior Survey Lifespan	13.2%	-	-	16.8%	9.4%	-	-
Eaton et al. (2008)	US N=14,103 14–18 years old	Retrospective population-based survey	Youth Risk Behavior Survey Lifespan	7.8%	-	-	11.3%	4.5%	-	-
Eaton et al. (2010)	US N=16,460 14–18 years old	Cross-sectional	Youth Risk Behavior Survey Lifespan	7.4%	-	-	10.5%	4.5%	-	-
Coker et al. (2000)	US N=5,414 14–17 years old	Cross-sectional	Youth Risk Behavior Survey Lifespan	-	-	-	21.3% <sup>a</sup>	7.2% <sup>a</sup>	2.5% <sup>a</sup>	4.3% <sup>a</sup>
Olshen et al. (2007)	US N=8,080 14–17 years old	Cross-sectional	Youth Risk Behavior Survey Lifespan	-	-	-	9.6%	5.4%	-	-
Silverman et al. (2001)	US N=4,163 <sup>b</sup> 14–17 years old	Retrospective population-based survey	Youth Risk Behavior Survey Lifespan	-	-	-	3.7% 3.8% <sup>c</sup>	-	-	-
			<b>Mean</b>	9.5%	-	-	12.2%	6.2%	2.5%	4.3%
			<b>Range</b>	7.4- 13.2%	-	-	3.8- 21.3%	4.5- 9.4%	-	-

**Notes**

<sup>a</sup> Severe sexual violence measured only.

<sup>b</sup> All female sample.

<sup>c</sup> Two intervals of data reported

**Table 11**  
Prevalence of sexual dating violence and abuse: Ad hoc measures.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Ackard and Neumark-Sztainer (2002)	US N=81,247 14-17 years old	Retrospective population-based survey	Ad hoc Measure Lifespan	-	-	-	1.2%- 1.8% <sup>a</sup>	1.0- 1.3% <sup>a</sup>	-	-
Barter et al. (2009)	UK N=1,353 13-17 years old	Cross-sectional	Ad hoc Measure and semi-structured interviews Lifespan	-	-	-	6-31% <sup>b</sup>	3-16% <sup>b</sup>	-	-
de Bruijn et al. (2006)	Netherlands N=1,700 14-18 years old	Cross-sectional	Ad hoc Measure Previous 12 months	1.6- 75% <sup>b</sup>	0.8- 63% <sup>b</sup>	-	23- 76% <sup>b</sup>	16- 75% <sup>b</sup>	19- 54% <sup>b</sup>	37- 72% <sup>b</sup>
Burman and Cartmel (2005)	UK N=1,395 14-18 years old	Cross-sectional	Ad hoc Measure Lifespan	-	-	-	3-10% <sup>a</sup>	6-8% <sup>a</sup>	2% <sup>a</sup>	4-5% <sup>a</sup>
Fox et al. (2013)	UK N=855-869 13-14 years old	Cross-sectional	Ad hoc Measure Previous 12 months	14% <sup>a</sup>	4% <sup>a</sup>	-	-	-	-	-
Jackson et al. (2000)	New Zealand N=373 16-18 years old	Cross-sectional	Ad hoc Measure Lifespan	-	-	-	76.9%	67.4%	-	-
Schütt (2006)	UK N=135 16-24 years old	Cross-sectional	Ad hoc Measure Lifespan	15.3% <sup>a</sup>	3.2% <sup>a</sup>	-	12.2% <sup>a</sup>	19% <sup>a</sup>	0% <sup>a</sup>	7.3% <sup>a</sup>
Zweig et al. (2013)	US N=3,745 12-18 years old	Cross-sectional	Ad hoc Measure Previous 12 months	13%	3%	-	16%	9%	1%	4%
			<b>Mean</b>	20.2%	10.5%	-	25.9%	22.7%	9.9%	17.6%
			<b>Range</b>	13- 38.3%	3-31.9%	-	1.5- 76.9%	1.2- 67.4%	0-36.5%	50.5%

**Notes**

**a** Severe sexual violence measured only.

**b** Dependent on violence severity.

**Table 12**  
Prevalence of sexual dating violence and abuse: Other established instruments.

Source	Sample (country, size, age)	Design	Instrument (type, report period)	Vict	Perp	Mutual	Vict Girls	Vict Boys	Perp Girls	Perp Boys
Danielsson et al. (2009)	Sweden N=3,170 15–23 years old	Cross-sectional	NorVald Abuse Questionnaire Lifespan	-	-	-	32% <sup>d</sup>	8.6% <sup>d</sup>	-	-
Federal Centre for Health Education (2006)	Germany N=2,500 14–17 years old	Cross-sectional	Youth Sexuality Repeat Survey Lifespan	-	-	-	13%	4%	-	-
Federal Centre for Health Education (2010)	Germany N=3,543 14–17 years old	Cross-sectional	Youth sexuality Repeat Survey Lifespan	-	-	-	13% <sup>b</sup> – 19% <sup>oc</sup>	1% <sup>b</sup> – 3% <sup>c</sup>	-	-
Gagné et al. (2005)	Canada N=622a 14–20 years old	Cross-sectional	VIFFA (Violence faite aux Filles dans les Fréquenta-tions <sup>a</sup> l'Adolescence) Previous 12 months	-	-	-	26%	-	-	-
Krahé (2009)*	Germany N=856 17–20 years old	Cross-sectional	Sexual Experiences Survey Lifespan	-	-	-	14.9%	6.5%	-	-
Narring et al. (2004)*	Switzerland N=7,420 16–20 years old	Cross-sectional	Swiss Multicenter Adolescent Survey on Health Previous 12 months	-	-	-	14.4%	1.7%	-	-
Sears et al. (2007)	Canada N=633 12–18 years old	Cross-sectional	Sexual Experiences Survey-Revised Lifespan	-	-	-	-	-	5%	17%
			<b>Mean</b>	-	-	-	19.4%	4.6%	5%	17%
			<b>Range</b>	-	-	-	13–32%	2–8.6%	-	-

**Notes**

**a** All female sample.

**b** Dependent on violence severity.

**c** Adolescents from immigrant families had a higher rate of victimization than those from German (native) families.

**d** Not just dating partner (e.g. stranger, someone close, partner or expartner).

\* Cited in Leen et al. (2013).

**Table 13**  
Prevalence of technology-assisted adolescent dating abuse

Source	Sample (Country, size, age)	Design	Instrument (type, report period)	Findings:	Vict	Perp	Vict girls	Vict boys	Perp girls	Perp boys
Associated Press and MTV. (2009)	US N=1,247 14 to 24 years old	Cross- sectional	Ad hoc online interview survey Lifespan	Feel like their partner checks up on them either online or on a cell phone, to see where they are, who they are with or what they are doing, too often Say their partner complains that they check up too often Partner has checked the text messages on their cell phone without their permission Had a boyfriend or girlfriend call them names, put them down, or say really mean things to them on the Internet or cell phone Had a boyfriend or girlfriend demand passwords Had a partner demand that they “unfriend” former boyfriends/girlfriends on social networks Experienced at least some form of digital dating abuse Checked up with you multiple times per day on the Internet or on your cell phone, asking where you are, who you are with, or what you are doing Read your text messages without your permission Made you remove former girlfriends or boyfriends from your friends list on Facebook, MySpace or other social networking sites Called you names, put you down, or said really mean things to you on the Internet or on your cell phone Demanded to know the passwords to your email and Internet accounts Contacted you on the Internet or your cell phone to ask you to have sex or engage in sexual acts when you did not want to Spread rumours about you on the Internet or on a cell phone	22%	- 15%	-	-	-	-
Associated Press and MTV. (2011)	US N=1,355 14-24 years old	Cross- sectional	Ad hoc online interview survey Lifespan		25%	-	-	-	-	-
					12%	-	-	-	-	-
					10%	-	-	-	-	-
					10%*	-	-	-	-	-
					41%	-	-	-	-	-
					27%	-	-	-	-	-
					27%	-	-	-	-	-
					15%	-	-	-	-	-
					14%	-	-	-	-	-
					13%	-	-	-	-	-
					6%	-	-	-	-	-
					5%	-	-	-	-	-
					5%	-	-	-	-	-

Barter et al. (2009)	UK N=1,353 13–17 years old	Cross-sectional	Ad hoc measure and semi-structured interviews Lifespan	Used information posted on the Internet against you, to harass or embarrass you Contacted you on the Internet or on your cell phone to threaten to hurt you Partners had used mobile phones or the Internet to humiliate and threaten them Partners had frequently checked up on their movements by phone or text	5% - - -	- - 12% 42%	- - 4% 29%	- - - -
Cutbush et al. (2010)	US N=4,282 Mean age 14.3 years	Cross-sectional	Ad hoc measure (Picard 2007) Lifespan	Experience of some form of psychological electronic dating aggression Partner had used a mobile phone, Email, text message or Web chat to threaten to hurt them physically Partner had shared private or embarrassing pictures/video of them using a cell phone, Email, IM, Web chat, a blog, or a SNS like MySpace or Facebook Been afraid to not respond to a cell phone call, Email, or text because of what their partner might do Partner had used information posted on a SNS against them (to harass, put them down, etc.) Partner had spread rumours about them using a cell phone, Email, IM, text, Web chat, a blog, or a SNS Partner had asked them via cell phone, Email, IM, text, or Web chat to have sex or engage in sexual acts when they did not want to Partner had called their cell phone or sent Emails or text messages when they did not want them, just to make them	56% 7% 8% 8.5% 11% 21% 22% 31% 35.5%	29% 3% 5% 4% 6% 7% 5% 14% 20%	- - - - - - - - -	- - - - - - - - -

Cutbush et al. (2012)	US N= 1,430 Mean age 12.3 years	Cross-sectional	Ad hoc measure (Picard 2007) Lifespan	Partner had called them names, put them down, or said really mean things to them using a cell phone, Email, IM, text, Web chat, or a blog	31.5%	18%	-	-	-
Draucker and Martsoff (2010)	US N=56 18-21 years old	Retrospective	Transcribed narratives Adolescent dating relationships at 13-18 years old	Provided references about the adolescent use of electronic technologies in monitoring or controlling a partner Provided references about monitoring or controlling a partner via: Mobile phone Text message Social Networking Sites Emails Websites Key-loggers	53.6%	-	-	-	-
				Provided references to the adolescent use of electronic communication technologies in perpetrating emotional or verbal aggression against a partner	44.6%	-	-	-	-
				Provided references about the perpetration of emotional or verbal aggression against a partner via: Mobile phone Text message Social networking Sites Instant messages	8.9%	-	-	-	-
				Ever checked up on who you have phoned or sent messages to at least once	12.5%	-	-	-	-
				Experience of some form of electronic dating violence	3.6%	-	-	-	-
				Prevented a romantic partner from using a	1.8%	-	-	-	-
					1.8%	-	-	-	-
					53.6%	-	-	-	-
Fox et al. (2013)	UK N=855-869 13-14 years old	Cross-sectional	Ad hoc measure Previous 12 months	Provided references about the perpetration of emotional or verbal aggression against a partner via: Mobile phone Text message Social networking Sites Instant messages	-	41.1%	-	-	-
Hinduja and Patchin (2011a)	US N=4,400 11-18 years old	Cross-sectional	Ad hoc measure Lifespan	Ever checked up on who you have phoned or sent messages to at least once	17.3%	12.2%	-	-	-
				Experience of some form of electronic dating violence	12%	-	-	-	-
				Prevented a romantic partner from using a	10%	7%	-	-	-

Korchmaros et al. (2013)	US N=615 14-19 years old	Cross-sectional	Ad hoc measure Previous 12 months	computer or mobile phone	6%	5%	-	-	-			
				A romantic partner posted something publicly online to make fun of, threaten, or embarrass the other	10%	7%	-	-	-			
				Received or sent a threatening mobile phone message	4%	4%	-	-	-			
				from/to a romantic partner								
				A romantic partner uploaded or shared a humiliating or harassing picture of them online or through their mobile phone								
				Perpetrated at least one of four psychological ADV behaviours (in person, phone call, online, and text messaging)	-	46%	-	-	-			
				Text messaged 10, 20, or 30 times an hour by a partner to find out where they are, what they are doing, or who they are with	30%	-	-	-	-			
				Called names, harassed, or put down by their partner through mobile phones and texting	25%	-	-	-	-			
				Asked by mobile phone or the Internet to engage in sexual activity when they did not want to	22%	-	-	-	-			
				Partner has used a mobile phone or the Internet to spread rumours about them	19%	-	-	-	-			
Picard (2007)	US N=382 13-18 years old	Cross-sectional	Ad hoc online measure Lifespan	Partner used a SNS to harass or put them down	18%	-	-	-	-			
				Partner has shared private or embarrassing pictures/videos of them	11%	-	-	-	-			
				Partner has made them afraid not to respond to a mobile phone call, Email, IM or text message because of what he/she might do	17%	-	-	-	-			
				Threatened physically via Email, IM, text, chat, etc	10%	-	-	-	-			
				Partner has actually bought a mobile phone or minutes for them	16%	-	-	-	-			
				Experienced at least some form of digital dating abuse	38%	-	-	-	-			
				Tompson et al. (2013)	US N=1,297	Cross-sectional	Ad hoc online interview survey					

