

**Internet infidelity ten years on:
A critical review of the literature**

Andreas Vossler

The Open University, UK

Andreas Vossler, PhD, Department of Psychology, Faculty of Social Science, The Open University,
Milton Keynes, UK.

Correspondence concerning this article should be sent to Dr Andreas Vossler, Department of
Psychology, Faculty of Social Science, The Open University, Milton Keynes MK7 6AA, UK.

E-mail: Andreas.Vossler@open.ac.uk

Abstract

The rapid development of Internet and social networking services in the last decade have augmented the possibilities to engage in activities online that can be classified as infidelity and introduced new challenges into the practice of couple and sex therapists. Building on Hertlein and Piercy's (2006) literature review, this paper provides a critical review of the literature on Internet infidelity published in the last ten years. The aim with the review is to present the current state of knowledge in this field compared to the situation in 2006. The review includes research articles and theoretical papers on the definition of Internet infidelity, factors contributing to it, the impact of online infidelity on couples and families and treatment models and issues. A discussion of implications for both future research and therapeutic practice is presented at the end of the paper.

Key words:

Internet Infidelity, online infidelity, cybersex, internet sex, couple therapy

With the Internet and social media (e.g. Facebook, Twitter, MySpace) now being part of everyday life for most people in the Western world, there are ever growing opportunities for partners to engage in online behaviors and activities that may be considered unfaithful in the context of a committed relationship (Henline, Lamke & Howard, 2007). Behaviors that have been defined in the literature as Internet infidelity include cybersex, exchanging sexual self-images, online dating, online flirting, and watching online pornography (Henline et al., 2007; Hertlein & Webster, 2008; Whitty, 2003). Whilst to date there are no exact statistics on the frequency of Internet infidelity in the general public or as a presenting problem in couple therapy, researchers seem to agree that the prevalence of this problem for couple and family relationships is rising rapidly (Hertlein & Piercy, 2008; Henline et al, 2007). This is of concern as like sexual and emotional betrayal offline, cybersex and other forms of Internet infidelity are seen and experienced as 'real acts of infidelity' (Whitty & Quigley, 2008) that cause relationship distress and can have a negative and deteriorating effect on marriages and families (Hertlein & Stevenson, 2010).

However, compared to the broad research base on sexual activities on the Internet (e.g. sex addiction, compulsive use of Internet porn), empirical research and treatment literature focused strictly and specifically on online behavior and activities that can be classified as Internet infidelity are still rather limited. A decade ago, Hertlein and Piercy (2006) engaged in a systematic review of research publications on this newly emerging topic and published a critical review of the literature on Internet infidelity. Their aim in doing so was to provide a 'coherent and organized view' of a research field that was, back then, still in its infancy, to offer 'a foundation to build a stronger case on which to develop further questions, empirical investigations, and treatment protocols' (p. 366).

Now around ten years later, with research on Internet infidelity having reached its 'adolescence', one can conclude that it is time to take stock again and see what questions have been developed and what findings have been established in the field. Computer and Internet technologies have rapidly evolved in the last ten years, with increasingly interactive websites, specific internet offers for adult dating and sexual entertainment and improved video streaming (Schneider, Weiss &

Samenow, 2012). This, combined with the explosion in portable internet-enabled electronic communication devices, provides Internet users with even more opportunities to find electronic intimacy and sexual entertainment and interaction online, and to hide any online activities that could be seen as infidelity. Parallel to the technological advancement, the last decade has seen an increase of research which investigates the different and new forms of Internet infidelity and the effects these activities have on relationships and families.

The aim of this overview paper then, is to build on Hertlein and Piercy's (2006) work and critically review the research on Internet infidelity that has been published in the last ten years (termed 'new studies' in the following). The review is organized in terms of the areas covered by Hertlein and Piercy's (2006) review, namely: definition of Internet infidelity, contributing factors, impact on couples and families, treatment. The paper will conclude with a list of implications for both future research and marriage and family therapy.

Inclusion criteria

The following list of search terms was used to identify peer-reviewed publications that have been published in this area from 2006 to July 2015: *Internet infidelity, cybersex, internet sex, cyber infidelity, online infidelity, extramarital, betrayal, online attraction, internet affairs, technology and relationships, internet and relationships*. These keywords were thought to encompass the spectrum of publications concerning infidelity that occurs or is initiated through online contact. To include literature in different disciplines, not only the database Psychinfo (APA database) was employed but also Sociofile/Sociological Abstracts (database for sociology and related disciplines) and ERIC (educational research database). A systematic search of the literature was conducted whereby the search terms were methodically applied in each database. Using the same inclusion criteria as Hertlein and Piercy's (2006), publications were included in the review if they contained content related to one or more of the following:

1. Definitions and perceptions of Internet infidelity

2. Factors contributing to Internet infidelity
3. Impact of Internet infidelity on couples and families
4. Treatment of Internet infidelity.

Definitions and perceptions of Internet infidelity

Hertlein and Piercy focused in their 2006 literature review on how practitioners defined Internet infidelity and concluded that there was a lack of definitional agreement in the field, with research indicating 'that definitions of Internet infidelity vary from person to person' (p.367). The authors did however identify a level of secrecy combined with sexual excitement as a consistent factor in many definitions.

In the research conducted since 2006, most studies have continued to utilise hypothetical infidelity scenarios or preset lists of behaviors rather than allowing respondents to define for themselves what constitutes Internet infidelity (e.g. Hackathorn, 2009; Henline et al., 2007; Witty & Quigly, 2008). In responding to a hypothetical question ('What online behaviours would you consider to be 'unfaithful'...'), student participants in Henlein et al.'s (2007) study classified a broad range of activities - from cybersex and sexual chat to emotional involvement online, flirting, chatting with random people, lying to the online contact and activities which interfered with real-life relationships. Shaughnessy, Byers and Thornton (2011) asked university students for written definitions of cybersex and found that whilst it was consistently defined as an interactive activity, there was considerable individual variability in how the term was defined. Using case vignettes with common Internet infidelity situations, Hertlein and Piercy (2008) conducted an internet survey, combined with follow-up phone interviews, which asked 508 practicing marriage and family therapists in the US about their ideas about definition, assessment and treatment of Internet infidelity. The study revealed significant differences in the way practitioners defined and conceptualized internet infidelity, dependent on client gender, therapist's age and gender, religion and personal experiences with infidelity.

The new research since 2006 suggests that setting up a consistent operational definition for Internet infidelity remains a challenge for both researchers and practitioners in this area – just as problematic as establishing a definition for conventional infidelity (Moller & Vossler, 2014). The research further indicates that many individuals in a couple relationship have the same problem. Whilst assuming that the partner shares his/her beliefs (Helsper & Whitty, 2010), they often differ in what they consider as cheating and struggle to draw a clear line between appropriate and inappropriate activities online (Whitty & Quigly, 2008; Wilson et al., 2011). Research in the last almost decade thus confirms the conclusion of Hertlein and Piercy's (2006) paper – that there is not one agreed definition of Internet infidelity.

One reason for the messiness of definitions and conceptualizations of Internet infidelity might be the fact that this is still a relatively new phenomenon – 'rules' and ways to understand and judge online behavior have not been established yet (Cravens & Whiting, 2014; Whitty & Quigly, 2008). However, and just as with conventional offline infidelity (Moller & Vossler, 2014), it seems any attempt to categorize online activities as infidelity (e.g. on the basis of secrecy or betrayal) will inevitably include a relativist 'eye-of-the- beholder' element, allowing multiple, sometimes conflicting views on one and the same behavior dependent on the person judging. The views can vary from seeing Internet contacts (of sexual or emotional nature) as innocuous (and not betrayal), or as a 'weaker' form of infidelity (which is 'only' virtual) to conceptualizing any sexual and/or emotional contact online as infidelity (especially when hidden and protected with lies; Mileham, 2007).

In the absence of a widely agreed objective definition, researchers have focused their efforts on the specific characteristics differentiating Internet infidelity from similar experiences offline. For example, in her theoretical paper Gerson (2011) identified four properties of 'cyberspace betrayal' deemed to be specific for this form of infidelity, including (1) the suddenness of exposure (discovery of hidden activities is often abrupt and traumatizing for partners), (2) specific privacy issues as Internet infidelity typically happens in the space of cohabitation, (3) the permanence of infidelity record online (which can make it more difficult to move on and rebuild trust between partners) and

(4) the addictive quality of the Internet (easy accessibility and excitement, anonymity). However, not all of these characteristics seem to be specific for Internet infidelity only (e.g. suddenness of exposure might be common offline too) and there is no research evidence yet that partners are particularly distressed by the specific privacy issues around Internet infidelity or the permanency of the infidelity record. Moreover, the notion of addictive quality as identifying factor is notable since the ambiguity in the literature between the concepts of Internet infidelity, internet addiction and sex addiction has been critically discussed by Jones and Hertlein (2012). These authors see the main difference between Internet infidelity and Internet or sex addiction in the fact that internet infidelity is primarily a relational activity (with an identifiable third person) kept secret from the primary partner, and that there are usually no withdrawal symptoms attached to it.

In addition to seeking to identify defining characteristics for Internet versus non-Internet infidelity, researchers have also investigated the way problematic Internet activities are perceived and defined by different groups (e.g. engaged and recipient partners, women vs. men). For example, the perceptions and experiences of chat room users, who engage in secret cybersex and the exchange of sexual and/or emotional content with strangers, have been investigated with an ethnographic, qualitative interview study (Mileham, 2007). The majority of users did not see their online activities as infidelity, and instead rationalized their chat room behaviors, for example by stating that their behavior did not constitute infidelity because there was no physical contact. Mileham (2007) concluded that the experience of a disembodied self in cyberspace gives chat room users a 'license to engage in Internet infidelity without perceiving it as such' (p. 20). For her study participants, Internet infidelity seemed to offer participants a safe way to live a form of 'electronic polygamy' while maintaining their monogamous primary relationships and not feeling they were betraying anyone ('It's not cheating ...it is all in your head'; Mileham 2007; Gerson, 2011). This is contrasted by research findings on the experience of the receiving partner (discussed further below) suggesting that they *do* define this type of Internet behavior as infidelity and that they do feel betrayed by it: 'the experience of being deceived online is as devastating as traditional infidelity' (Maheu & Subotnik, 2001, p. 105; see also Whitty, 2003).

Finally, some recent research has revealed gender differences in the way that Internet infidelity is perceived. Hackathorn (2009) and Muccanell, Guadagno, Rice and Murphy (2013) both found that compared to their male colleagues, female participants (college students) were more likely to characterize certain online behaviors as infidelity, rate these behaviors as more destructive for relationships and report higher levels of expected distress in response to the activities. In line with the long line of research that examines gender differences in infidelity behaviors and reactions from an evolutionary perspective which assumes that men are more perturbed by sexual infidelity and women by emotional infidelity (Buss, 2008, for an overview; Grootjof, Dijkstra, P. & Barelds, 2009), these findings suggest that women are more likely to identify Internet flirting and relationships as acts of (emotional) infidelity. Similarly, an online survey of married couples in the UK (Helsper & Whitty, 2010) found that females are more likely to identify both their own and their partners' online behaviors as infidelity (similar results were found by Grov, Gillespie, Royce & Lever, 2011). Helsper and Whitty's (2010) female participants were also more on guard for online infidelity, being more likely to monitor their partner's online activities.

In summary, research since 2006 has not led to any more clarity about a widely accepted objective definition of Internet infidelity, instead underlining that definitions will depend on the subjective stance of the definer such as their gender, experience with infidelity (e.g. as 'engaged' or 'recipient' partner), age, personal and moral values. New publications have started to focus on the differences between Internet versus non-Internet infidelity and the perceptions of different groups impacted by problematic online behavior.

Factors contributing to Internet infidelity

Under the sub-heading 'Characteristics of Internet infidelity', Hertlein and Piercy (2006) had summarized the theoretical discussion around factors related to people getting involved in online activities and behaviors that can be classified as Internet infidelity. In specifically referring to the models of internet-related vulnerabilities that had been developed to conceptualize the seductive

character of Internet websites and chat rooms (Cooper, 2000, 2002; Ross & Kauth, 2003; Young et al., 2000), they identified a lack of empirical evidence for these models and their explanatory power for the likelihood to engage in Internet infidelity.

Since 2006 further theoretical consideration has been given to extend the existing models that had identified accessibility, affordability, anonymity and the aspect of approximation (possibilities offered by the Internet to approximate and simulate real world situations while nonetheless not being 'real') as factors related to internet-related vulnerabilities. Based on the earlier models and their own review of the literature on aspects contributing towards internet-related intimacy problems (19 articles published between 2000 and 2009, excluding publications on sex addiction or the formation of a primary relationship online), Hertlein and Stevenson (2010, see also Hertlein & Blumer, 2014) proposed an updated and extended model of internet-infidelity-related vulnerabilities ('seven "As"), including the following three new and additional factors:

- *Acceptability*: Behavior and activities that are perceived as inappropriate in society tend to be more socially acceptable if done online/via the internet (e.g. accessing sexual topics, viewing internet pornography; Daneback, Cooper, Manson, 2005; King, 1999).

- *Ambiguity*: As discussed, defining problematic online activities, including Internet infidelity, is difficult for researcher, practitioners and couples. This ambiguity is theorized to incite users to explore new territory online.

- *Accommodation*: Acting out needs and desires through Internet activities potentially allows users to accommodate conflicting identity aspects such as living electronic polygamy online whilst sustaining a monogamous relationship offline (Mileham, 2007). Accommodation is related to the 'approximation'- factor described above but refers to the individual user (intrapyschic incongruence between ideal-self and real-self that can be accommodated online) rather than a specific quality of the Internet.

Other individual vulnerabilities for internet affairs discussed in the literature are an inability to take ownership of and responsibility for one's online behavior (Mileham, 2007) and a tendency to avoid emotional and sexual intimacy in real-world relationships by escaping to the distance, relative anonymity and control offered by the Internet (Young, 2006). However, despite these theoretical advances there is still no research focused on providing empirical evidence for the role of these vulnerability factors and models for Internet infidelity.

Finally, some authors have discussed the relevance of factors like an emotional and/or sexual disconnection and dissatisfaction in the primary relationship, in contributing to Internet infidelity (e.g. Mileham, 2007; 2008; Young, 2006). For instance, Millner (2008) has theorized a climate of relationship difficulties and 'emotional sterility' (Armstrong, 2006) in a couple relationship as a situation in which one of the partners can be tempted to seek 'intimacy with detachment' by connecting with an Internet partner (Millner, 2008). Two recent online surveys with Twitter (Clayton, 2014) and Facebook users (Cayton, Naguerney & Smith, 2013) indicate that frequent relationship conflicts caused by the high levels of Facebook or Twitter usage of one partner can be associated with an increased risk of emotional or physical cheating and relationship breakup. However, these relationship factors are not specific to Internet Infidelity - they are considered as common contributing factors for offline infidelity too (Vossler & Moller, 2014) – and hence are not helpful for the discrimination of different forms of infidelity.

In summary, whilst the new literature since 2006 has furthered the theoretical debate and understanding of factors contributing to Internet infidelity, there is still a lack of research focusing on the empirical validation of the proposed factors and models of internet-related vulnerabilities, which considerably limits their explanatory power.

Impact of Internet infidelity on couples and families

In their literature review ten years ago, Hertlein and Piercy (2006) rather cautiously concluded that whilst most partners being sexually active on the Internet would deny a negative impact of these

activities on their lives, 'there are still cases in which these sexual pursuits can affect families and relationships' (p. 368). The authors saw the need for future research focused more narrowly on the effects of Internet infidelity on couples and families (as opposed to e.g. compulsive pornography use). Two years later, and based on another review of studies specifically focused on the negative impact of technology on relationships (8 studies), Hertlein and Webster (2008) conclude that it can be considered an established research finding that 'online acts of betrayal are perceived as serious as offline acts of betrayal' (p. 458).

Three new studies focusing on the experiences of partners at the receiving end of Internet infidelity have been conducted since the 2006 and 2008 reviews, providing further evidence for the potentially negative, and in some cases traumatic, effect of Internet infidelity on couple and family relationships (Mao & Raguram, 2009). Schneider et al. (2012) conducted an online survey of the impact of Internet-based sex on partners of cybersex users (35 respondents). The findings show that these online activities can lead to a loss of trust in the engaged partner and the need to seek professional help to cope with the negative impact. Many of the survey respondents felt betrayed and traumatized both by their partner's online activities, and by the partner's response once the betrayal was disclosed (e.g. if the partner was deceptive or in denial). Cavaglioni and Rashty (2010) employed narrative analysis and an interpretive approach to analyze 1130 messages from female members of two web-based Italian self-help groups for male cybersex and cyber-porn dependents and their female partners. The participants' narratives showed a major pattern of distress, mainly related to ambivalent emotions and experiences of loss. Finally, Cravens, Leckie and Whiting (2013) used a Grounded Theory approach to analyze 90 stories around cheating written by receiving partners and posted on the 'FacebookCheating'- website. The stories revealed strong emotional reactions to the discovery of inadequate Facebook activities, with common expression of emotional pain and feelings of hurt, loss of trust, shock and anger, as well as a struggle with the decision to end the relationship or not.

A common methodological issue with all three studies is their focus on the effects of one specific form of Internet infidelity, which means that the findings might not be representative for other types of activities and receiving partners. The number of participants was comparatively small in all three studies, and the samples were highly selective (e.g. participants recruited through specific websites for 'victims' of Internet infidelity) which also limits the generalizability of the study findings. There is also often a lack of information about the demographic characteristics of participants (gender, age, etc.) when analyzing material collected from Internet websites.

Other new studies have focused on gender differences in emotional reaction to internet infidelity. This research strand is informed by evolutionary theory (ancestral men's challenge of paternal uncertainty vs. women's challenge of ensuring paternal investment, Buss, 2008) and linked to the above discussed research on gender differences in how Internet infidelity is perceived. Guadagno and Sagarin (2010) employed an experimental design with undergraduate students to investigate sex differences in jealousy in online and offline contexts. Based on findings from a questionnaire with items related to potential infidelity scenarios, the authors concluded that gender differences regarding jealousy in response to offline infidelity (men are more likely to react jealously in the case of sexual infidelity, woman in the case of emotional infidelity) can be generalized to Internet infidelity. This is supported by Groothof et al. (2009) who found that men's jealousy seems generally triggered by a partner's online sexual infidelity, and women's jealous reaction by a partner's online emotional infidelity. In a further study by the same author team (Dijkstra, Barelds & Groothof, 2013), women showed more jealousy in reaction to hypothetical jealousy-evoking online situations than men (with no difference regarding offline situations), and homosexual participants (both male and female) reacted with less jealousy than heterosexual participants. However, the ecological validity of studies from this research strand is limited as they typically use student samples and hypothetical infidelity scenarios which limit the generalizability of the findings.

In summary, the research since 2006 has mainly focused on the negative impact of the Internet on intimate relationships - the possibilities offered online for couples to explore their sexuality

together have so far rather been neglected (Groves et al. 2011; Hertlein & Webster, 2008). Broadly however the findings on the impact of Internet infidelity parallel the research on offline infidelity, both in terms of the potentially very negative or even traumatizing effects once the activities are disclosed as well as the gender differences regarding the responses to infidelity.

Treatment of Internet infidelity

In the light of the presented evidence for the negative impact of Internet infidelity on relationships and families it might not surprise that the number of cases in therapeutic practice presenting with this issue is increasing (Hertlein & Stevenson, 2008; Gonyea, 2004). In their survey of 164 clinical members of the American Association for Marriage and Family Therapy, Goldberg, Peterson, Rosen and Sara (2008) found that cybersex cases had increased in the last two years (according to 53% of the respondents) whilst most practitioners (73%) felt not well prepared to work with these problems by their required college courses. Whilst no more recent survey is available in the literature, it can be assumed that the number of cases has continued to rise in the last years. This section will briefly describe available treatment models and recommendations before summarizing the published research literature on the treatment of Internet infidelity in the last decade.

The published treatment frameworks for Internet infidelity (e.g. Jones & Tuttle, 2012; Shaw, 1997; Young, 2006) generally blend traditional approaches and methods from couple therapy with more specific elements to address the effects of Internet infidelity on the relationship. In working with Internet infidelity, practitioners in the field have been reported to generally employ approaches like emotionally focused therapies, transgenerational theories and solution-focused concepts (Hertlein & Piercy, 2008). Hertlein (2011) suggests that in order to reduce vulnerabilities for Internet infidelity therapists should not only focus on Internet-related activities by using environmental strategies (e.g. setting rules for computer use at home or proposing to move the computer to another room) but pay attention to underlying intra-psychic factors as well as the primary couple's relationship. Young (2006) highlights the importance of not reinforcing rationalizations of the partner engaged in

Internet activities (e.g. online exchanges are 'not real' and therefore 'not cheating) but helping them to see the effects of their actions and take responsibility for them.

Reviewing the literature on treatment frameworks, Hertlein and Piercy (2006) identified a lack of empirical evidence for the effectiveness of these treatment approaches as 'the validation of these frameworks is reflected in the case examples following the framework's description rather than through process or outcome research' (p. 370). Simultaneously, Hertlein and Weeks (2007) had pointed to the need to investigate the specific properties of Internet infidelity, compared to offline infidelity, so that treatment models can specifically address these characteristics.

Whilst there has been some progress in identifying and conceptualizing specific characteristics of and vulnerabilities for Internet infidelity (as discussed above), there is still a lack of systematic evaluation of Internet infidelity treatment programs. The little published research focused on the treatment of Internet infidelity is mainly concerned with US therapists' perceptions and experiences of their work with this problem. For example, using a qualitative study design with in-depth interviews with 15 therapists, Hertlein and Piercy (2012) were able to identify several treatment steps, ranging from developing physical and psychological relationship boundaries (e.g. presence of partner while using computer, reviewing couple definitions of infidelity) and raising awareness of internet infidelity vulnerabilities, to engaging in helping the couple work towards forgiveness. As with other forms of infidelity (Vossler & Moller, 2014), practitioners seem to conceptualize 'Internet infidelity as a symptom of a larger problem in the primary couple's relationship' (Hertlein & Piercy, 2008, p. 492). Similar to the definition and assessment of Internet infidelity (as discussed above), Hertlein and Piercy (2008) found indicators in their practitioner survey for the impact of therapist factors (age, gender, religious orientation, and personal experience with Internet infidelity) on the way clients are treated. These factors, if not reflected on, can lead to personal biases, like the common misattribution of viewing 'someone who has a relationship with someone online as being addicted to either sex/porn or the Internet' (Hertlein, 2011, p. 169). Hertlein (2011) therefore argues for a need for therapists to attend to 'Self-of Therapist' issues, such as unrecognized ideas about

sexuality and personal opinions about pornography (Jones & Tuttle, 2012), and how these factors influence case conceptualizations and treatment.

In summary, whilst the body of research knowledge on how practitioners experience and conceptualize their therapeutic work with Internet infidelity has grown, there is still no empirical evidence for the effectiveness of treatment models, let alone a commonly agreed and empirically validated treatment approaches for Internet infidelity. Therapists' treatment approach – as their perception of problematic online behavior – seems to be influenced by their own preferences as well as personal values and biases (Hertlein & Piercy, 2008).

Discussion and Implications

Although more research and theoretical papers have been published in the field of Internet infidelity in the last decade, there are still many unresolved issues and gaps in the growing body of knowledge. Only a few new studies have investigated the actual behavior and its impact (e.g. Mileham, 2007; Schneider et al., 2012). Most research is still focused on attitudes towards and perceptions of Internet infidelity, typically using student samples as participants asking them who to rate hypothetical infidelity scenarios, although there have been a few studies on practitioners' perceptions and experiences of Internet infidelity treatment (e.g. Hertlein & Piercy, 2008; Goldberg et al., 2008). Whilst some progress has been made in the theoretical debate about factors contributing to Internet infidelity, the proposed models of internet-related vulnerabilities have not been empirically tested yet. New studies have instead predominantly focused on the negative impact of the Internet on intimate relationships, showing similar impact pattern and gender effects as for offline infidelity. The effectiveness of treatment models for Internet infidelity is another neglected research area. In addition, almost all the research on Internet infidelity published since 2006 has been conducted in a US context.

Implications for future research

The reliance to date on undergraduate students as participants in research on internet infidelity limits its generalizability, especially for research on the impact of Internet infidelity on relationships and families (Hertlein & Webster, 2008). Hence, there continues to be a need for researchers in this field to 'sample from populations that have experienced this issue', as Hertlein and Piercy (2006) suggested ten years ago (p. 370). Future studies should also involve both partners in a couple relationship as this would allow researchers to investigate couple level data (Cravens & Whiting, 2014), something that is particularly relevant for couple therapists.

In the past, researchers have been encouraged to develop more consistent definitions and categorizations of Internet infidelity (e.g. Hertlein & Webster, 2008). However, the available research evidence points to the contextuality and subjectivity of definitions – if a behavior is seen as infidelity depends very much on the context and the person judging (infidelity as social construction). Hence, instead of aiming for definitional agreement or an objective definition that seems impossible to reach, it would be more fruitful to examine the different contexts of problematic online behavior. Future studies should specifically investigate definitional differences related to gender, age and sexual orientation, and the way that Internet infidelity is perceived and experienced in different cultural settings as there are significant cultural variations in how extramarital affairs and jealousy is viewed.

Future research should also explore the perception and impact of infidelity activities in different Internet contexts, for example the differences between Facebook infidelity and other problematic behavior in Internet chat rooms (Cravens & Whiting, 2014). Many empirical studies on the impact of Internet infidelity have focused on pornography and Internet sexual compulsivity which raises the question of a potential conceptual overlap between Internet infidelity and online and/or sex addiction. Future research should differentiate between these activities and investigate their impact dependent on the type and nature of the problematic online activity (e.g. watching porn vs. activities with 3rd party involvement). Finally, there is a clear need to empirically validate the theoretical

models of internet-related vulnerabilities and the available Internet infidelity treatment programs to ensure that any treatment that is being offered is effective.

Implications for marriage and family therapy

Internet infidelity and its impact on couples and families have certainly introduced new challenges into the practice of marriage and family therapists (Hertlein & Piercy, 2008). The rapid development of the Internet and social networking services in the last decade have augmented the possibilities to engage in activities online that may be classified as infidelity by partners and thus impact offline-relationships (Cravens & Whiting, 2014). Hence, practitioners in the field of marriage and family therapy need to be aware that an increasing number of couples will present with issues related to Internet infidelity in their practice. They need to understand and consider the specific aspects of Internet infidelity, including the contributing factors and their impact on couple and family relationships, and adapt their assessment and treatment strategies accordingly when working with clients presenting with this problem. For example, assessment should include questions about client's Internet use (only 20% of therapists in Goldberg et al.'s (2008) survey reported that they routinely asked families about cybersex use). In the initial therapy sessions there could be a specific focus on developing physical boundaries around computer and internet use (e.g. restrictions on certain websites, monitoring software, internet use only allowed in the presence of the partner) to promote safety and rebuild trust within the couple relationship. Moreover, since partners often differ in what they consider to be cheating, an important part of clinical work with couples is to help and encourage them to talk openly about their personal perceptions and definitions of online infidelity behavior and (re-)negotiate rules and boundaries for their relationship around this issue. The reviewed research also points to the importance of practitioners being aware of the impact of their own experiences and values regarding issues like Internet usage, sexuality, pornography and infidelity in order to avoid blind spots and biases in their work (Hertlein, 2011). Therapists who reflect on these self-of-therapist issues and gain specific therapeutic skills and knowledge, e.g. by attending relevant training programs, will be better prepared to support the increasing number of clients struggling with Internet infidelity.

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