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Pushing the Wrong Buttons: Men and Women's Attitudes toward Online and Offline Infidelity

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# **ABSTRACT**

Despite current researchers' interest in the study of online sexual addiction, there is a dearth of research available on what constitutes online infidelity. This paper attempts to redress this balance by comparing 1117 participants' attitudes toward online and offline acts of infidelity. A factor analysis was carried out which yielded three components of infidelity: sexual infidelity, emotional infidelity and pornography. More importantly, this study revealed that online acts of betrayal do not fall into a discrete category of their own. A MANOVA was performed and revealed a statistically significant difference on the combined dependent variables for the interaction of gender by age, age by relationship status and Internet sexual experience. The hypotheses were, in part, supported. However, counter to what was predicted, in the main younger people were more likely to rate sexual acts as acts of betrayal than older individuals. It is concluded here that individuals do perceive some online interactions to be acts of betrayal. In contrast to some researchers' claims, it is suggested here that we do need to consider how bodies are reconstructed online. Moreover, these results have important implications for any treatment rationale for infidelity (both online and offline).

Pushing the Wrong Buttons: Men and

Women's Attitudes toward Online and Offline Infidelity

# INTRODUCTION

The literature is replete with studies on attitudes towards offline infidelity. However, there is a paucity of research available on what online acts men and women consider to be unfaithful. Research that has investigated online infidelity has mostly focused on addiction to cybersex and the available treatment for these cybersex addicts and their partners. 1-6 This paper, in contrast, focuses on how potential acts of offline infidelity compare with potential acts of online infidelity. In addition, gender, age, relationship status, and sexually experienced Internet user differences are examined. In a world where online interactions continue to become more frequent, it has become imperative for psychologists to understand the nature of these interactions and the repercussions of these interactions. It is maintained here that it is critical to investigate whether interactions online are perceived to be unfaithful and by whom as such data will inform ways forward within clinical practice and therapy. For example, while some therapists might be dismissive of online sexual acts or communication, perceiving these as no 'real threat' to an offline relationship, research into attitudes on online infidelity might reveal a different perspective. Rather than isolating potential acts of online infidelity, this study considers both online and offline acts of betraval and whether, when taken as a whole, there are different types of infidelity.

Before deliberating on potential online acts of betrayal, this paper considers what might constitute an act of offline infidelity. Most researchers would agree that we need to consider other acts of infidelity in addition to sexual intercourse. For

example, Roscoe, Cavanaugh and Kennedy <sup>7</sup> focused on undergraduates' views on acts of infidelity and found that participants indicated three principle behaviors: dating or spending time with a different partner; having sexual intercourse with someone else; and engaging in other sexual interactions with someone else, such as kissing, flirting and petting. To supplement work such as Roscoe at al.'s <sup>7</sup> study, Yarab, Sensibaugh and Rice Allgeier 8 investigated what extradyadic behaviors individuals identify as unfaithful acts in the context of committed romantic relationships. Yarab, et al.'s 8 study yielded an array of unfaithful behaviors in addition to sexual intercourse, including, passionately kissing, sexual fantasies, nonsexual fantasies about falling in love, sexual attraction, romantic attraction, flirting and behavior in dyads, such as studying, having lunch with, and going to a movie with someone other than one's partner. These researchers claim that 'mental exclusivity' might be considered as important as 'sexual exclusivity'. Interestingly, Yarab and Rice Allgeier <sup>9</sup> found that when considering sexual fantasies the greater the threat of the sexual fantasy to the current relationship, the higher the fantasy was rated as unfaithful. For instance, fantasizing about a partner's best friend (a great potential to disrupting the current relationship) was considered by most to be more of a threat, and therefore more unfaithful than fantasizing about a movie star. In addition, these researchers found that participants were more jealous about the idea of their partner fantasizing about their best friend than fantasizing about a movie star.

The general consensus has been that men and women hold different viewpoints on offline monogamous relationships. For instance, Sheppard, Nelson, and Andreoli-Mathie 10 have argued that men tend to view commitment and monogamy as less attractive options than women do. It also seems that men and women enter into extramarital relationships for different reasons; women more because they are seeking

a friendship or emotional relationship, while men tend to be more interested in sexual relationships. 11 Satisfaction within a marriage is also often marked by these gender differences, with men more likely to report sexual problems, and women more likely to indicate problems with affection as the cause of discord within the marriage. 12

Noticeably, men are more likely to at least own up to having some type of extradyadic sexual experience compared to women. 13,14 Yarab et al. 8 found that men admitted more than women did to fantasizing about having sexual intercourse and giving and receiving oral sex with someone else other than their partner. Moreover, men in their study, were more likely to state that they had 'hit on' someone else.

Research has also considered gender differences in attitudes toward infidelity. For instance, Taylor <sup>15</sup> found that men tend to judge a husband's affair as more justifiable than a wife's affair. Furthermore, Sheppard et al. 10 found that male college students were more likely to rate infidelity as more acceptable than women rated infidelity. Paul and Galloway 16 found, in their sample of undergraduate students, that women (52%) were much more likely than men (30%) to say they would end the relationship if their partner was unfaithful to them. However, such gender differences are not always supported. For instance, it has been established that men and women tend to assess their own extradyadic behavior as more acceptable than that of their partner. Furthermore, researchers have revealed that individuals are more forgiving of extradyadic behaviors committed by members of their own gender compared to individuals of the opposite gender. 17 One of the reasons for these discrepancies could possibly be the variations in samples being used, including people who are experienced in relationships who are asked to reflect on their current relationship, compared to non-experienced participants who are asked to imagine a hypothetical cheating partner.

In respect to what extradyadic behaviors cause more upset for each gender, women more than men rate extradyadic emotional behavior as more upsetting than extradyadic sexual behavior. 18 However, it is also noteworthy that both men and women report extradvadic sexual behavior to be more unacceptable and a greater betrayal than extradyadic emotional behavior. 18 Roscoe et al. 7 also identified gender differences in what participants considered to be violations of infidelity. In their study they asked participants to list what behaviors they believed constituted being unfaithful to a dating partner who is involved in a serious dating relationship. They found that men were more likely to state that a sexual encounter with a different partner was an exemplar of infidelity. In contrast, women were more likely to state that spending time with another and keeping secrets from a partner were acts of infidelity.

One shortcoming of most of the research in this area is the heavy reliance on college students as participants. This is clearly problematic given that these are younger people who are often not married or in cohabiting relationships. Hence, their lack of experience in long-term relationships could dramatically influence how these individuals perceive acts of infidelity.

Admittedly, a few researchers have explored how age, cohort and period effects have shaped attitudes towards sexuality activity<sup>19,20</sup>. These researchers mostly contend that attitudes towards extra-marital sex have changed little since the 1960s. Smith <sup>20</sup> argues that while there is some truth to the sexual revolution/ counterrevolution metaphor (where approval in premarital sex increased in the 1960s to the early 1980s and then leveled off after this time) "the revolutionary imagery is misleading because it does not clearly apply to sexual attitudes in general" (p.91). Rather, he argues, there is much less evidence of a sexual revolution in regard to

extradyadic relations. Moreover, in respect to age differences, Smith <sup>20</sup> provides data that suggests (although no statistical analysis is presented) that older individuals are more disapproving of extramarital sexual relations compared to younger people. He also presents some interesting differences in respect to relationship status. He found that those who had never been married were more approving of extramarital relations.

While it can be strongly argued that social researchers have still not unearthed the whole story about attitudes towards offline acts of infidelity, the empirical research available on attitudes towards Internet infidelity is even scarcer. It has been contended that "Internet infidelity is, of course, behaviorally different from other kinds of infidelity; however, the contributing factors and results are similar when we consider how it affects the way partners relate" (p.29)<sup>3</sup>. Shaw <sup>3</sup>, however, did not qualify how online and offline infidelity are behaviorally different. Indeed, while Shaw has made the assumption that infidelity, in essence, is a "refusal to relate personally to one's partner" (p.29)<sup>3</sup> researchers have rendered little work on specifying what online behavior people consider as unfaithful.

Other researchers have also made an attempt to define sexual acts unique to the Internet. For example, cybersex has been defined as involving "two online users engaging in private discourse about sexual fantasies. The dialogue is typically accompanied by sexual self-stimulation"(p.60)<sup>6</sup>. Moreover, Young et al. <sup>6</sup> have defined a cyberaffair as "a romantic and/or sexual relationship that is initiated via online contact and maintained predominantly through electronic conversations that occur through e-mail and in virtual communities..." (p.60). Young and her colleagues, however, have mostly focused on cybersex addition <sup>4-6</sup>.

Sex addicts are not the only individuals who peruse the web for erotic material. Cooper, Putnam, Planchon and Boies 21 identified three categories of

individuals who access Internet erotic material, including, recreational users, sexual compulsive users (these individuals are addicted to sex per se, and the Internet is but one mode where they can access sexual material) and at-risk users (these individuals would never have developed a sexual addiction if it were not for the Internet). In addition, Cooper, Delmunico and Burg's <sup>22</sup> research extended upon past anecdotal data of clinical cases, to focus on individuals who access the Internet for sexual purposes. These researchers found that most of their participants who surfed the web for erotic material did not experience significant problems in their lives.

In addition to findings on who are cybersex consumers, other researchers have outlined the potential erotic communication available online. <sup>23,24</sup> Mehta and Plaza <sup>25</sup> examined images from newgroups in 1994, and found differences in the type of material posted by commercial and non-commercial users. Commercial users posted explicit pornographic material, and illegal sexual acts such as bestiality, more than non-commercial users. Kim and Bailey <sup>23</sup> proposed that the Internet is a haven for individuals with a paraphilia. Although the sexual preferences for paraphiles have changed little in recent times, the Internet does provide another mode for such individuals to live out their sexual fantasies. Durkin and Bryant <sup>24</sup> have listed a number ways the Internet can be used for erotic entertainment, including some bulletin boards and chat rooms, where consenting individuals can exchange x-rated messages and pictures. In 1995, Levy estimated that on a monthly basis up to 500 000 users visit sex newsgroups <sup>26</sup>. Durkin and Bryant <sup>24</sup> also proposed that the Internet offers a certain kind of erotic talk, which they named 'hot chatting'. 'Hot chatting', they state, is moving beyond light-hearted flirting, and can galvanize one's offline sex life. In the literature, theorists have also made a distinction between 'hot chatting' and 'cybersex', purporting that cybersex also involves obtaining sexual gratification.

The research on online lascivious material demonstrates a need to consider other types of activity, besides cybersex, as potential acts of infidelity. Moreover, given that accessing erotic material is not restricted to addicts, distinguishing potential acts of online infidelity is important to consider for the maintaining of committed romantic relationships.

This current study explores individuals' views on what constitutes an act of infidelity online and compares this with perceptions of offline acts of infidelity. In addition, gender, age, relationship status, and sexually experienced online users differences are explored in respect to both online and offline infidelity. Given the importance placed on gender differences in previous studies on offline infidelity, this study, in turn, took into account gender differences. To address the limitation of the focus on college students in previous research on infidelity, the sample in the present study included individuals ranging from 17 to 70 years. Relationship status was considered, since it is possible that being involved or uninvolved with another might shape one's perception of what constitutes an act of infidelity. Finally, Internet sexual experience was taken into account, as this factor, may also shape one's perception of Internet infidelity. Four hypotheses were formed for this study:

H1: Women will be more likely to consider all of the acts as violations of fidelity compared to men. This hypothesis is based on the literature outlined above.

H2: Older people will be more likely to consider all of the acts as violations of fidelity compared to younger people. Whilst, most research has focused on college students' attitudes towards infidelity, this hypothesis was constructed around the premise that younger people have more liberal attitudes towards sex compared to older individuals. H3: *Those who are currently in a relationship will be more likely to rate acts as violations of fidelity than those not in a relationship.* This is based on the assumption that those in a relationship are more likely to imagine the 'real' impact of an act of betrayal than individuals not in a relationship.

H4: Those who have had online sexual experience will be less likely to rate acts as violations of fidelity compared to people with no online sexual experience. This hypothesis was devised based on the assumption that these individuals will have more liberal sexual attitudes compared to those who have not had online sexual experiences.

# **METHOD**

# **Participants**

Participants were recruited both online and offline. Although it may appear sufficient to recruit participants for a study of this kind by placing a survey on the Internet, this was deemed inappropriate for this current study. Rather, it was considered imperative that, in addition, participants be recruited offline, since participants who have had little or no Internet experience might nonetheless have a view about what constitutes an act of betrayal online (e.g., their partner might be engaging in these activities).

One thousand, one hundred and seventeen individuals were included in the final sample, of which 468 were men (42%) and 649 (58%) were women. (Note: although individuals of any sexual orientation were encouraged to participate in the study, only 6 homosexuals and 2 bi-sexuals participated. As a consequence they were

omitted from the final sample). Ages ranged from 17 to 70 years, with a mean of 30 (SD = 10.53) years. A detailed account of the Internet and offline demographic characteristics of the sample are given in Table 1. In the MANOVA age was broken into four categories, according to Levinson's <sup>27</sup> theory of life stages. These age categories included: the transition from adolescence to adulthood 17-22 years (31%), early adulthood 23-44 (57%), and middle adulthood to later adulthood were combined as there were too few in the late adulthood category to warrant a separate grouping 45 – 70 years (12%). Internet sexual experienced was defined based on definitions offered by <sup>22</sup> who have defined 'hot chatting' as socializing with a member of the opposite sex (same sex if gay), that has moved beyond light hearted flirting. Participants had to provide a 'yes'/'no' response to this question. Thirty sex percent of the sample admitted to having had some experience of hot chatting.

Although it was not a condition to have used the Internet in order to participate in the study, all of the participants used the Internet for at least 1 hour on average each week (see Table 1 for breakdown of hours spent online each week). Ninety six percent of the participants used email, 36% chat rooms, 31% newsgroups, and 94% web-sites. Three hundred and fifty three Australians filled out the survey offline, while the remainder of the sample filled out the survey online. Of the entire sample, 39% resided in Australia or New Zealand, 52% in the Americas, 3% in Europe, 1% in Asia, and 1% in the Middle East.

# **INSERT TABLE 1**

#### Materials

For this study, a survey was constructed which focused on potential acts of infidelity both online and offline. Past research on offline infidelity was considered in the construction of this survey. In addition, seemingly equivalent online acts of infidelity were included in the study. These items, were in part, drawn from the literature on Internet sexual acts discussed in the literature to date. Because it was difficult to ascertain which acts might be online equivalents, an exploratory factor analysis was performed to determine how items might be grouped together, if at all.

Since it was deemed important to avoid constructing a lengthy survey, it was decided to limit how many items were investigated. Lengthy surveys on the web can be problematic for two main reasons. Firstly, poor connection can lead to a survey crashing prior to completion, and secondly, an extensive survey on the web might be a deterrent for many, thus leading to a poor response rate (although response rate is difficult to determine when placing surveys on the web).

Participants were asked to rate on a 5-point likert scale (from not considered as infidelity to extreme infidelity) whether they thought the activity was unfaithful to their partner. In each instance, it was specified that the act was carried out without one's partner. The potential acts of infidelity included: going to strip clubs, viewing pornographic videos or magazines, viewing pornographic pictures on web sites, viewing porn sent via an email, engaging in hot chat with strangers online, engaging in hot chat regularly with the same person online, engaging in hot chat with a stranger, just the once, engaging in cybersex with strangers online, engaging in cybersex with a stranger, just the once, engaging in cybersex regularly with the same person online, engaging in intercourse/sexual acts offline, sharing deep emotional and or intimate information with a person of the opposite sex (same sex if homosexual)

offline, sharing deep emotional and or intimate information with a person of the opposite sex (same sex if homosexual) online, maintaining a non-sexual relationship with someone of the opposite sex offline (same sex if homosexual), maintaining a non-sexual relationship with someone of the opposite sex online (same sex if homosexual). Because the terms cybersex and hot chatting might have been unfamiliar to many a definition was provided for each of these items. Cybersex was defined as obtaining sexual gratification whilst interacting with another person online. Hot chat was defined as online socializing that has moved beyond light-hearted flirting.

# Procedure

Participants were recruited offline by placing notices in libraries, cafes, and community centers throughout Sydney, Australia, inviting people to fill out a hardcopy of the survey which was to be placed in a locked box on completion. Participants were recruited online by placing notices in newsgroups and by placing links on webpages inviting people to fill out the survey online (which was placed on the web for approximately 6 months). In both conditions participants were ensured anonymity and were able to withdraw consent up until the time of submitting the survey.

# **RESULTS**

The means and standard deviations for each of the items are displayed in Table 2 below.

# **INSERT TABLE 2**

As demonstrated in Table 2, the means for sexual intercourse, hot chatting and cybersex are reasonably high, whereas the means for pornographic items and non-sexual relationships are fairly low.

The Infidelity Scale formed an internally consistent scale, with Cronbach  $\alpha(1101) = 0.93$ . Ratings on the Infidelity scale were subjected to an exploratory factor analysis. The Principle Axis Factoring revealed three factors with Eigen values > 1.0, which accounted for 80% of the total variance. The Kaiser-Meyer-Olken measure of sampling adequacy was .88, well above the value of .6 usually considered to be necessary for a good factor solution. These factors were separately rotated orthogonally (Varimax) and obliquely (Direct Oblimin, delta = 0). In each case, the same items loaded on the same three factors. However, to allow for the possibility of inter-correlation among factors, the solution provided by the oblique solution was chosen. The oblique rotation is reported in Table 3 (the higher factor loading for each item appears in boldface type to aid interpretation of the factor structure). It took 6 iterations to produce these factors. Most of the loadings were above .71, which according to Comrey and Lee  $^{29}$  are excellent.

# **INSERT TABLE 3**

Factor 1 was labeled as 'sexual infidelity'. This factor included both online and offline sexual acts; including offline sexual intercourse, cybersex and hot chatting. Factor 2 was labeled 'emotional infidelity' and included both online and offline sharing of intimate details with a person of the opposite sex and developing a cross-sex non-sexual relationship. Finally, factor 3 was labeled 'pornography' and

included viewing pornographic material both online and offline; including on the web, via email, in magazines as well as going to strip clubs. Factor based scales were derived by initially standardizing each variable using a z-transformation before summating them. Each of these scales formed internally consistent scales, with  $\alpha$  -values of .95, .90 and .94 for 'sexual infidelity', 'emotional infidelity' and 'pornography' respectively.

The factors were moderately to slightly correlated with one another. Sexual infidelity correlated significantly with emotional infidelity (r = .41, p < .001) and pornography (r = .52, p < .001). Emotional infidelity correlated significantly with pornography (r = .41, p < .001). Gender was found to be significantly related to sexual infidelity (r = .23, p < .001), emotional infidelity (r = .08, p < .01) and pornography (r = .15, p < .001). Age was significantly related to sexual infidelity (r = -.15, p < .001) and pornography (r = -.15, p < .001). Internet sexual experience was significantly related to sexual infidelity (r = .13, p < .001), and pornography (r = .19, p < .001). Relationship status was significantly related to emotional infidelity (r = -.06, p < .05).

A MANOVA was performed using the dependent variables sexual infidelity, emotional infidelity and pornography, and the independent variables were gender, age, relationship status, and Internet sexual experience. (It should be noted that originally country of origin was to be included as a co-variate; however, given that it was not significantly correlated with the dependent variables it was excluded from the analysis). Applying an  $\alpha$ -level of 0.05, there was a statistically significant difference on the combined dependent variables for the interaction of gender by age F(6, 2182) = 2.21, p = .039; Wilks' Lambda = .98; partial eta squared = .01, for the interaction of age by relationship status F(6, 2182) = 2.67, p = .014; Wilks' Lambda = .99; partial

eta squared = .01, and for Internet sexual experience F(3, 1091) = 13.21, p < .001; Wilks' Lambda = .97; partial eta squared = .04. The dependent variables were then considered separately. It is noteworthy, to point out that according to Cohen <sup>30</sup> these effect sizes are relatively small. Table 4 presents the significant Univariate F-tests, using a Bonferroni adjusted  $\alpha$ -level of .017.

# **INSERT TABLE 4**

An inspection of the mean scores for the factor sexual infidelity indicated that that those who stated they had no Internet sexual experience (M = 1.42, SD = 5.39) scored higher than those with Internet sexual experience (M = -2.5, SD = 6.41). Furthermore, for the factor pornography those who stated they had no Internet sexual experience (M = 0.52, SD = 3.88) scored higher than those with Internet sexual experience (M = -0.92, SD = 3.07).

The interaction effect of gender and age on sexual infidelity is shown in Figure 1 below.

# **INSERT FIGURE 1**

Figure 1 clearly shows an interaction between gender and age on the factor sexual infidelity. It demonstrates that women overall were more likely to believe that sexual acts were an act of betrayal than the men did. Overall, the younger group (17 - 22 years) believed that these sexual acts were acts of betrayal more than the older groups. The 23 - 44 year old men were also more likely to rate sexual infidelity higher than the oldest group of men (45 - 70 years). However, the interaction effect

occurred for the older women (45 - 70 years) who rated this factor higher than the 23 - 44 year old women.

The interaction effect of age and relationship status on sexual is shown in Figure 2 below.

# **INSERT FIGURE 2**

Figure 2 shows an interaction between age and relationship status on the factor sexual infidelity. The younger individuals (17 - 22 years), who were currently in a relationship, believed that these sexual acts were acts of betrayal more than the 17 - 22 years olds not in relationship. Moreover, the 17 - 22 years olds in a relationship rated this factor higher than any other individuals. Interestingly, this pattern is reversed for the 23 - 44 years olds, where those who were not in a relationship were more inclined to rate the factor sexual infidelity as an act of betrayal, compared to the 23 - 44 year olds in a relationship. Again contrasting results occur for the 45 - 70 year olds, where those individuals not in a relationship rate this factor the lowest compared to other individuals; however, the drop in scores was not as dramatic for the 45 - 70 year olds in a relationship.

# **DISCUSSION**

The results of this study suggest that individuals do perceive that some interactions that occur online can be considered as acts of betrayal. An inspection of the means for each of the individual items, prior to the factor analysis, suggests that some acts, such as sexual acts both offline and online pose a greater threat than other acts such as viewing pornography. This is an interesting finding, given that physical

bodies are not actually touching each other during the sexual online encounters, and in fact, more visual nudity is probably available for those viewing pornography. What does this mean about individuals' perception of infidelity? It is perhaps not the amount of physical contact or the idea that one's partner is masturbating, but rather that their partner has desire for another and is seeking out a sexual encounter with another individual other than themselves. In line with Yarab et al.'s <sup>9</sup> claim that when considering sexual fantasies the greater the threat of the sexual fantasy to the relationship, the more likely the fantasy is considered to be unfaithful. It is probable that participants perceived that sexual acts such as cybersex and hot chatting were more of a threat than pornography, since they are more likely to meet face to face with their cyber-loves than they are with porn stars.

An interestingly and important finding from this study was that the factor analysis revealed that there are separate components of infidelity that we need to consider, these being sexual infidelity, emotional infidelity and pornography. This too fits with other theorists understanding that we need to consider other aspects besides sexual intercourse as acts of infidelity <sup>8</sup>. However, what is unique to this study is the finding that online acts of betrayal do not fall into a discrete category of their own. As can be seen in the factor analysis, each factor consisted of both online and offline acts of infidelity.

The findings from this study challenge the notion that acts that occur in cyberspace cannot have a 'real' impact on an individual's life. Many theorists have placed a strong emphasis on the absence of the body in cyberspace, <sup>31,32</sup> focusing on cybersex as an action that does not involve the 'real presence' of bodies. Such researchers focus on the importance of a 'meeting of minds'. In contrast, this study found that individuals separate disclosing intimate details with another online

(emotional infidelity) and engaging in sexual activities (sexual infidelity) online with another. This current study suggests that people at least perceive online acts of infidelity as authentic and real as offline acts. Certainly, there are no physical bodies present online; however, this in turn does not mean that the action is 'unreal'. Instead, Internet relationships are better understood if we focus on the reconstruction of the body online, which is imperative to the success of many online interpersonal interactions. <sup>33</sup> In line with this view, engaging in virtual erotic communications online with someone other than one's partner can pose a real threat to couples.

In addition to the above explanation, whilst many sexual encounters do initiate online, it has been suggested that a large proportion of individuals continue these relationships offline <sup>33-35</sup>. Previous work has found that many individuals hope to eventually meet up face to face with their cyber-mates <sup>33</sup>. Whitty and Gavin <sup>36</sup> have argued that continuing a relationship that initiated online to offline represented increasing levels in trust and intimacy in a relationship. Hence, it is likely that some individuals see their partners' erotic interactions with another on the Internet as a *real* threat to their relationship.

This study, in part, supported the hypotheses. It found that women were more likely than men were to perceive sexual acts as violations of fidelity. This is not surprising considering the general agreement in the literature that women are more upset by offline acts of infidelity compared to men. However, contrary to previous studies <sup>18</sup>, women in this study did not score significantly higher than men did on extradyadic emotional behavior, or pornography. Perhaps the types of questions individuals are asked can explain this difference. In this current study participants were asked to rate items on infidelity, while others <sup>18</sup> have asked participants to rate how upset they would be by these behaviors.

Although we did find that women tended to rate sexual infidelity higher than men did, the results obtained in this study found an interesting gender by age interaction effect on sexual infidelity. That, in the main, younger people rated sexual acts as an act of betrayal more than older individuals; however, the 45 - 70 year old women considered this to be the case more than the 23 - 44 year old women. These results do not support the age hypothesis formed for this study, that young people are more sexually liberated; but rather suggest the opposite to be the case. Of course, it is difficult to ascertain from a cross-sectional study whether these reflect age effects or cohort effects. Possibly the women's movement has effected the cohort of 23 - 44 year old women and the sexual counter-revolution have swung attitudes around to being more conservative for the 17 - 22 years olds.

This study also highlights the value in considering age differences and relationship status in attitudes towards sexual infidelity. An age by relationship status interaction occurred for the factor sexual infidelity. There is a plausible explanation for why younger people in a relationship rate sexual acts of infidelity higher than other individuals. Courtship has been described as "a 'trying-out' period that individuals use to assess the qualifications of each as a more permanent mate" (p.403)<sup>37</sup>. These younger individuals, who are more likely to be in a trying out phase in a relationship, are perhaps less tolerable of any sexual form of betrayal. Interestingly, the result is reversed for the older adults (23-44 years) with those not in a relationship more likely to rate sexual as an act of betrayal than those in a relationship. Moreover, the oldest individuals not in a relationship (presumably some of which are widows) rated sexual acts of infidelity lower than any other group.

Again it is important to recognize here the limitation of exploring age differences in isolation to cohort and historical effects. While the higher ratings in

infidelity from the younger individuals might, in part, be explained by the sexual conservative backlash, which has been a consequence of the AIDS epidemic, this cannot be confidently accounted for in a cross-sectional design. Hence, future researchers might consider carrying out longitudinal studies on attitudes towards online and offline infidelity.

As predicted an Internet sexual experience difference was obtained. This occurred for two of the factors: sexual infidelity and pornography. Perhaps these individuals perceived these acts as less of a threat, given that they are more aware of what these acts entail. Alternatively, perhaps they are more sexually liberated and less prudish than the rest of the population. However, one wonders what their partners would say if they were aware of their online sexual encounters.

While this study does not claim to have all the answers on what constitutes an act of infidelity and by whom it has revealed new gaps in the literature that need to be taken-up in future studies. It should be noted that the effect sizes were fairly small for many of the significant differences obtained, suggesting that there are other variables we also need to consider. For example, in addition to sexual experience future studies might consider offline sexual experience. A further breakdown in categories of relationship status could also highlight some important differences. Other aspects of infidelity might also be considered. Future research might also find differences in levels of jealousy in respect to online acts, since it might be the case that people feel jealous about a certain behavior, but do not consider the behavior to be a violation of fidelity.

Despite, these limitations, this study does present some interesting findings on a topic that has great bearing on functioning in today's society. As the Internet increases as a popular means of communication, researchers need to start seriously questioning how the use of this technology impacts on our every day relationships.

Obviously, such findings highlight that any treatment rationale for infidelity will need to consider that some online behaviors can pose a real threat to relationships. Indeed, further research of this kind is imperative if psychologists are to be successful in counseling partners who believe they have been betrayed by an online affair.

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TABLE 1. CHARACTERISTICS OF THE SAMPLE BY PERCENTAGES

Variable	Entire	Internet	Offline	
	sample			
Gender				
Men	42	44	35	
Women	58	56	65	
Age				
17-22 years	31	24	53	
23-44 years	57	63	37	
45-70 years	12	13	10	
Relationship Status				
In a relationship	73	74	70	
Not in a relationship	27	26	30	
Internet experience				
1-5 hours	28	19	60	
6-10 hours	24	26	18	
11-15 hours	16	18	9	
16-20 hours	12	13	8	
21-25 hours	6	7	2	
26+ hours	14	17	3	
Education				
Primary school	1	1	1	
High School	40	33	40	

table continues

Variable	Entire	Internet	Offline
	sample		
Certificate/diploma	18	17	18
Degree	30	35	30
Postgraduate	11	14	11
Internet sexual experience	36	41	18
Country			
Australia/NZ	39	44	99
UK	4	100	0
Americas	52	100	0
Asia	1	100	0
Europe	3	92	1
Middle East	1	100	0

TABLE 2. MEANS AND STANDARD DEVIATIONS FOR THE ITEMS IN THE  ${\bf SURVEY}$ 

Item	M	SD
Sexual intercourse	4.74	0.81
Cybersex regularly with the same person	4.10	1.21
Hot chat regularly with the same person	3.94	1.21
Cybersex regularly with strangers	3.89	1.30
Cybersex with a stranger-just the once	3.69	1.34
Hot chat regularly with strangers	3.61	1.27
Hot chat with a stranger-just the once	3.22	1.29
Sharing deep emotional and/or intimate	2.34	1.29
information offline		
Sharing deep emotional and/or intimate	2.34	1.29
information online		
Strip clubs	2.23	1.32
Pornographic pictures on web sites	1.98	1.26
Pornographic pictures sent via email	1.97	1.28
Pornographic videos and magazines	1.96	1.28
Non-sexual relationship online	1.77	1.17
Non-sexual relationship offline	1.75	1.19

TABLE 3. FACTOR PATTERN MATRIX

Eigenvalues         (7.81)         (2.28)         (1.87)           Explained variance         52%         15%         12%           Cybersex regularly with the same person         .95        00         .02           Cybersex regularly with strangers         .92        01        05           Hot chat regularly with the same person         .88         .01        06           Cybersex with a stranger–just the once         .85         .02        11           Hot chat regularly with strangers         .83         .01        16           Hot chat with a stranger–just the once         .70         .03        28           Sexual Intercourse         .54         .02         .14           Share emotional intimacy with opp sex offline         .04         .87         .04           Non-sexual friendship with opp sex online        02         .84        03           Share emotional intimacy with opp sex offline        10         .77        05           Videos/magazines        02         .02        96           Pornographic pictures on the web         .01        00        96           Pornographic pictures sent via email         .09         .03        76		Factor 1	Factor 2	Factor 3
Cybersex regularly with the same person .9500 .02  Cybersex regularly with strangers .920105  Hot chat regularly with the same person .88 .0106  Cybersex with a stranger–just the once .85 .0211  Hot chat regularly with strangers .83 .0116  Hot chat with a stranger–just the once .70 .0328  Sexual Intercourse .54 .02 .14  Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online .02 .84 .03  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline .10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Eigenvalues	(7.81)	(2.28)	(1.87)
Cybersex regularly with strangers .920105  Hot chat regularly with the same person .88 .0106  Cybersex with a stranger–just the once .85 .0211  Hot chat regularly with strangers .83 .0116  Hot chat with a stranger–just the once .70 .0328  Sexual Intercourse .54 .02 .14  Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online .02 .84 .03  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline .10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Explained variance	52%	15%	12%
Hot chat regularly with the same person  Cybersex with a stranger–just the once  .85  .02 11  Hot chat regularly with strangers  .83  .01 16  Hot chat with a stranger–just the once  .70  .03 28  Sexual Intercourse  .54  .02  .14  Share emotional intimacy with opp sex offline  .04  Non-sexual friendship with opp sex online 02  Share emotional intimacy with opp sex online  .13  .84  .04  Non-sexual friendship with opp sex offline  .10  Non-sexual friendship with opp sex offline 10  .77 05  Videos/magazines 02  .02 96  Pornographic pictures on the web  .01 00 96  Pornographic pictures sent via email  .03  .05 80	Cybersex regularly with the same person	.95	00	.02
Cybersex with a stranger–just the once .85 .0211  Hot chat regularly with strangers .83 .0116  Hot chat with a stranger–just the once .70 .0328  Sexual Intercourse .54 .02 .14  Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online02 .8403  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Cybersex regularly with strangers	.92	01	05
Hot chat regularly with strangers  .83 .01 .16 Hot chat with a stranger–just the once .70 .03 .28 Sexual Intercourse .54 .02 .14 Share emotional intimacy with opp sex offline .04 .87 .04 Non-sexual friendship with opp sex online02 .84 .03 Share emotional intimacy with opp sex online .13 .84 .04 Non-sexual friendship with opp sex offline10 .7705 Videos/magazines02 .0296 Pornographic pictures on the web .010096 Pornographic pictures sent via email .03 .0580	Hot chat regularly with the same person	.88	.01	06
Hot chat with a stranger–just the once .70 .0328  Sexual Intercourse .54 .02 .14  Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online02 .8403  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Cybersex with a stranger–just the once	.85	.02	11
Sexual Intercourse .54 .02 .14  Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online02 .8403  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Hot chat regularly with strangers	.83	.01	16
Share emotional intimacy with opp sex offline .04 .87 .04  Non-sexual friendship with opp sex online02 .8403  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Hot chat with a stranger-just the once	.70	.03	28
Non-sexual friendship with opp sex online02 .8403  Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Sexual Intercourse	.54	.02	.14
Share emotional intimacy with opp sex online .13 .84 .04  Non-sexual friendship with opp sex offline10 .7705  Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Share emotional intimacy with opp sex offline	.04	.87	.04
Non-sexual friendship with opp sex offline 10  .77 05  Videos/magazines 02  .02 96  Pornographic pictures on the web  .01 00 96  Pornographic pictures sent via email  .03  .05 80	Non-sexual friendship with opp sex online	02	.84	03
Videos/magazines02 .0296  Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Share emotional intimacy with opp sex online	.13	.84	.04
Pornographic pictures on the web .010096  Pornographic pictures sent via email .03 .0580	Non-sexual friendship with opp sex offline	10	.77	05
Pornographic pictures sent via email .03 .0580	Videos/magazines	02	.02	96
	Pornographic pictures on the web	.01	00	96
Strip clubs .09 .0376	Pornographic pictures sent via email	.03	.05	80
•	Strip clubs	.09	.03	76

*Note.* The higher factor loading for each item appears in boldface type.

TABLE 4. SIGNIFICANT RESULTS FOR SEXUAL INFIDELITY, AND PORNOGRAPHY

	SS	df	F	p	$\eta^2$
Sexual					
Gender x Age	268.59	2	4.34	.013	.01
Age x Relationship	469.82	2	7.59	.001	.01
Internet sexual experience	1217.25	1	39.35	.000	.04
Pornography					
Internet sexual experience	156.40	1	12.43	.000	.01

TOP

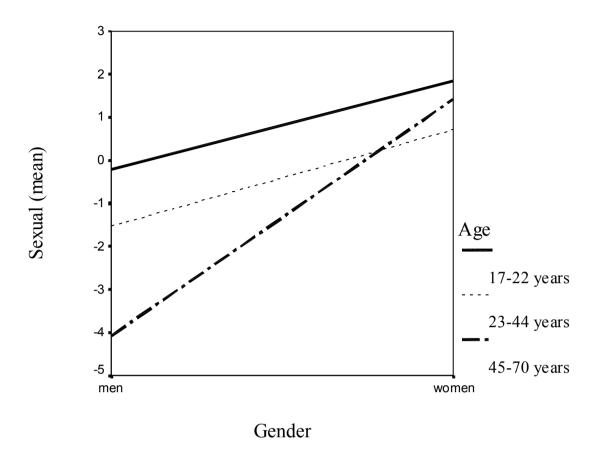


FIG. 1. Interaction for gender age by age on sexual

TOP



FIG. 2. Interaction for age by relationship status on sexual