Running head: EMOTIONAL AND SEXUAL INFIDELITY

Emotional and Sexual infidelity Offline and in Cyberspace

Monica T. Whitty

School of Psychology

Queen's University Belfast

&

Laura-Lee Quigley

School of Psychology

Queen's University Belfast

_____

Dr. Monica Whitty has a PhD and is a Chartered Psychologist. She is a lecturer in the School of Psychology at Queen's University Belfast, Northern Ireland, UK.

Ms. Laura-Lee Quigley has a BA (Hons) degree and was a student at Queen's University Belfast, Northern Ireland, UK.

Emotional and Sexual infidelity Offline and in Cyberspace

This study investigated how men and women perceive online and offline sexual and emotional infidelity. Undergraduates from a large university in Northern Ireland participated in the study. It was found that men, when forced to decide, were more upset by sexual infidelity and women by emotional. It was also found that men were more likely to believe that women have sex when in love and that women believe that men have sex even when they are not in love. It was not, however, found that either men or women believed that having cybersex implied the other was also in love or that being in love online implied they were having cybersex. These results are explained through a social cognitive lens.

Emotional and Sexual infidelity Offline and in Cyberspace

Many researchers have come to the conclusion that there are two main types of infidelity: sexual and emotional (e.g., Buss, Larsen, Westen, & Semmelroth, 1992; Shackelford & Buss, 1996). Sexual infidelity is considered to be engaging in sexual intercourse with someone other than one's partner. Emotional infidelity is understood to be falling in love with another individual other than one's partner. This article examines two dimensions of infidelity both offline and online.

Before moving on to consider these two forms of infidelity, we do note that not everyone is in agreement that sexual and emotional infidelity are the only forms of relationship transgressions.. Roscoe, Cavanaugh, and Kennedy (1988), for instance, found that undergraduates believed that in addition to sexual intercourse that behaviors, such as dating or spending time with a different partner and engaging in other sexual interactions with someone else, such as kissing, flirting, and petting are also acts of infidelity. Yarab, Sensibaugh, and Allgerier (1998) have claimed that other unfaithful behaviors include, passionately kissing, sexual fantasies, non-sexual 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. We also take the line that there are other unfaithful behaviors besides sex and falling in love, however, this paper is solely focusing on sexual and emotional infidelity.

Theoretical Explanations for Gender Differences

Theorists have also considered how upsetting these two forms of infidelities are for men and women. Overall, it seems that men and women do not differ in the

amount or how regularly they experience jealousy (Buss, 2000). Nonetheless, it has been found that men and women differ in the "weighting given to the cues that trigger jealousy" (Buss, 2000, p. 46). The research finds that men are more upset by sexual infidelity and women by emotional infidelity. Different theoretical explanations have been offered to explain these gender differences.

Some theorists have explained these gender differences through an evolutionary lens. According to such an approach, through natural selection the human species has inherited certain traits and emotional reactions. Researchers, such as Buss (2000), contend that ancestral man faced a grave threat from cuckoldry – that being uncertainty about their paternity of their partner's children. Consequently, men are more likely to respond with more intense jealousy to sexual infidelity than women are. Ancestral woman, on the other hand, faced the risk that an unfaithful male partner might divert his resources to another woman and her children. Therefore women have developed an innate jealousy towards emotional infidelity (the assumption being that the man will expend resources on the 'other woman' that they are in love with). There is empirical evidence to support such a theory. For example, Roscoe et al. (1988) asked their 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. Shackelford and Buss (1996) have found that women more than men rate extra dyadic emotional behavior as more upsetting than extra dyadic sexual behavior. However, it is also noteworthy that both men and women report extra dyadic sexual

behavior to be more unacceptable and a greater betrayal than extra dyadic emotional behavior (Shackelford & Buss 1996).

Not all theorists agree with evolutionary theorists' arguments. For example, DeSteno, Bartlett, Braverman, and Salovey (2002) have argued that the methodology Buss and his colleagues use to test out their claims is not sound. They emphatically argue that "the choice between sexual and emotional infidelity reflects a false dichotomy" (p. 1104). Alternative theories have been developed to explain jealousy and upset experienced from betrayal. For instance, some theorists have contended that jealousy might be better explained by a social-cognitive approach, as well as developmental theory (e.g., DeSteno & Salovey, 1996; Harris, 2004; Harris & Christenfeld, 1996). Such theorists believe it is crucial to understand what men and women read into their spouses' infidelity. This has been named the *"double-shot hypothesis"* (DeSteno & Salovey, 1996) or the *"two-for-one hypothesis"* (Harris & Christenfeld, 1996)*,* which essentially argues that:

> Men tend to think sexual infidelity would be more distressing because they infer that if a woman has sex with another man, she is probably also in love with him. Women tend to believe that men can have sex without being in love. Hence, sexual infidelity does not necessarily imply emotional infidelity. (Harris, 2004; p.65)

To test out their claims Harris and Christenfeld (1996) asked their participants to think of a serious romantic relationship they had been involved in and to imagine that this partner has been engaging in sexual intercourse with someone else. On a 5-point likert scale participants had to rate the likelihood that their partner was in love

with the person they had sex with. In addition they were again asked to think of a serious romantic relationship they had been involved in and to imagine that their partner was in love with someone else. On a 5-point likert scale participants had to rate the likelihood that their partner was having sex with the person they were in love with. As predicted they found that men were more likely to say that their partner was in love with the person they were having sexual intercourse with and women were more likely to say that their partner was having sex with the person they had fallen in love with.

Internet Infidelity

This current study was especially interested in examining gender differences in how men and women understand sexual and emotional betrayals in cyberspace. While it has been recently accepted that certain acts online are construed as real acts of infidelity (e.g., Aviram & Amichai-Hamburger, 2005; Mileham, 2007; Parker & Wampler 2003; Whitty, 2003, 2005; Whitty & Carr, 2005, 2006) little is still known about these forms of betrayal. When Whitty (2003) asked her participants to rate whether they believed certain online behaviours were potential acts of infidelity she found that cybersex was rated very highly and almost as severe as sexual intercourse. In a follow-up study, instead of asking participants directly about what they believed were acts of internet betrayal, Whitty (2005) employed a qualitative method to investigate people's representations of internet infidelity. In this study it was found that emotional infidelity was stressed as much as sexual infidelity. Importantly, Whitty (2005) also examined the kind of impact participants believed that cyber-cheating could have on the offline relationship. Sixty-five percent of the stories mentioned that the aggrieved had been hurt or upset by this virtual encounter.

Moreover, in many cases participants wrote that the online infidelity led to a break up of the relationship. She concluded from this study that some online interactions could potentially have serious repercussions on the offline relationship.

Gender differences have also been identified when it comes to attitudes towards cyber-infidelities. Whitty (2005) found that women, more than men, mentioned emotional betrayal in their stories of cyber-infidelities. In line with previous research on offline infidelity (e.g., Amato & Previti 2003; Paul & Galloway 1994), she also found that women were more likely than men to write that they would end the relationship if they found out their partner was having an internet affair. Moreover, the women in Whitty's (2005) study were more likely than the men to talk about the time and distancing from the relationship the infidelity caused. Parker and Wampler's (2003) study, which considered sexual online activities, found that women viewed these activities more seriously than men did.

Current Study

In this study we firstly set out to see if the results obtained by Buss et al. (1992) and Harris and Christenfeld (1996) could be replicated with a Northern Irish sample. In line with these theorists, then, we hypothesized that when given a forced choice that men will more likely rate sexual infidelity as more upsetting and women would rate emotional infidelity as more upsetting. In addition, based on Harris and Christenfeld's (1996) work we hypothesized that men are more likely to think that women have sex only when in love and that women are more likely to think that men have sex without love. Furthermore, we hypothesized that women are more likely to think if their partner is in love with another person they will have sex with them, and that women are more likely to think that men in love are certainly have sex.

The second aim of this study was to examine how men and women understand online sexual and emotional infidelity. We wanted to firstly determine, when compared to offline infidelities and forced to choose, whether individuals would select cyber-infidelities as more upsetting. Based on previous findings we hypothesized that when forced to decide offline infidelities would be perceived as more upsetting than online. In addition, we wanted to examine whether Harris and Christenfeld's theory applies to online infidelities. Although cybersex is obviously quite a different act to sexual intercourse they share many aspects in common (e.g., sexual pleasure in the company of another person – even if it is not the same physical space). Moreover, previous research has found that cybersex is perceived as almost a severe an act of infidelity as sexual intercourse and that viewing pornography online is understood to be very different (Whitty, 2003). Therefore, we hypothesized that men are more likely to think that women have cybersex only when in love and that women are more likely to think that men have cybersex without love. Furthermore, we hypothesized that women are more likely to think if their partner is in love with another person they will have cybersex with them, and that women are more likely to think that men in love are certainly have cybersex. Although individuals' online and offline worlds often collide (Whitty & Carr, 2006), in this study the online infidelity scenarios were restricted to the cyberworld.

Method

Materials

A survey was constructed for this study. Participants were initially asked to provide information on their gender, age, and sexual orientation. Next questions based on Buss et al.'s (1992) and Harris and Christenfeld's (1996) work were drawn from

and added to so that sexual and emotional internet infidelity could also be considered. First, drawing from Buss et al. (1992) participants were asked:

1) Please think of a serious romantic relationship you have had in the past, currently have or would like to have. Imagine that you discover that your partner has become interested in someone else. What would upset you more?

   a) Imagining your partner trying different sexual positions with that other person

   b) Imaging your partner engaging in cybersex with that other person (and they have only ever known that other person online)

   c) Imaging your partner falling in love with that other person

   d) Imaging your partner falling in love with that other person (and they have only ever known that other person online)

To ensure good internal validity cybersex was formally defined as "two individuals engaging in online discussions of a sexual nature accompanied by sexual self-stimulation".

Next drawing from Harris and Christenfeld's (1996) work participants were asked the following questions, which they were required to answer on a 5-point likert scale (with 1 representing 'not at all likely' and 5 'very likely'):

2) Please think of a serious romantic relationship you have had in the past, currently have, or would like to have. Imagine that you discover that your partner is engaging in sexual intercourse with someone else. How likely do you think it is that your partner is in love with that person?

3) Please think of a serious romantic relationship you have had in the past, currently have, or would like to have. Imagine that you discover your partner meets someone online and is engaging in cybersex with that other person. How likely do you think it is that your partner is in love with that person?

4) Please think of a serious romantic relationship you have had in the past, currently have, or would like to have. Imagine that you discover your partner is in love with someone else. How likely do you think it is that your partner is also engaging in sex with this other person?

5) Please think of a serious romantic relationship you have had in the past, currently have, or would like to have. Imagine that you discover that your partner is in love with someone else that they have met online, and have never met face-to-face. How likely do you think it is that your partner is also engaging in cybersex with this other person?

Procedure

After obtaining the approval of an ethics committee, psychology students enrolled in a large university in Northern Ireland were invited to participate in the study. Participants initially were provided with a consent form and an information sheet describing the study and the kind of questions they would be asked. They were assured of anonymity and were informed that they could withdraw consent without penalty. Those who then wished to participate filled out the survey, which took approximately five minutes to complete. Participants were given an email and phone number to contact if they had any further queries about the study. They were also given the telephone number and an email address of the student counseling service

(which is a free service to students) in case they experienced any distress from

completing the survey (although we expected they would not).

Participants

The participants were 112 psychology undergraduate students, comprising of

61 (55%) women and 51 (45%) men. Participants ranged between 18 and 44 years of

age (*M*=23.72, *SD*=6.38). All of the participants were heterosexual.

Results

For the first question, not a single participant responded that b) engaging in

cybersex or d) falling in love online would upset them more. Consequently, we

compared whether men and women significantly differed in their responses to a)

sexual intercourse and c) falling in love offline. As hypothesized, and shown in Table

1, we found that more men than women believed that sexual infidelity was more

upsetting, and more women than men were upset by emotional infidelity, $\chi^2(1,$

N=112) = 41.85, *p* < .001.

Table 1

Comparison of men's and women's distress in response to imagining offline

emotional and sexual infidelity (in percentages)

		More bothered by	
Gender	*N*	Sex	Love
Women	61	23	77
Men	51	84	16

To analyze whether men and women differ in the extent to which they think one form of infidelity implies another we subjected questions 2-5 (described in the method section) to one-way ANOVAs (means and standard deviations are displayed in Table 2). Applying an α-level of 0.05, there was a statistically significant gender difference for sex implies love, $F(1, 110) = 5.44$, p $= .021$ ($\eta^2 = .05$), however, there were no significant differences for any of the other scenarios.

Table 2

Means and standard deviations of participants ratings of how much sexual infidelity (on and offline) implies emotional infidelity and how much emotional infidelity (on and offline) implies sexual infidelity

Gender	N	Sex implies love	Love implies sex	Cybersex implies love	Online love implies cybersex
Women	61	3.16	3.51	2.74	3.03
		(1.25)	(1.09)	(1.15)	(1.10)
Men	51	3.71	3.67	2.71	2.76
		(1.19)	(1.11)	(1.36)	(1.21)
Total	112	3.41	3.58	2.72	2.91
		(1.25)	(1.10)	(1.25)	(1.15)

Given that the means for the cyber-infidelities looked much lower than the means for the offline infidelities we decided to conduct paired t-tests to determine if there were any statistical significant differences between these. We found that the means for 'sex implies love' were significantly higher than 'cybersex implies love', $t(111) = 4.29$, p < .001 ($\eta^2 = 0.14$). We also found that the means for 'love implies sex' were significantly higher than 'online love implies cybersex', $t(111) = 4.83$, p < .001 ($\eta^2 = 0.17$)

Discussion

The results yielded in this study only partly replicated previous studies and only partly supported our hypotheses. In addition, they provide new insights into how men and women perceive internet infidelities.

In considering our first hypotheses we found, in line with previous researchers, that when given the choice men thought sexual infidelity was more upsetting and women thought emotional infidelity was more upsetting. What was perhaps more interesting was that not one participant considered that cybersex or falling in love online was the most upsetting scenario. Previous research has found that when presented with hypothetical scenarios of internet infidelity that, although many perceived these as relationship transgressions, not everyone is convinced that this is real infidelity (Whitty, 2005; Whitty & Carr, 2005, 2006). Whitty and her colleague (Whitty, 2005; Whitty & Carr, 2005, 2006) have argued that given the newness of the internet that the rules have still not been clearly defined as to what are acceptable online encounters. Moreover, it has been argued that, given that cyberspace is regularly perceived as a space that is part fantasy and part reality, online

sexual encounters and online relationships may not be perceived as threatening or hurtful to an offline relationship when compared to offline relationship transgressions (Whitty, 2005, Whitty & Carr, 2005, 2006). The results obtained in this study suggest that such theorists might be correct in their claims.

As mentioned earlier in this paper, theorists have taken different theoretical stances in their attempts to explain why men and women differ in their perceptions and emotional reactions towards infidelity. Evolutionary theorists contend that men and women have evolved to become more upset by specific types of infidelity. They believe that because of concerns with paternity men are more likely to be upset by sexual infidelity, and in contrast, because of upset in regard to losing a man's resources women are more upset by emotional infidelity. The second part of this assumption is difficult to argue in current times where, at least in Western countries, most women no longer require a man's resources in order to support herself and her children. Nonetheless, the results obtained in this study are consistent with what evolutionary theorists would predict. However, given that, like previous theorists, we were not convinced that an evolutionary approach is the best way to explain these gender differences we sought to replicate Harris and Christenfeld's (1996) work which challenges these findings.

In contrast to the evolutionary view, theorists have drawn upon a social-cognitive model to explain gender differences in upset caused by sexual and emotional infidelity (DeSteno & Salovey 1996; Harris & Christenfeld, 1996;). Such theorists posit that men and women are upset by different types of infidelities because of what they call the double-shot hypothesis or the two-for-one hypothesis. This current study, however, did not fully support this view. We found support for the first part of this theory, that men assume that women typically only have sex when in love

and that women do not assume that a man needs to be in love for him to have sex. This would explain why men rated sexual infidelity as more upsetting than women do given that they do receive the double-shot of sexual and emotional infidelity when they think about their female partner cheating on them. However, we did not find support for the second part of the hypothesis, that is, that women are more likely to believe than men that if their partner is in love with someone else they are likely to be having sex with them.

So why might our results differ to what Harris and Christenfeld (1996) found in their research? What appears to be happening here is that the men in this current sample are more likely than Harris and Christenfeld's (1996) sample to believe that their female partner would engage in sex with another man if she is in love with him. Harris and Christenfeld's (1996) collected in the mid 90s – a time when some sociologists claim that people were more sexually conservative as a consequence of changing sexual practices due to fear of catching HIV (Scott, 1998). Times have changed, and so too have sexual practices and attitudes towards sexual practices. This study provides some evidence towards this shift in thinking about sexual practices. However, we argue here that although we have not completely replicated Harris and Christenfeld's study, our results nonetheless support a social-cognitive model as they demonstrate that social shifts lead men and women to think differently about sex and love.

This study also considered whether the double-shot hypothesis or the two-for-one hypothesis applied to attitudes towards cyber-infidelities. We did not obtain significant gender differences on either of the items that tested these hypotheses. Moreover, we found that participants were much less likely to believe that cybersex implied love or that online love implied cybersex than they were to believe that sexual

intercourse implied love or that love implied sexual intercourse. This could be for a number of reasons. First, given that previous research has found that most people have not engaged in online sexual activities (e.g., Whitty, 2003) then making connections between love and cybersex are not so easy to do. As previously argued, defining betrayal lies in 'relationship knowledge structures' (Whitty & Carr 2005). Second, given that cybersex is qualitatively different to sexual intercourse then, although individuals might still perceive it as a relationship transgression, they do not necessarily link it with love in the same way they would with offline relationship transgressions. Whereas this result does not help provide support for the double-shot and two-for-one hypotheses they equally did not provide support for the evolutionary argument. Further research needs to consider whether men and women, when forced to decide, are upset more by cybersex or falling in love online. Moreover, it needs to consider why men and women might perceive certain acts online to be acts of betrayal.

Although this study has advanced our understandings of how individuals understand offline and online infidelity there are some obvious limitations. Like previous studies it is limited to considerations of hypothetical scenarios of infidelity. Also future research needs to examine whether we would find the same results for an older population and with individuals who are not university students. Future research should also examine why cybersex and online love are not strongly linked to one another.

In concluding, this study contributes to the debate of whether upset caused by relationship transgressions can be best explained by evolutionary or social cognitive models. Moreover, it provides more information about how men and women

understand offline and online infidelities. Finally, it highlights that more research is required in this field.

References

Amato, P. R., & Previti, D. (2003). People's reasons for divorcing: Gender, social

   class, the life course, and adjustment. *Journal of Family Issues, 24* (5), 602-

   626.

Aviram, I., & Amichai-Hamburger, Y. (2005). Online infidelity: Aspects of dyadic

   satisfaction, self-disclosure, and narcissism. *Journal of Computer-Mediated*

   Communication, 10 (3), article 1. Retrieved March 7, 2006, from

   http://jcmc.indiana.edu/vol10/issue3/aviram.html

Buss, D. M. (2000). Desires in human mating. *Annals New York Academy of Sciences,*

   907, 39-49.

Buss, D. M., Larsen, R., Westen, D., & Semmelroth, J. (1992). Sex differences in

   jealousy: Evolution, physiology, and psychology. *Psychological Science, 3,*

   251-255.

DeSteno, D., Bartlett, M. Y., Braverman, J., & Salovey, P. (2002). Sex differences in

   jealousy: Evolutionary mechanism or artifact of measurement? *Journal of*

   Personality and Social Psychology, 83 (5), 1103-1116.

DeSteno, D., & Salovey, P. (1996). Evolutionary origins of sex differences in

   jealousy? Questioning the "fitness" of the model. *Psychological Science, 7,*

   367-371.

Harris, C. R. (2004). The evolution of jealousy: Did men and women, facing different

   selective pressures, evolve different "brands" of jealousy? Recent evidence

   suggests not. *American Scientist, 92,* 62-71.

Harris, C. R., & Christenfeld, N. (1996). Gender, jealousy, and reason. *Psychological*

   Science, 7 (6), 364-245.

Mileham, B. L. A. (2007). Online infidelity in Internet chat rooms: An ethnographic exploration, *Computers in Human Behavior, 23,* 11-31.

Parker, T. S., & Wampler, K. S. (2003). How bad is it? Perceptions of the relationship impact of different types of internet sexual activities. *Contemporary Family Therapy, 25* (4), 415-429.

Paul, L., & Galloway, J. (1994). Sexual jealousy: Gender differences in response to partner and rival. *Aggressive Behavior, 20,* 203-211.

Roscoe, B., Cavanaugh, L., & Kennedy, D. (1988). Dating infidelity: Behaviors reasons, and consequences, *Adolescence, 23,* 35-43.

Scott, J. (1998). Changing attitudes to sexual morality: A cross-national comparison. *Sociology, 32,* 815-845.

Shackelford, T., & Buss D. (1996). Betrayal in mateships, friendships, and coalitions, *Journal of Personality and Social Psychology, 22*, 1151-1164.

Yarab, P. E., Sensibaugh, C. C., & Allgeier, E. (1998). More than just sex: Gender differences in the incidence of self-defined unfaithful behavior in heterosexual dating relationships. *Journal of Psychology & Human Sexuality*, *10* (2), 45-57.

Whitty, M. T. (2003). Pushing the wrong buttons: Men's and women's attitudes towards online and offline infidelity. *CyberPsychology & Behavior, 6* (6), *569-579.*

Whitty, M. T. (2005). The 'Realness' of Cyber-cheating: Men and women's representations of unfaithful Internet relationships. *Social Science Computer Review, 23* (1), 57–67.

Whitty, M. T., & Carr, A. N. (2005). Taking the good with the bad: Applying Klein's work to further our understandings of cyber-cheating. *Journal of Couple and Relationship Therapy, 4*(2/3), 103-115.

Whitty, M. T. & Carr, A. N. (2006). *Cyberspace romance: The psychology of online relationships.* Basingstoke: Palgrave Macmillan.