UNIVERSITY STUDENTS' PERCEPTIONS OF, AND EXPLANATIONS FOR, INFIDELITY: THE DEVELOPMENT OF THE INFIDELITY QUESTIONNAIRE (INFQ)

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To expose perceptions of – and explanations for – emotional and sexual infidelity, an Infidelity Questionnaire (INFQ) was developed for this study and was administered to university students. The structure of the INFQ included different causes under six components which are legitimacy, seduction, normalization, sexuality, social background, and sensation seeking. Results are discussed with reference to differences in the sex of participants and the sex of betrayers.

Keywords: emotional infidelity, sexual infidelity, Infidelity Questionnaire, betrayal.

The evolutionary approaches to human mating assert that in general women tend to give greater value to resource acquisition and therefore prefer economically stable and socially dominant partners. On the other hand, men, giving more value to reproductive capacity, prefer young, healthy, and physically attractive partners (Buss, 1989; Cramer, Abraham, Johnson, & Manning-Ryan, 2001; Landolt, Lalumiere, & Quinsey, 1995; Symons, 1979). According to this perspective, emotional infidelity leads to more distress for women than for men because this type of betrayal threatens the meaning of the relationship in which emotional

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commitment and needed resources have greater value for women. However, for men, sexual infidelity is much more threatening because it signals sexual exclusion and therefore paternity uncertainty (Abraham, Cramer, Fernandez, & Mahler, 2001; Buss et al., 1999; Cann, Mangum, & Wells, 2001; Cramer, Abraham, Johnson, & Manning-Ryan, 2001).

Jankowiak, Nell, and Buckmaster (2002) argued that - supported by folk ideologies - common sense, and social convention, extramarital affairs may be treated differently by men and women. Men may think that they do have the right to possess the bodies of their partners (bodies of women). On the other hand, women believe that they have neither the bodies of their partners nor that of themselves. Therefore it is possible to expect that men and women treat infidelity differently. Jankowiak, Nell, and Buckmaster found three types of responses to infidelity; use of self-help, appeals to higher authority, and appeals to the general public. The self-help category is defined as resolving the matter of infidelity between partners and contains verbal/physical violence and distancing themselves from each other (such as banishing, leaving partner, emotional withdrawal, and suicide). Not surprisingly, it was found that men prefer physical violence and women prefer to distance themselves from their partners. However, men prefer to appeal to a higher authority by taking the matter of infidelity to a formal institution, whereas women prefer to appeal to the general public using methods such as gossip for shaming and correcting the partner and to get emotional help.

Harris and Christenfeld (1996) claimed that men and women have different ideas about the relationship between sex and love. Their survey indicated that, according to men, women must be in love to have sex, whereas women think men may have sex without love. People have different theories about the betrayal of their partners, and the type of infidelity becomes a main factor for these explanations. When infidelity is considered as emotional, individuals feel more responsibility for their partner's betrayal because they tend to think of themselves as being insufficient (Nannini & Meyers, 2000). Consistent with evolutionary perspective, men explain their partner's infidelity as a desire for greater commitment. However, women explain the same behavior as a desire for sexual variety. Furthermore, if sex is believed to be an indicator of intimacy, then, sexual infidelity becomes more distressing for both male and female partners (Cann, Mangum, & Wells, 2001).

In the light of these studies, we were curious about the reasons for sexual and emotional infidelity. Why do people betray their partners? Although, there seem to be numerous reasons to cheat on one's partner, there is no general questionnaire aimed to measure these possible reasons. Evolutionary perspectives stated that there are different perceptions of betrayal as a function of gender. It can be expected that there would be a difference between men and women in their

perception of infidelity and this difference would became much more evident when the gender of the betrayer was taken into account. Therefore, although the development of an instrument to measure lay theories about betrayal and the exploration of the structure of infidelity were the major purposes of our study, sex differences (both the sex of the raters and the sex of the imagined betrayers) were also considered.

METHOD

PARTICIPANTS

Two hundred and twenty-seven women and 177 men (a total of 404) participated in the present study. The mean age was 21.90~(SD=2.48) ranging from 18 to 38. Participants were students from various universities in Turkey. Only 2.0% of the students were married, 44.9% were single but they had a romantic relationship, and the remaining 53.1% were absolutely single. They were asked to indicate whether they had ever been emotionally or sexually unfaithful to their partners or not ("Have you ever been unfaithful to your partner?"). Almost 1 out of 5 (19.6%) of the university students reported that they had been unfaithful to their partners at least once. On the other hand, 17.3% claimed that it was not them, but their partners, who had been unfaithful. The majority of the participants (54.3%) stated that neither they nor their partners had committed an act of emotional or sexual infidelity. A small group of our sample (8.7%) reported no romantic relationship at all. Since the present research was designed to explore the structure of infidelity, participants who had reported no romantic relationships were also included for subsequent analyses.

Participants were also asked to indicate which type of cheating was a real act of betrayal ("In order to define an act as unfaithfulness, this act should include..."). Interestingly, 14.7% of the participants believed that emotional infidelity itself was sufficient to label a behavior as unfaithful. However 4.5% used the infidelity label if the behavior was *solely* sexual. The majority (70.1%) believed that either type of betrayal should be taken as an example of unfaithfulness. The percentage of participants who believed that both emotional and sexual infidelities should take place at the same time to define unfaithfulness was 10.7%.

MATERIALS AND PROCEDURE

Development of the Infidelity Questionnaire (INFQ) In order to construct a questionnaire to determine and to measure the possible components of emotional and sexual infidelity, the researchers examined infidelity stories of anonymous cases. These cases were examined via a Turkish web site (http://www.itiraf.com) on which confessions of the internet users about different topics had been published. We used a single keyword "aldatma" ("infidelity" in Turkish) and

reached 738 different confessions. These confessions might or might not be true, however, for the development of the INFQ, it was not the truth of the confessions but the stated causes which were important. The infidelity confessions were read and analyzed in terms of causes given to them. From the given causes we found 132 different reasons for being unfaithful.

The Infidelity Questionnaire A 100-item questionnaire was developed. All of the items were selected from the qualitative analysis of the published confessions. Two versions of the INFQ were prepared. The first was labeled as "the possible reasons for a woman to commit infidelity", (INFQ-W), the second version started with the phrase "the possible reasons for a man to commit infidelity", and was labeled INFQ-M. The items in both versions were the same except the sex of the target who was identified as a person who committed an act of infidelity. Participants used a 5-point Likert-type scale to indicate the importance of a given cause (1 = not important at all, 5 = very important).

The INFQ-W and INFQ-M were administered together, mostly in class sessions. Each participant took either the INFQ-W or the INFQ-M. The administration of the questionnaires was randomly assigned and it took approximately 30 minutes. Then, participants were debriefed.

RESULTS

STRUCTURE OF INFQ

Principal Component Analysis (PCA) with varimax rotation was performed to discover the component structure of the Infidelity Questionnaire (INFQ). The examination of the scree plot indicated that a six-component solution was suitable. Then, another PCA was run with varimax rotation forcing the number of components to six. Since the items were taken from real or imaginary cases from an internet site, it was quite expected that there would be some factors with many more items than others and some items which would be very similar. Therefore, in order to be able to manage these items economically, four conceptually different items with the highest loadings of each component, with the least being .45 loading, were selected as much more representative (indicating that the contribution of each item to the component was at least 20%), and thus included in that component. Items, their loadings and appropriate reliability coefficients (alpha) are shown in Table 1.

The first component included 4 items related to legitimacy (explained variance = 11.33%). This component contained items such as "Being in a romantic relationship in which the partner does not show any involvement", and "Seeing no future for the relationship". This component seems to imply the effect of "revenge". In other words, this component seems to state that the partner in the relationship deserves to be cheated. The internal consistency of this component was 83.

TABLE 1
MEANS, STANDARD DEVIATIONS, RELIABILITIES, AND PRINCIPAL COMPONENT ANALYSIS RESULTS
FOR THE REASONS FOR INFIDELITY

	Compone	ent						
The possible reasons for a man / woman cheat on his / her partner:	to							
	M	SD	1	2	3	4	5	6
Being in a romantic relationship in which the partner does not show any involveme. Being in a romantic relationship in which	nt. 3.88	1.03	.71					
the partner is insensitive. Thinking that the current relationship	3.68	1.09	.70					
is a mistake.	3.47	1.21	.68					
Seeing no future for the relationship.	3.72	1.16	.68					
Being seduced by another person.	3.44	1.21		.67				
The other person is handsome / beautiful.	3.38	1.31		.67				
Getting an opportunity for cheating. Feeling a desire to have a sexual	2.80	1.36		.66				
relationship with another person.	3.61	1.22		.57				
Just to spite the partner.	2.58	1.37			.65			
Perceiving the act of infidelity as a game. Thinking that cheating is a natural	2.28	1.24			.60			
human right.	1.96	1.13			.58			
Infidelity is a fashion.	1.93	1.13			.57			
Having a bad sexual relationship with his / her partner.	3.52	1.19				.84		
Partner's unwillingness to have a	3.32	1.19				.04		
sexual relationship.	3.73	1.17				.81		
Decrement in the sexual functionality	0.,0	111,				.01		
of the partner.	3.16	1.22				.75		
Being in a romantic relationship in								
which the partner has sexual taboos.	3.22	1.26				.57		
Marrying young.	3.33	1.35					.56	
Having an arranged marriage.	3.13	1.41					.51	
Growing up in a conservative culture.	2.49	1.34					.49	
Having few romantic relationships during adolescence.	2.79	1.35					.47	
Seeking arousal.	3.83	1.13						.63
Seeking new experiences.	3.58	1.18						.59
Seeking enjoyment.	3.36	1.27						.55
Boredom with the routine life.	3.80	1.18						.50
	genvalue		26.14	6.20	5.35	2.68	2.63	2.13
	iance (%)		11.33	9.43	9.28	8.22	3.92	2.93
Alp	na		.83	.80	.74	.84	.73	.83

The second component included 4 items related to seduction (explained variance = 9.43%). This component contained items such as "Being seduced by another person", and "Feeling a desire to have a sexual relationship with another person". The seduction component implies the effect of a "third person". The internal consistency of this component was .80.

Normalization was the third component, with 4 items (explained variance = 9.28%). This component contained items with the underlying concept that infidelity is a normal act such as "Just to spite the partner" and "Infidelity is a fashion". The internal consistency of this component was .74.

The fourth component included 4 items related to sexuality (explained variance = 8.22%). What is meant by *sexuality component* is *the quality of the sexual relationship between a person and his or her partner*. Items in these components indicated deprivation or lack of a sexual relationship between two partners as reasons for infidelity. "Having a bad sexual relationship with his / her partner" and "Decrement in the sexual functionality of the partner" were the examples of the component. The internal consistency of this component was .84.

The fifth component included 4 items related to social background (explained variance = 3.92%). "Having an arranged marriage", "Marrying young", and "Growing up in a conservative culture" are examples of this component. The internal consistency of this component was .73.

The last component included 4 items related to sensation seeking (explained variance = 2.93%). As its name implies, this component contains items indicating "Seeking arousal", "Seeking enjoyment", and "Boredom with the routine life". The internal consistency of this component was .83. The correlations among components are presented in Table 2.

TABLE 2
CORRELATION MATRIX AMONG INFQ COMPONENTS

Component Name	Legitimacy	Seduction	Normalization	Sexuality	Social Background	Sensation Seeking
Seduction	.40					
Normalization	.31	.52				
Sexuality	.32	.47	.25			
Social Background	.31	.32	.30	.31		
Sensation Seeking	.42	.50	.45	.35	.33	
M	3.69	3.30	2.18	3.41	2.93	3.64
SD	0.92	1.01	0.91	1.00	1.02	0.96

Note: All correlations are significant at p < .05.

SEX OF THE PARTICIPANT AND SEX OF THE BETRAYER

To compare the perceived importance of these causes as a function of the betrayer's sex and sex of the participant a 2 (sex of the participant) x 2 (betrayer's sex) multivariate analysis of variance (MANOVA) was conducted. With the use of Wilks' criterion, the infidelity components were significantly affected by the sex of the participants ($F_{6,391} = 4.29$, p < .05, $\eta^2 = .06$), sex of the betrayer ($F_{6,391} = 4.94$, p < .05, $\eta^2 = .19$), and their interaction ($F_{6,391} = 5.47$, p < .05, $\eta^2 = .08$).

A test of between-subjects effects indicated main effects of sex in the seduction $(F_{1,396}=6.03,\,p<.05,\,\eta^2=.02)$ and social background $(F_{1,396}=5.79,\,p<.05,\,\eta^2=.01)$ components. It appeared that men tended to give greater importance to seduction as a cause of infidelity than women (means were 3.46 and 3.22, respectively). On the other hand, women rather than men reported higher importance for the social background component as a cause of betrayal (means were 3.05 and 2.80, respectively). There were no significant differences between men and women among other INFQ components.

Betrayer's sex was also found to be significant. Results showed that legitimacy was perceived as a much more reasonable cause for infidelity if the betrayer was a woman ($F_{1,396} = 4.76$, p < .05, $\eta^2 = .01$; means were 3.78 and 3.57, respectively). However, if the betrayer was a man, seduction ($F_{1,396} = 31.17$, p < .05, $\eta^2 = .07$; means were 3.61 and 3.07, respectively), sexuality ($F_{1,396} = 20.95$, p < .05, $\eta^2 = .05$; means were 3.67 and 3.23, respectively), and social background ($F_{1,396} = 12.82$, p < .05, $\eta^2 = .03$; means were 3.11 and 2.74, respectively) components were reported to be much more reasonable causes for infidelity. In the normalization and sensation-seeking components there were no significant differences related to the betrayer's sex.

Results also showed that there were significant interactions between sex of the participant and sex of the betrayer in 3 of the 6 components. The first interaction was in the seduction component ($F_{1,396} = 6.30$, p < .05, $\eta^2 = .02$). Post hoc analyses (Tukey) revealed that when the betrayer's sex was assumed to be a woman, male participants gave greater importance to the seduction component than did female participants (means were 3.31, and 2.82, respectively; p < .05). In addition, among female participants, seduction was seen as a much more valid reason for infidelity if the betrayer's sex was male rather than female (means were 3.61, and 2.82, respectively; p < .05).

Another significant interaction between sex of the participant and sex of the betrayer was found in the normalization component ($F_{1,396} = 7.02$, p < .05, $\eta^2 = .02$). The only difference that led to a significant interaction effect was that when the betrayer was a woman, male participants gave greater importance to the normalization component than did female participants (means were 2.36, and 2.00, respectively; p < .05).

Finally, the post hoc analyses of the last significant interaction effect concerning the sexuality component ($F_{1,396} = 14.12$, p < .05, $\eta^2 = .03$) indicated that male participants, rather than females, reported much more value for sexuality as a cause for infidelity if the betrayer was assumed to be a woman (means were 3.49, and 2.96, respectively; p < .05). Furthermore, for female participants the concept of sex was seen as more reasonable when the betrayer was a man (means were 3.77, and 2.96, respectively; p < .05).

DIFFERENCES RELATED TO INFIDELITY EXPERIENCES

Among a total of 404 participants, 144 (35.64%) stated either that they betrayed their partner or vice versa, 213 participants (52.72%) reported neither themselves nor their partners taking part in acts of emotional or sexual infidelity. A group of *t*-tests (those who had experienced any type of betrayal vs. those who had had no experience of unfaithfulness) were performed to indicate whether there were differences between these two groups of individuals with regard to infidelity components. Results showed that except for sexuality, those who had an experience of unfaithfulness gave more importance to infidelity reasons than did those who had no such experience (see Table 3 for results).

	TABLE 3	
DIFFERENCES IN INFO	COMPONENTS AS A FUNCTION OF INFIDELITY 1	Experience

Components	Infidelity Experience	Mean (SD)	t value
Legitimacy	Yes	3.83 (0.83)	
	No	3.64 (0.93)	2.005*
Seduction	Yes	3.53 (0.94)	
	No	3.20 (1.03)	3.004*
Normalization	Yes	2.32 (0.91)	
	No	2.13 (0.91)	1.999*
Sexuality	Yes	3.49 (0.97)	
•	No	3.40 (1.00)	0.858
Social Background	Yes	3.10 (0.98)	
	No	2.87 (1.01)	2.256*
Sensation Seeking	Yes	3.96 (0.81)	
	No	3.52 (0.99)	4.575*

^{*} p < .05

DISCUSSION

This study aimed to represent how university students perceive, and what they think about, the reasons for emotional and sexual infidelity. A questionnaire about possible causes of infidelity was constructed in which there were 100 different reasons for the act of unfaithfulness.

Six components emerged in the analysis regarding causal attributions to infidelity. Participants found items, "being in a romantic relationship in which partner does not show any involvement", "being in a romantic relationship in which partner is insensitive", "thinking that the current relationship is a mistake", and "seeing no future for the relationship" as the major causes of the legitimacy component of infidelity. These items were perceived as more reasonable causes for infidelity if the betrayer was a woman, not a man. It is consistent with evolutionary perspective that the female partner's infidelity may result from a desire for seeking greater commitment (Cann, Magnum, & Wells, 2001).

The second component consists of the items, "being seduced by another person", "the other person is handsome/beautiful", "getting an opportunity for cheating", and "feeling a desire to have a sexual relationship with another person". These were related to being seduced. It is apparent that men tended to give greater importance to this component as a cause of infidelity than did women. In addition, seduction was reported as a much more reasonable cause for infidelity if the betrayer was stated to be a man, not a woman. On the other hand, when the betrayer's sex was assumed to be a woman, the seduction component was perceived as being much more important by male participants. The same condition was reversed for female participants. In other words, women thought that reasons related to seduction were more important if a man committed the acts of infidelity. It can be speculated that assuming heterosexual relationships, both men and women participants attributed the act of unfaithfulness to the "third person". They might have thought that if their partners had been unfaithful, the reason for this behavior did not stem from the characteristics of their partners or themselves but rather came from an external agent.

The normalization component consisted of items, "just to spite the partner", "perceiving the act of infidelity as a game", "thinking that cheating is a natural human right", and "infidelity as a fashion". These reasons were seen as more valuable for men if the betrayer was a woman. This result seems to be very interesting. It appears that men showed greater flexibility in thinking of unfaithfulness as a "natural thing" for women. Although there was no direct evidence for this, it can be claimed that life stories of the female celebrities who are unfaithful, which are presented on television, in movies and in other mass media, may cause men to think that infidelity is a natural human behavior of women. It should be noted that men did not claim the same naturalness for themselves.

As was expected, one of the components was related to sexuality. The reasons, "having a bad sexual relationship with one's partner", "partner's unwillingness to have a sexual relationship", "decrement in the sexual functionality of the partner", and "being in a romantic relationship in which partner has sexual taboos" were perceived as being much more reasonable if the betrayer was a

man. This result can be explained by the partner selection system that is stated in evolutionary perspectives. As mentioned before, according to evolutionary perspectives, men prefer young, healthy, and physically attractive partners (Buss, 1989; Symons, 1979). Therefore, selection criteria related to sexuality should be important especially if there is a decrement in the sexual functionality of a man's partner. If there is a problem in the perceived quality of sexual life, men tend to find unfaithfulness quite reasonable. We found that the sexuality dimension was not important only for men. On the one hand, if the betrayer was a man, women participants saw his behavior as a response to the problems of his sexual life. This result is consistent with Harris and Christenfeld's (1996) claim that women think men may have sex without love. On the other hand, if a woman was the betrayer, not women but men participants perceived sexuality as an important dimension of infidelity.

"Marrying young", "having an arranged marriage", "growing up in a conservative culture", and "having few romantic relationships during adolescence" are also important factors for the causes of infidelity. The characteristics of social background were reported as more important reasons for infidelity by women, especially if the betrayer was a man. This is quite understandable because men are believed to have greater freedom in sexual activity as compared to women. Then, if this freedom is restricted for any reason such as social background, culture, or physical environment, men are expected to be unfaithful when they are able to have a romantic relationship.

The major contribution of this study is the development of a questionnaire to measure the possible perceived reasons of infidelity. The six-component model of infidelity was shown as a reliable measure to investigate causes for unfaithfulness. Future research should concentrate on testing the structure of the INFQ with different age groups and in different cultures.

REFERENCES

- Abraham, W. T., Cramer, R. E., Fernandez, A. M., & Mahler, E. (2001). Infidelity, race, and gender: An evolutionary perspective on asymmetries in subjective distress to violations-of-trust. *Current Psychology*, 20, 337-348.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, **12**, 1-49.
- Buss, D. M., Shackelford, T. K., Kirkpatrick, L. A., Choe, J. C., Lim, H. K., Hasegawa, M. et al. (1999). Jealousy and the nature of beliefs about infidelity: Tests of competing hypotheses about sex differences in the United States, Korea, and Japan. *Personal Relationships*, 6, 125-150.
- Cann, A., Mangum, J. L., & Wells, M. (2001). Distress in response to relationship infidelity: The roles of gender and attitudes about relationships. *The Journal of Sex Research*, 38, 185-190.
- Cramer, R. E., Abraham, W. T., Johnson, L. M., & Manning-Ryan, B. (2001). Gender differences in subjective distress to emotional and sexual infidelity: Evolutionary or logical inference explanation? *Current Psychology*, 20, 327-336.

- Harris, C. R., & Christenfeld, N. (1996). Gender, jealousy, and reason. Psychological Science, 7, 364-366.
- Jankowiak, W., Nell, M. D., & Buckmaster, A. (2002). Managing infidelity: A cross-cultural perspective. *Ethnology*, 41, 85-101.
- Landolt, M. A., Lalumiere, M. L., & Quinsey, V. L. (1995). Sex differences in intra-sex variations in human mating tactics: An evolutionary approach. *Ethology and Sociobiology*, **16**, 3-23.
- Nannini, D. K., & Meyers, L. S. (2000). Jealousy in sexual and emotional infidelity: An alternative to the evolutionary explanation. *The Journal of Sex Research*, **37**, 117-122.
- Symons, D. (1979). The evolution of human sexuality. New York: Oxford University Press.