

Effect of Facebook Use Intensity Upon Marital Satisfaction Among Pakistani Married Facebook Users: A Model Testing

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The impact of Social Networking Sites (SNS), especially, Facebook in marital relationships is increasing in Pakistan. A model based on negative-effect hypothesis about SNS use was designed to test the effect of Facebook use intensity on marital satisfaction among married Facebook users. Sample comprised of 302 married Facebook users from capital city of Pakistan. Data were conveniently collected through using Urdu versions of Interpersonal Electronic Surveillance Scale (Tokunaga, 2011), Trust in Close Relationships Scale (Rempel, Holmes, & Zanna, 1985), Facebook Jealousy Scale (Muisse, Christofides, & Desmarais, 2009), Comprehensive Marital Satisfaction Scale (Blum & Mehrabian, 1999), and six items for Facebook Use Intensity. Marital satisfaction as assumed was found to have significant positive relationship with trust in relationship and significant negative relationship with Facebook related jealousy and online surveillance. Findings revealed a process whereby Facebook related jealousy and online surveillance were the mediators for the trust and Facebook use intensity as predictors in predicting marital satisfaction. Men were found to be more satisfied and have more trust on their wives as compared to women. Women possessed more jealous feelings and indulged in more surveillance of their spouses on Facebook as compared to male counterparts. This conceptualization showed the causal relationship between intensity of Facebook usage and marital satisfaction that can help in studying the impact of growing technology upon marital relationships in Pakistani context.

Keywords. Facebook, jealousy, social networking site, marital satisfaction, married Facebook users

It is beyond any doubt that technology has changed the nature and dynamics of social relationships. A large body of research has

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emphasized the positive impact of social networking on young adults' lives (e.g., Boyd, 2007; Ellison, Steinfield, & Lampe, 2007), but recently researchers (Marshall, Bejanyan, Di Castro, & Lee, 2012) have begun to explore the negative impact of social networks on romantic relationships. With all the positive capabilities of Social Networking Sites (SNS) to help users in connecting people, damaging interpersonal or romantic relationships is the deleterious feature of SNS (Bindley, 2012; Fox, 2016). Facebook is the most popular SNS to date (Internet World Stats, 2018; Zarar, 2017). Facebook helps in building social contacts with much convenience through text messaging, sharing photographs and cultural artifacts, etc. (Madden & Zikher, 2011). Nevertheless, this very feature of Facebook has made it a source of stress and dissolution of relationship (Bindley, 2012; Fox, 2016) and researchers have found Facebook as a cause of divorce in one divorce out of 5 (Adams, 2011; Gardner, 2013). Facebook eases the way in having extramarital relationships (Valenzuela, Halpern, & Katz, 2014). Easy access to one's personal information on SNS reduces partner search cost (Kendall, 2011). Finding potential new match effortlessly may cost dissolving the old one, thus, fuelling divorce rates or cheating in marital relationship.

Gershon (2011) interviewed 72 undergraduate students in Indiana University and found that the Facebook usage was causing the breakup of their intimate relationship. This increased usage of SNS not only leads to problem between friends and romantic partners (Tokunaga, 2011), but also between married individuals (Valenzuela et al., 2014). This demands attention of researchers for studying impact of Facebook use on marital relationship in Pakistan, so that family as an institution could be maintained.

There are two perspectives that explain the negative relationship between SNS use and relationship satisfaction: (1) *The negative affect hypothesis* postulates that SNS use negatively affects marriages and causes divorce and (2) *the self-selection hypothesis* proposes that SNS is more frequently used by divorcees or people with troubled relationships (Valenzuela et al., 2014). Both perspectives reflect positive relationship between Facebook use and marital dissatisfaction, however, the negative affect hypothesis is basically focused in the present research, which states a causal relationship between Facebook usage effecting marital satisfaction, which is the main objective of the study. Current study does not intend to screen married individuals first for having good marital relationship or not and then comparing them on Facebook use and marital satisfaction as proposed in the self-selection hypothesis.

Integration of Facebook in daily lives has gone beyond the term 'use' only. Nowadays, people feel so emotionally connected with the site (Ellison et al., 2007) and display compulsive dependence on its usage (Raacke & Bonds-Raacke, 2008) that it somewhat suggests at the borderline of addiction disorder (Kuss & Griffiths, 2011). This may be effecting functioning in social, school, or occupational domains (Kuss & Griffiths, 2011). That is why in the present study, Facebook use intensity is measured as number of hours one uses Facebook and psychological dependence on its compulsive use (Ellison et al., 2007; Tokunaga, 2011).

According to Muise, Christofides, and Desmarais (2009), the easy access to information at Facebook leads to online surveillance of partner's activities that can result in feelings of jealousy (Phillips, 2009) and mistrust in relationships. Elphinston and Noller (2011) also agree with the theory that surveillance on Facebook leads to feelings of jealousy. Surveillance is spying or following romantic partner, keeping eye on partner's activities, and looking for signs of infidelity (Guerrero, Andersen, Jorgensen, Spitzberg, & Eloy, 1995). When monitoring occurs online as on Facebook, this is online surveillance or interpersonal electronic surveillance (IES) and somehow *Facebook stalking* has gradually become a popular culture (Lyndon, Bonds-Raacke, & Cratty, 2011). IES is secretive strategies to gain information about user's offline and online behaviours through communication technology (Tokunaga, 2011). It is less complicated than traditional form of surveillance (Mrashall et al., 2012). IES may foster healthy interpersonal relationship by keeping partners informed and in contact with each other (Lampe, Ellison, & Steinfield, 2006). Nevertheless, it may have deleterious effect on relationship (Fox, 2016), as increased usage of SNS to the level of addiction provokes feelings of jealousy between couples (Valenzuela et al., 2014).

Marital satisfaction is found to be negatively correlated with jealousy (Andersen, Eloy, Guerrero, & Spitzberg, 1995). SNS has jealousy-provoking environment when person witnesses spouse being friend or commenting on posts of opposite gender or rival that may harm the relationship strength (Elphinston & Noller, 2011). Reconnecting with people of past relationship on SNS may also generate jealousy (Ellison et al., 2007). Further, Muise et al. (2009) empirically supported that this jealousy-provoking environment of Facebook starts a vicious cycle between jealousy and surveillance. Both fuel each other and increased online surveillance of spouse's activities leads to more suspiciousness between partners that ultimately negatively affect the relationship (Helsper & Whitty, 2010)

and marital functioning between the couple, eventually, ending up the relationship (Tosun, 2012).

Unlike increased Facebook use, marital satisfaction has been found to be highly positively correlated with trust (Atta, Adil, Shujja, & Shakir, 2013; Goldberg, 1982). Lack of trust in marital relationship significantly predicted Facebook-related jealousy through suspicious feelings about partner's Facebook activities and monitoring their Facebook profile (Muisse et al., 2009). Rempel, Holmes, and Zanna (1985) defined trust as predictability, dependability, and faith in relationship. Since, distrust in marital relationship is believed to encourage surveillance behaviours such as spying on a partner and individuals with low partner trust are likely to engage in frequent Facebook partner-monitoring. In context of SNS, sharing passwords and online social networking information and exercising internet boundaries in defining with whom to interact are indicators of trust between couples (Norton, 2011). Insecure individuals often perceive their spouse's online activities as a flawed (Rau, Gao, & Ding, 2008) and partner's trust significantly predicts frequent Facebook monitoring intentions (Darvell, Walsh, & White, 2011). In addition to this, online surveillance of SNS may cause higher anxiety, mistrust, and jealousy, which threatens the romantic relationship (Marshall et al., 2012).

In patriarchal society of Pakistan, men are encouraged to be aggressive and powerful and they enjoy more autonomy as compared to women. Both men and women give importance to different factors in their marital satisfaction. Pakistani women give more importance to communication, while, men give importance to sexual satisfaction in marital relationship (Ayub & Iqbal, 2012). Women are found to use more SNS as compared to men (Muisse et al., 2009), while, in Pakistan men's profile on Facebook is more in number than women. Insecure and dependent status of women may lead them to be more involved in surveillance (Helsper & Whitty, 2010; Muise et al., 2009) and feel more jealous as compared to men (Marshall et al., 2012; Muise, Christofides, & Desmarais, 2014). Research shows that women indulge in more behavioural display of jealousy like spying or checking up partner's things as an evidence of betrayal (Pfeifer & Wong, 1989). In this context, when SNS provides more easy access to information and less privacy checks, surveillance and related jealousy increase manifold (Kallis, 2011). However, Demirtas-Madran (2018) did not find any gender differences on Facebook jealousy in Turkey.

Internet Service Providers Association of Pakistan (ISPAK; 2015) gave an estimate of 25 million internet users in Pakistan. Launch of 3G and 4G has made SNS use more accessible and easy on smart phone. There are around 3.2 million users of Facebook that has

penetrated in 22.2% of population (Internet World Stats, 2018). Extensive use of smart phone has incurred severe negative effects on moral, social, and emotional aspects of life (Shah, 2016). Divorce rate is alarmingly increasing in Pakistan and reportedly lack of trust, misunderstanding, and extra-marital relations are considered few significant reasons behind divorce among others (Ramzan, Akhtar, Ahmad, Zafar, & Yousaf, 2018). With such a large proportion of individuals using Facebook, it is important to do cost–benefit analysis to determine overall impact on marital relationship quality. The current research aims to add to the body of literature pertaining to study the effects of Facebook use and trust on marital relationship with online surveillance and Facebook jealousy as mediators. Despite the overwhelming popularity of SNS, the dynamics of marital relationships in context of proposed variables of the study in Pakistan are yet not explored. None of the research has been found studying this relationship in a composite model. Hence, based on literature following model (Figure 1) is proposed for the study.

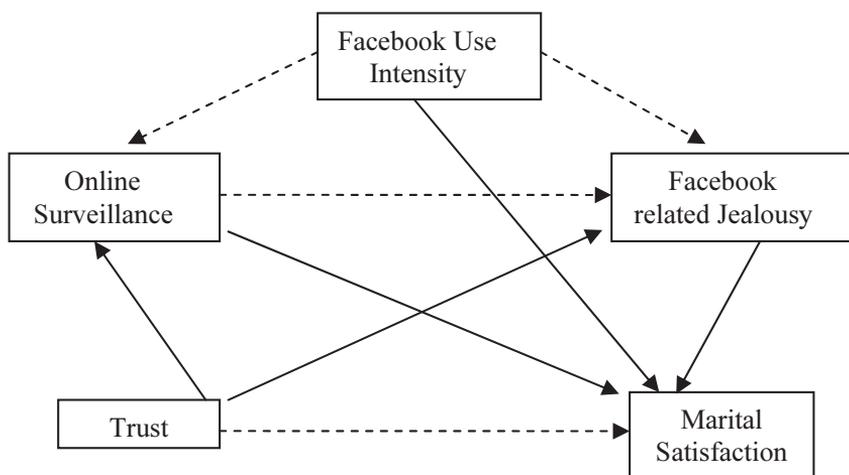


Figure 1. Conceptual model of the study. Dotted lines present positive predictive relationship between variables and straight lines present negative predictive relationship.

Literature helps to assume that individuals with more psychological dependence on Facebook in their lives are more involved in their partner's monitoring (Elphinston & Noller, 2011; Tokunaga, 2011); experience more jealous feelings (Farrugia, 2013; Muise et al., 2009); and have low marital satisfaction (Kendall, 2011; Valenzuela et al., 2014). Same is true for trust as mentioned in previous paragraph. Distrust leads to more IES and jealousy that

effects marital satisfaction. Direct links between variables of the study has been found in the previous literature, however, indirect link through online surveillance and Facebook related jealousy is yet to be explored. Based on literature, it is hypothesized that:

1. Facebook use intensity is negatively related with marital satisfaction.
2. There is positive relationship of Facebook use intensity with online surveillance and Facebook related jealousy.
3. Trust is positively related to marital satisfaction.
4. There is negative relationship of trust with online surveillance and Facebook related jealousy.
5. Online surveillance leads to Facebook related jealousy.
6. Online surveillance and Facebook related jealousy enhances the negative impact of Facebook use intensity on marital satisfaction.
7. Online surveillance and Facebook related jealousy reduces the positive impact of trust on marital satisfaction.
8. Women indulge more in online surveillance and experience Facebook jealousy about their spouse than men.

Method

Sample

Convenience and Snow-ball sampling were used for accessing sample. A sample of 302 married Facebook users (Age range: 19-52 years; $M = 31.14$, $SD = 5.45$) from the Capital city of Pakistan were included. The inclusion criterion for participants' selection was married individuals with both spouses using Facebook and having minimum education of 10th grade (Matric). Out of total sample, 147(48.7%) were men and 155(51.3%) were women. Overall, on average participants spent 2 hours and 10 minutes per day on Facebook and on average had 202 Facebook friends. Average marriage duration was 5.11 years. Out of total sample, 37 women were nonworking. Along educational level, 119(39.4%) had MPhil/PhD, 171(56.6%) had graduate/MSc., 10(3.3%) had intermediate, and only 2(0.66%) had matric level education. Average monthly income in PKR of the family was 113835.42 (81004.61) excluding 20 participants who did not report their monthly income.

Instruments

Interpersonal Electronic Surveillance Scale - Urdu Version (IESS-U). Tokunaga (2011) developed it to assess monitoring of spouse's online activities. The measure was translated into Urdu in the current study to monitor Facebook activities, hence, term SNS was replaced by Facebook to meet the objectives of the study and term partner was replaced by '*spouse*' as aim was to monitor spouse's activities. Final Urdu version was a 12 items, 5 point likert self-report measure with response categories ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Scores ranged from 12 to 60 where high score meant more surveillance of spouse's activities on Facebook. The measure is highly reliable with alpha reliability coefficient .97 (Tokunaga, 2011). For the current sample, alpha coefficient is .89.

Trust in Close Relationships Scale-Urdu Version (TCRS-U). Developed by Rempel et al. (1985), and translated in current study, this 17-item self-report measure is designed to measure levels of trust in marital relationship. It was a 7 point rating scale, however, 5-point Likert type scale with five response categories 1= *Strongly Disagree* to 5 = *Strongly Agree* was followed for the participants' convenience. It has three subscales: Predictability (5 items), Dependability (5 items), and Faith (7 items). Item number 4, 5, 6, and 14 were reverse scored being negatively worded. The scores ranged from 17 to 85 and high scores indicated more trust. The alpha reliability coefficient of English version was .81 (Rempel et al., 1985). For the Urdu version in current sample, alpha coefficient is .93.

Facebook Jealousy Scale-Urdu Version (FJS-U). The English version (Muisse et al., 2009) of FJS was translated into Urdu in the current study. Essential modification like replacing term "partner" with term '*spouse*' was done. Final Urdu version had 27 self-reported items to assess the role of Facebook in the experiencing jealousy. Response format was 5 point Likert scale (1 = *very unlikely* to 5 = *very likely*) to make the response pattern simplified as compared to original having 7 point scale. The Cronbach's alpha for the original FJS was .96 (Muisse et al., 2009); while, for the current sample, alpha coefficient for Urdu version was found to be .94.

Comprehensive Marital Satisfaction Scale (CMSS). Originally developed by Blum and Mehrabian (1999), it was translated into Urdu by Khan (2006) for measuring the marital satisfaction of married individuals. Out of 35 items, 17 were

negatively worded items. Algebraic sum of responses on negatively worded items was subtracted from sum on positively worded items to compute discrepancy score. The test-retest reliability for English version was .83 over a six-week interval and alpha coefficient was .94 (Mehrabian, 2005). For the Urdu version in the current sample, alpha coefficient of .94 was acquired.

Facebook Use Intensity (FUI). To measure Facebook use intensity, 6 items were formulated based on Facebook Intensity Scale (Ellison et al., 2007) and from the literature (Tokunaga, 2011). Main objective was to measure psychological dependence and emotional connectedness with the usage of Facebook in daily. Response categories were 1 (*Strongly disagree*) to 5 (*Strongly agree*). The possible total scores ranged from 5 to 30; where high score indicated more dependence on Facebook reflecting upon intensity of it's use and for the current sample, alpha coefficient of .82 was attained.

Procedure

Volunteer married Facebook users participated in the study. They were provided with booklet of questionnaire clearly delineating objective of the study and its significance. Written informed consent was taken from them where they were informed that no harm would incur to their integrity if they participated in the study. They were ensured about the confidentiality and anonymity of the data and personal information provided by them. Participants' emerging queries were dealt with there and then. Order effect was controlled by changing the order of questionnaires in the booklet. At the end, participants were appreciated for their cooperation.

Results

For hypotheses testing, Pearson Product Moment Correlation and Independent sample *t*-test were computed through SPSS 21. Model was tested through AMOS 21.

Correlation between study variables. To study the relationship between marital satisfaction, Facebook use intensity, trust, surveillance, Facebook related jealousy, and their subscales, Pearson Product Moment Correlation was computed.

Table 1

Correlations of Marital Satisfaction, Facebook Use Intensity, Trust, Surveillance, and Facebook Related Jealousy, and Their Components (N = 302)

Variables	1	2	3	4	5	6	7	8	9	10	11
1 MS	-	-.01	.84	.74	.78	.72	-.34	-.48	-.37	-.54	-.41
2 FBUI		-	-.01	-.02	-.02	.03	.30	.22	.20	.24	.15
3 T			-	.92	.94	.82	-.36	-.48	-.36	-.60	-.40
4 Dep				-	.86	.61	-.35	-.47	-.36	-.55	-.39
5 F					-	.62	-.26	-.35	-.24	-.47	-.29
6 Pre						-	-.35	-.50	-.39	-.60	-.38
7 Sur							-	.60	.55	.64	.40
8 FBJ								-	.94	.81	.85
9 Ins									-	.63	.67
10 Inq										-	.62
11 Inf											-

Note. *r*-values of .15 and above are significant at $p < .01$.

Var = Variables; MS = Marital Satisfaction; FBUI = Facebook use intensity; T = Trust; Deb = Dependability; F = Faith; Pre = Predictability; IES = Interpersonal Electronic Surveillance; FBJ = Facebook related Jealousy; Ins = Insecurity; Inq = Inquisition; Inf = Infidelity.

In Table 1, inter-subscale and subscale-to-total correlations of trust and Facebook related jealousy are significantly positively and highly correlated that indicate construct validity of these measures (Cronbach & Meehl, 1955). Marital satisfaction has nonsignificant relationship with Facebook use intensity, however, significant positive relationship is observed with trust and its domains (predictability, faith, and dependability), while, significant negative relationship with online surveillance and jealousy along its domains (insecurity, inquisition, & infidelity).

Facebook use intensity has significant positive relation with online surveillance and Facebook related jealousy and its domains. Facebook use intensity has nonsignificant relationship with trust and its domains. Trust along its domains (predictability, faith, & dependability) has significant negative relationship with online surveillance and Facebook related jealousy and its domains (insecurity, inquisition, & infidelity). Online surveillance has significant positive relation with Facebook related jealousy and its domains. Findings confirm first five hypotheses of the study.

Model Testing

Proposed model in which mediating role of online surveillance and Facebook related jealousy for Facebook use intensity and trust

was studied for in predicting marital satisfaction among married Facebook users. Structural Equation Modeling (SEM) through AMOS 21 was computed to test the model. Trust and Facebook related jealousy were taken as latent variables with their domains as observed variables. Facebook use intensity, interpersonal electronic surveillance, and marital satisfaction were observed variables where their composite scores were considered in model testing (see Figure 2). Model fit indices are given in Table 2.

Table 2

Model Fit Indices for Model in Predicting Marital Satisfaction (N = 302)

Model/ Modifications	χ^2 (df)	χ^2/df	CFI	GFI	IFI	RMSEA	SRMR
M1	182.50(22)*	8.30	.90	.88	.90	.17	.06
M2 del Sur↔MS	182.66(23)*	7.94	.90	.89	.91	.15	.06
M3e1 ↔ e3	142.43(22)*	6.47	.92	.91	.93	.10	.05
M4e4 ↔ e5	122.45(21)*	5.83	.94	.93	.94	.08	.05

Note. CFI = Comparative Fit Index; GFI = Mean Square Residual; IFI = Incremental Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square; M1 = Default Model; M2 = Model with path deleted between surveillance and marital satisfaction (MS); M3 = Model when error covariance drawn between e1 and e3; M4 = Model when error covariance drawn between e4 and e5.

* $p < .00$.

Criteria of good fit for the model is specified as CFI, GFI, and IFI $> .90$ and for RMSEA and SRMR for good fit $\leq .08$ (Browne & Cudeck, 1993). For χ^2 ration, it can be as high as 5.0 (Wheaton et al, 1977) to as low as 2.0 (Tabachnick & Fidell, 2007). All good fit indices in Table 2 are meeting criteria, while, value χ^2 ratio is a bit high, but close to 5.0.

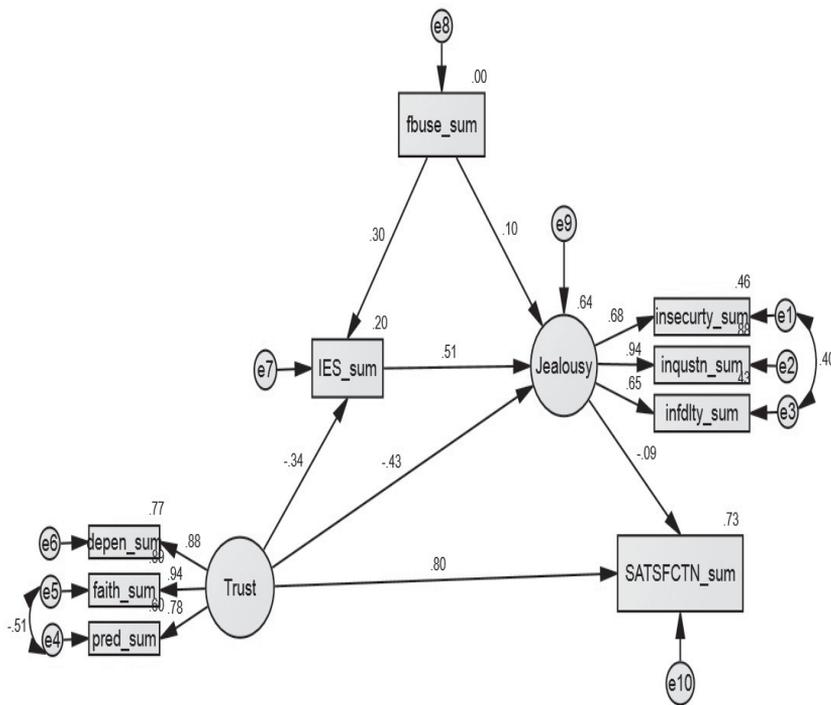


Figure 2. Model explaining prediction for marital satisfaction ($N = 302$). fbuse_sum = Facebook use intensity; IES_sum = Interpersonal electronic surveillance; depen_sum = Dependency; faith_sum = Faith; Pred_sum = Predictability; insecurity_sum = Insecurity; inqstn_sum = Inquisition; infdly_sum = Infidelity; SATSFCTN_sum = Marital Satisfaction.

Figure 2 represents the path models. Where Facebook use intensity positively predicts Facebook related jealousy directly ($p < .05$) and also through online surveillance indirectly ($p < .01$). Trust negatively predicts jealousy directly ($p < .05$) and indirectly through online surveillance ($p < .01$). Surveillance predicts marital satisfaction indirectly through Facebook related jealousy only ($p < .05$). Trust predicts directly marital satisfaction ($p < .05$) and indirectly through jealousy ($p < .05$). Thus, Facebook related jealousy is the mediator for trust and Facebook use intensity in predicting marital satisfaction. While, online surveillance does not appear as mediators for trust and Facebook use intensity in predicting marital satisfaction, but it is acting as a mediator for trust and Facebook use intensity in predicting Facebook related jealousy. For direct and indirect relationships see Table 3.

Table 3

Direct and Indirect Effects for Marital Satisfaction and Facebook Related Jealousy (N = 302)

Predictors	Marital Satisfaction		Facebook related Jealousy	
	β (Direct)	β (Indirect)	β (Direct)	β (Indirect)
Facebook related Jealousy	-.09*	-	-	-
Online Surveillance	.00	-.05*	.51**	-
Trust	.80*	.05*	-.43**	-.17**
Facebook use intensity	-	-.02	.10*	.15**

* $p < .05$. ** $p < .01$.

Gender Differences Along Study Variables. Table 4 reflects difference in scores of male participants and female participants on marital satisfaction, Facebook use intensity, trust, online surveillance, and Facebook related jealousy, and their domains. For this, Independent Sample t -test was computed.

Table 4

Mean, SD, and t -Values Along Gender on Study Variables (N = 302)

Variables	Males	Females	$t(df)$	95% CI		Cohen's d
	($n = 147$)	($n = 155$)		LL	UL	
Marital Satisfaction	45.42(18.39)	35.14(26.53)	3.93(275)	5.12	15.42	0.45
FU Intensity	18.92(5.76)	18.72(6.20)	.29(300)	-1.16	1.56	0.03
Trust	72.37(9.30)	65.82(14.13)	4.78(268)**	3.85	9.24	0.55
Dependability	21.37(3.28)	19.06(4.53)	5.08(281)**	1.41	3.19	0.58
Faith	30.67(4.24)	28.58(6.07)	3.48(276)**	.90	3.27	0.40
Predictability	20.33(3.66)	18.17(4.80)	4.41(287)**	1.19	3.12	0.50
Surveillance	31.29(10.23)	33.95(12.16)	-2.05(300)*	-5.21	-1.10	-0.24
FR-Jealousy	48.72(17.35)	57.48(23.63)	-3.69(283)**	-13.44	-4.08	-0.42
Insecurity	26.39(10.54)	31.46(12.66)	-3.79(295)**	-7.70	-2.44	-0.43
Inquisition	10.33(4.15)	12.67(6.85)	-3.62(256)**	-3.62	-1.07	-0.41
Infidelity	12.00(5.61)	13.35(6.95)	1.86(293)	-2.78	.078	-0.21

Note. Boldface represents differences along composite scores on measures. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; FU Intensity = Facebook Use Intensity; FR-Jealousy = Facebook related Jealousy.

* $p < .05$. ** $p < .01$.

Table 4 shows significant gender on all variables except Facebook use intensity. Men score significantly high on marital satisfaction and trust along its domains predictability, dependability, and faith. Women score significantly high on online surveillance and

Facebook related jealousy and its domains as compared to men, excluding infidelity where a tilt towards significance is observed in favour of women. Effect size is weak for online surveillance, while it is medium for other significant findings. Nonsignificant gender differences are found on Facebook use intensity. This confirms hypothesis 9 that women score high than men on online surveillance and Facebook related jealousy. This shows that male participants are significantly more satisfied with their relationship with spouse and trust them more. On the other hand, female participants are significantly more involved in spouse surveillance on Facebook and experience more jealousy towards them within Facebook context. The low value of degree of freedom shows heterogeneity in variances of two groups. These are not equal.

Discussion

The current study was aimed to explore the role of Facebook use on marital satisfaction among married Facebook users and it was assumed that it reduces marital satisfaction. Trust is the protective factor in marital relationship, which promotes marital satisfaction. For Facebook use and trust mediating role of online surveillance of Facebook account of the spouse and jealousy generated by the Facebook interaction of the spouse was also studied in predicting marital satisfaction.

Relationship between variables showed that intensity of Facebook use did not have significant negative relationship with marital satisfaction as assumed, hence, rejects Hypothesis 1. Spending more time on internet, reduces level of face-to-face interaction, but it does not affect marital satisfaction may be because sample comprised of Facebook users only who may understand and relate to spouse's Facebook activities which they are following too. Using Facebook and getting information may not violate trust in relationship. This may be because, literature reveals the process how Facebook use effects marital satisfaction that is monitoring spouse's activities (Tokunaga, 2011) and feeling jealous of spouse's nature of interaction with online friends or strangers (Valenzuela et al., 2014).

Model testing supports this process whereby level of Facebook use positively predicted online surveillance and jealousy (Hypothesis 2 is also confirmed based on correlation). Hence, Hypothesis 6 is confirmed, and both of these acted as mediator for Facebook use in predicting marital satisfaction. Findings showed that monitoring of spouse's Facebook activities and experiencing threat from any rival on

spouse's Facebook in context of using more Facebook use make relationship with spouse much more stringent and less satisfying. This confirms negative affect hypothesis as proposed by Valenzuela et al. (2014). That is Facebook use negatively effects relationship, however, it occurs through following or spying over spouse's Facebook activities and feeling jealous of his/her Facebook friends and related interaction, as profile is publicly accessible to larger audience than in face-to-face interaction (Utz & Kramer, 2009). In future, self-selection hypothesis (Valenzuela et al., 2014) can be explored in context of Facebook use in effecting marital satisfaction.

Amount of Facebook use also predicted Facebook related jealousy about spouse through online monitoring of spouse's activities. This showed that married Facebook users who are emotionally and psychologically dependent on Facebook use invest more time in Facebook that also gives way to monitoring spouse's activities online that increases feelings of insecurity, suspecting disloyalty, and indulging in cross-questioning in relationship. Again surveillance did not predict marital satisfaction, directly, but through jealousy. Hypothesis 5 is also confirmed where online surveillance predicted Facebook jealousy. Tokunaga (2011) supported Muise et al.'s (2009) assumption that time spent on Facebook leads to increased jealousy, however, also proposed that actually surveillance causes it. Present study supports both direct and indirect relationship (online surveillance as mediator) of amount of Facebook use with Facebook jealousy about spouse that further leads to marital dissatisfaction. According to Marshall et al. (2012), surveillance of spouse's Facebook activities may lead to anxiety, uncertainty about relationship, and jealousy, which threatens the strength of a romantic relationship. Insecure individuals may keep tabs on their spouses, perceive online activities of their spouse as flawed that reduces marital satisfaction (Rau et al., 2008). On SNS, information is readily accessible even from distance; one can see pictures, past posts/photos, messages, audio/video clips that may generate suspicion and questioning relationship. Monitoring is second most prevalent act in romantic relationship (Tokunaga, 2011). Resultantly, jealousy so generated threatens person's self-esteem because of perceived attraction between spouse and imagined rival (White, 1980).

Jealousy may be because of lack of trust, believing that partner is deceiving them and have concern about their future relationship (Fleischmann, Spitzberg, Andersen, & Roesch, 2005). Feelings of jealousy may be reactive in response to spouse's suspected infidelity, having worrisome/anxious feelings, or manifest as a desire to protect relationship from third party based on feelings of possession (Barelds

& Barelds-Deijkstra, 2007). Jealousy may protect relationship; however, Facebook Jealousy Scale used in present study is based on reactive and anxious jealousy that is why it showed up as having negative relationship with marital satisfaction. Current study confirms that trust predicted jealousy and surveillance (Hypothesis 4 is confirmed); surveillance also had a mediating effect between trust and Facebook related jealousy (Hypothesis 7 is confirmed). Married Facebook users who consider their spouse's actions predictable, depend on their relationship, and have faith over each other's intentions; are less involved in monitoring spouse's online activities that decreases feelings of insecurity, infidelity, and questioning relationship, hence, strengthens marital relationship. Monitoring or restricting spouse's activities are often opted by individuals having lack of trust (Guerrero et al., 1995). Kemer, Bulgan, and VeÇetinkaya (2015) found on 537 married Turkish individuals that lack of trust about their spouses may lead to functional or dysfunctional measures to avoid negative consequences on relationship like divorce and preserving family system by acting on their feelings of jealousy. Trust in relationship directly predicted marital satisfaction (Hypothesis 3 is confirmed). Farrugia (2013) concluded that as lack of trust in relationship increases, feelings of jealousy increases when a Facebook user perceive their partner's inclination towards a potential rival online. That is why overall satisfaction in context of distrust in relationship decreases because of experienced jealousy.

It may be concluded that SNS acts as a slippery slope for a marital relationship, not directly, but indirectly by promoting surveillance of online activities of the spouse and having feelings of jealousy because of these online activities like upgrading status, uploading pictures and posts, following old friends, commenting on posts of opposite gender. One feels insecure and suspect infidelity of spouse, hence, start questioning relationship that effects satisfaction in marital relationship. Contrarily, trust on spouse considering him/her dependable, predictable, and faithful positively effects marital satisfaction. This trust also increases marital satisfaction through reducing monitoring spouse's Facebook activities and reducing jealousy.

The Hypothesis 8 that women feel more jealous and do more surveillance of their spouse's activities as compared to men has been supported by the results of current study. These finding are in line with past researches on jealousy (Marshall et al., 2012; Muise et al., 2009; Muise et al., 2014) and monitoring partner's Facebook activities (Guerrero & Andersen, 1998; Helsper & Whitty, 2010; Muise et al., 2014), which is manifested as spying, checking, or looking through a

partner's things/activities as evidence of betrayal (Pfeifer & Wong, 1989).

In a patriarchal society like Pakistan, men enjoy more dominance in marital relationship and they have privileged and independent social status. Women are religiously and financially dependent that promotes psychological dependence which preserves this social hierarchy. Women are often apprehensive about stability of their marriage, as men have right of polygamy in Islam. Witnessing spouse's interaction with opposite gender on Facebook confirms their apprehensions. For this purpose, they feel need to monitor their husband's Facebook and keeping tabs on them (Helsper & Whitty, 2010). Past research also showed that women experience negative emotions as compared to men (Johnson & Shulman, 1988) that may be sex-linked stereotypes showing women experiencing more anxiety, fear, distress (Grossman & Wood, 1993), and neuroticism (Lippa, 2010; Schmitt, Realo, Voracek, & Allik, 2008) as compared to men. In current study, participants' opinion about impact of Facebook on marital relationship was also sought through an open-ended question. A female participant responded to that question as: "*My life partner is very loving but may be to have suspicion/doubt is in women's nature*".

Women as compare to men report that finding involvement of spouse with someone else is very distressing (Dijkstra, Barelds, & Groothof, 2010). In Pakistani culture, at the time of marriage women are often advised by mothers, sisters, friends, etc. to keep an eye on husband's activity and keep him involved with her, otherwise, he may look for any other wife. Fear of polygamy keeps lurking in women's mind, hence, they feel insecure and indulge more in monitoring husband's activities and feel jealous if he pays attention to others. Anxiously attached individuals are hyper-vigilant in relationship that threaten their adult attachment styles (Schmitt et al., 2008) that may be linked to increased monitoring of partner's Facebook activities and having feelings of insecurity and perceived infidelity in marital relationship. Although, jealousy is experienced by anxiously attached men too, but this jealousy is not associated with partner's increased monitoring in them. This shows that men and women with anxious attachment may react in a different way (Muisse et al., 2014). It is suggested to study role of attachment styles in online surveillance and jealousy in Pakistani culture across gender.

Findings of the current study showed that men had more marital satisfaction and trust in relationship than women. This finding is similar with past researches (Clements & Swensen, 2000; Heaton & Blake, 1999; McRae & Brody, 1989). Men, generally, have a practical and rationale approach in dealing with conflicts in relationship.

Women, generally, initiate discussion on conflicting issues within relationship (Gottman, 1999), while, men try to avoid negative interactions (Johnson, 1996). Therefore, men may perceive their relationship as satisfying and trustworthy. Complaining and emotional nature of women make them sceptical of relationship. One of the male participant stated during study that, "Facebook does effect marital satisfaction, should be used but balance is a spice of life. It's not Facebook it's the trust that matters we have in our relation".

As gender roles for men and women are different, therefore, perceived costs and benefits of relationship also vary across gender (Heaton & Blake, 1999). In cultural context, men commonly display faith about fidelity of their wives or anticipate faithfulness from their wives, expect from them for taking care of his family and home. And women also strongly acknowledge this expected role that holds an element of social desirability in marital relationship (Fowers & Appelgate, 1996). Literature shows that men over-report their feelings about relationship with their spouse (Cohen & Swerdlik, 2005). One of the male participants related, "Life is a name of reliance and trust. When one person makes you believe that he is always with you for a lifetime, will never let you be alone, then there is no wish left after such companionship."

Limitations and Suggestions

Few potential weaknesses of the study and corresponding suggestions are outlined. Firstly, current study is cross-sectional; whereby, longitudinal study can give better understanding of process how Facebook use and trust building over a period of time effects marital satisfaction. Secondly, impact of nature of Facebook use on marital satisfaction can be studied in future that was not considered in present study. Thirdly, moderating role of gender in various relationship of study variables can be studied that was not under taken in the study. In addition, currently, only Facebook use was considered. In future, impact of other SNS can also be studied. Couples were not considered in the present study. In future, reciprocal impact of SNS on marital satisfaction of couples can be studied. Finally, self-selection hypothesis can also be explored in upcoming research in Pakistani context.

Implications

Technology use in increasing day-by-day. This cannot be stopped, Current study highlights the significance of Facebook use

and related online activities on marital satisfaction. Hence, interventions can be planned to guide married individuals about balanced and better use of internet, so that it should not negatively affect their marital life. Trust is a protective factor, if it is promoted within relationship, this may help in less negative impact on online activities and experiences on marital satisfaction.

Conclusion

Study confirms negative affect hypothesis that Facebook use intensity negative effects marital satisfaction. It is concluded that Facebook use in context of online activities like online surveillance of spouse's activities and having feelings of jealousy because of Facebook activities of spouse are affecting marital satisfaction. Nevertheless, Trust within relationship reduces online monitoring of spouse's activities, hence, reduces Facebook related jealousy that strengthens marital satisfaction. Gender holds significance in the current study, women practice more online surveillance and experience Facebook related jealousy than men. Contrarily, men reported more trust and marital satisfaction.

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