



Scrolling into Doubt: The Interplay of Social Media Engagement, Digital Jealousy, and Commitment Uncertainty Among Emerging Adults

Nimra Munawar¹, Noor Fatima², Zainab Touqeer³, Mishal Fatima⁴, Zarnab Faisal⁵

¹ Lecturer, Lahore School of Behavioural Science, The University of Lahore, Pakistan

Email: Nimra.munawar@lsbs.uol.edu.pk

² Student, Lahore School of Behavioural Science, The University of Lahore, Pakistan

³ Student, Lahore School of Behavioural Science, The University of Lahore, Pakistan

⁴ Student, Lahore School of Behavioural Science, The University of Lahore, Pakistan

⁵ Student, Lahore School of Behavioural Science, The University of Lahore, Pakistan

ARTICLE INFO

Submission:

June 18, 2026

Revised:

July 02, 2026

Accepted:

July 16, 2026

Available Online:

August 02, 2026

Keywords:

Chi-Square, Digital Relationship, Partner-Directed Commitment, Romantic Relationships, Social Media Index

Corresponding author:

Nimra Munawar

Email:

Nimra.munawar@lsbs.uol.edu.pk

ABSTRACT

Social media's role in romantic relationships is becoming more significant, impacting ways of communicating with others, and posing new problems, such as digital jealousy and insecurity about commitment. The study revealed that digital jealousy is a psychological phenomenon which is playing a significant part in the relationships between SMI, Digital Jealousy (DJ) and Commitment Uncertainty (CU) among university students in Lahore, Pakistan. A quantitative cross sectional correlational design was used and 190 university students aged 18-25 who were active social media users and actively involved in a romantic relationship were used. The Social Media Index, Digital Jealousy Scale and Commitment Uncertainty Short Scale were completed by participants. The Pearson product-moment correlation, hierarchical multiple regression, independent-samples t-test, one-way analysis of variance (ANOVA), Tukey's HSD post hoc test and chi-square analysis were completed using IBM SPSS Statistics Version 26. The results showed that increased social media activity was significantly related to digital jealousy and self-directed commitment uncertainty. Digital jealousy was a strong predictor of self- and partner-directed commitment uncertainty. Moreover, when digital Jealousy was added to the model, the predictive effect of social media on self-directed commitment uncertainty was no longer significant, indicating that digital Jealousy can account for this relationship. There were no significant gender differences in digital jealousy, but the more often participants reported checking their partner's social media, the higher their digital jealousy scores were. The longer the relationship, the greater the association with partner-monitoring behaviour on social media was. The findings emphasize that digital jealousy is an important psychological mechanism that connects social media usage to uncertainty in relationships among emerging adults. The study helps to build the body of research on digital relationship dynamics and offers implications for relationship education and counselling practices to promote positive digital social media and romantic relationships.

Introduction

Social media has become an integral part of everyday life, especially for university students who use social media for communication, self-expression, and development of romantic relationships (Smith & Storrs, 2023). Social media platforms like Instagram, Facebook, TikTok, Snapchat, and WhatsApp have shaped the way young adults communicate and interact with each other, and they have also created a variety of psychological issues, such as digital surveillance, social comparison, emotional insecurity, and relationship uncertainty (Dungey, 2026). As such, romantic relationships are now more affected by offline interactions and online behaviors that affect emotional experiences and perceptions of commitment. University students are

one of the most active social media users, which makes them the most susceptible to the psychological impacts of digitally mediated relationship (Peters et al., 2022). Emotional sensitivity and relationship insecurity can be increased by continuously monitoring and interpreting ambiguous digital cues, such as likes, comments, followers etc. of a partner. The effect of such digital interactions on emotional reactions and relationship stability are therefore important research topics in modern psychology.

Social Media and Romantic Relationships

Social media has revolutionized romantic relationships, providing for the seamless exchange of information and giving couples more insight into one another's online activity. In contrast to in-person communication, social media platforms like Instagram, Facebook, TikTok, and Snapchat provide more visibility into the relationship, such as likes, comments, followers, views of stories, and online status (Tandon et al., 2021). These sites enhance communication and emotional bonding but also promote a form of selective self-presentation, involving individuals in revealing primarily positive experiences and avoiding everyday conflicts and personal struggles. Idealized images can lead to social comparisons, unrealistic expectations in romantic relationships, and dissatisfaction, emotional insecurity, and perceived relational inequity among individuals (Han et al., 2025; Liu et al., 2024).

Another major implication of the use of social media is the development of digital surveillance practices in love relationships. The monitoring of partners' online activity, such as their followers, comments made, and online presence, is often done to gain reassurance or to identify potential threats (Chung et al., 2023). Past research suggests that this frequent monitoring can lead to suspicions, mistrust, and anxiety in the relationship, as evaluations of the relationship are increasingly based on digital information instead of direct communication (Walle et al., 2026; Wang et al., 2023). As such, high levels of monitoring behaviour have been linked to higher levels of jealousy, lower trust and increased psychological vulnerability among young adults (Meier & Johnson, 2022; Carraturo et al., 2023).

Digital Jealousy

Digital jealousy is a new conceptualization of jealousy that is formed as a result of online interactions with one's partner, not in-person interactions. Activities such as liking posts, commenting, following new accounts, or interacting with other users may be interpreted as potential relational threats despite the absence of actual betrayal (Allen, 2024). These digital mixed messages can foster emotional insecurity, suspicion and repeated cognitive decoding, resulting in a unique psychological experience with jealousy in the digital age of modern romantic relationships (Tandon et al., 2021). The key difference between digital and traditional jealousy is that the former is amplified by the permanent nature of online activities, giving individuals the opportunity to review and dissect their partner's online activity repeatedly. Such repeated exposure increases rumination, emotional reactivity, and relationship insecurity (Wahring, 2025). Empirical evidence also shows that digital jealousy is higher when social comparison and constant visibility of the partner are increased, which negatively influences emotional wellbeing and interpersonal trust, as well as the quality of the relationship between young adults (Carraturo et al., 2023; Khatatbeh et al., 2025).

Commitment Uncertainty

Commitment uncertainty is the state of doubt, hesitation and instability about the future of a romantic relationship. In today's digital age, perceptions of commitment are shaped by offline experiences as well as partners' online behaviors, communication styles, and social media interactions (Monk et al., 2025). People use social media more and more in the context of love and use digital information to assess trust, security, and stability of the relationship. Research indicates that ongoing feelings of digital jealousy can take its toll over time, leading to a decrease in emotional attachment, mistrust, and emotional withdrawal (Leahy, 2026). Exposure to social media has been linked to emotional insecurity, which in turn has been linked to less satisfaction in relationships and more relational anxiety leading to lower commitment stability (Carraturo et al., 2023). Also, social media use, digital jealousy and commitment outcomes are interconnected, as high frequency of social comparison and high exposure to potential romantic alternatives leads to greater commitment uncertainty (Khatatbeh et al., 2025).

Current evidence suggests that Social Media Index (SMI), Digital Jealousy and Commitment Uncertainty are all related constructs that, when combined, have an impact on the quality and stability of today's romantic relationships. The more one uses social media, the more likely they are to be exposed to their partner's online behavior, which can lead to social comparison and relational surveillance and can foster emotional dependence on online communication. This leads to a greater tendency to perceive ambiguous online behaviors as relational threats, increased emotional insecurity, and psychological distress (de Vries et al., 2018; Liu et al., 2024). While past research has consistently found that high social media use leads to an increase in digital

jealousy, this is associated with more monitoring of the partner and cognitive preoccupation with online interactions (Meier & Johnson, 2022; Carraturo et al., 2023). Digital jealousy is then sustained, which leads to a decline in interpersonal trust, fear of abandonment, and trust in the stability of the relationship, heightening commitment uncertainty (Carraturo et al., 2023; Khatatbeh et al., 2025). In total, these results lend evidence to the idea that Digital Jealousy is a significant psychological pathway which can explain how Social Media Index can impact Commitment Uncertainty for university students.

Theoretical Framework

This study is mainly based on the theoretical frameworks of Social Comparison Theory (Festinger, 1954) and Interdependence Theory (Kelley & Thibaut, 1978; Rusbult & Buunk, 1993). These theories, when combined together, offer a complete framework to understand how the use of social media can lead to digital jealousy and in turn, affect commitment uncertainty in romantic relationships. Social Comparison Theory (Festinger, 1954) suggests that people are naturally going to make comparisons between their thoughts, behaviors, and relationships with others. Social media can constantly expose individuals to their partner's Internet interactions, followers, likes, comments and past relationships, thereby providing opportunities for upward social comparison and the chance to misinterpret ambiguous online information as a potential threat to the relationship. Such comparisons can trigger insecurities and digital jealousy, especially for the younger generation who are super connected with social media. In recent studies, it has been shown that social media promotes relational uncertainty and jealousy because of comparison and surveillance. However, there is further support for the study in the form of Interdependence Theory (Kelley & Thibaut, 1978), especially as extended by Rusbult's Investment Model (Rusbult & Buunk, 1993) to explain how commitment comes about and how it can change based on individuals' perceptions of the outcomes of the relationship, dependence, and available alternatives. Social media interactions that lead to greater uncertainty, suspicion, and/or perceived relational threat may trigger thoughts about the stability and future of the romantic relationship. This can lead to increased commitment issues with themselves and their partner, due to increased digital jealousy. From these theories, the current study suggests that the more people are engaged in social networking, the more they experience digital jealousy, which subsequently leads to more commitment uncertainty in romantic relationships. These theories therefore serve as the conceptual bases for exploring the relationship between the Social Media Index, Digital Jealousy, and Commitment Uncertainty in the university students.

Problem Statement

University students' high levels of social media use have made it a part of their daily life, which has engendered new challenges to romantic relationships through greater exposure to social media interactions, relational surveillance, and social comparison (Kumar, 2025). While these Digital behaviours are linked with emotional insecurity and jealousy, the relation of Social Media Index with Commitment Uncertainty through Digital Jealousy is less understood especially among Pakistani university students. This becomes significant in comprehending the psychological mechanisms at work in digitally mediated romantic relationships and offers empirical evidence in the Pakistani cultural context (Carraturo et al., 2023; Liu et al., 2024).

Objectives of the Study

Following were the objective of this study:

1. To examine the relationship between Social Media Index, Digital Jealousy, and Commitment Uncertainty among university students.
2. To determine whether Social Media Index and Digital Jealousy significantly predict Self-Commitment Uncertainty and Partner-Commitment Uncertainty.
3. To examine demographic differences and associations in Digital Jealousy based on gender, frequency of checking a partner's social media, and relationship duration.

Hypotheses

Based on the literature and the theoretical framework, the subsequent hypotheses were framed:

H1: Social Media Index is positively associated with Digital Jealousy and Commitment Uncertainty.

H2: Social Media Index and Digital Jealousy significantly predict Self-Commitment Uncertainty and Partner-Commitment Uncertainty.

H3: Digital Jealousy differs according to demographic characteristics, including gender, frequency of checking a partner's social media, and relationship duration.

Significance of the Study

This study extends the literature by combining all three of these concepts, Social Media Index (SMI), Digital Jealousy and Commitment Uncertainty in one empirical study to gain a wider understanding of digitally mediated romantic relationships. It adapts Social Comparison Theory to the context of emotions, emotional insecurity, and commitment-related outcomes when using social media (Festinger, 1954; Wang et al., 2017). The results can help psychologists and counsellors, as well as university professionals, to encourage good digital relationship habits among young adults. Moreover, the study offers empirical evidence from Pakistan, where studies on digital jealousy and commitment uncertainty are limited in the context of the use of social media (Tandon et al., 2021).

Methodology

Research Design

A correlational design was used to investigate the relationship between Social Media Index (SMI), Digital Jealousy (DJ), Commitment Uncertainty (CU) among undergraduate university students in Lahore, Pakistan and to see the mediation role of Digital Jealousy.

Participants and Sampling

This study comprised 190 university students aged 18–25 years from public and private universities in Lahore, Pakistan, who were active social media users and currently involved in a romantic relationship. The sample size was calculated through an a priori power analysis using G*Power 3.1 ($\alpha = .05$, power = .95, medium effect size). Participants were recruited using a convenience sampling technique based on their accessibility and willingness to participate, provided they met the study's inclusion criteria. Responses from participants who did not meet the inclusion criteria or submitted incomplete questionnaires were excluded from the final analysis.

Table 1

Demographic Characteristics of the Participants (N = 190)

Variable	Category	n	%
Age (Years)	Mean $\pm$ SD	22.10 $\pm$ 2.14	—
Gender	Male	96	50.5
	Female	94	49.5
Relationship Status	In a Relationship	113	59.5
	Married	33	17.4
	Engaged	19	10.0
	It's Complicated	25	13.2
Relationship Duration	Less than 6 months	23	12.1
	6–12 months	55	28.9
	1–3 years	67	35.3

	More than 3 years	45	23.7
Daily Social Media Usage	Less than 1 hour	18	9.5
	1-3 hours	58	30.5
	5-8 hours	81	42.6
	More than 8 hours	33	17.4
Type of Relationship	Long-distance	88	46.3
	Same-city	102	53.7

Note. $N = 190$; SD = Standard Deviation.

Operational Definitions

Social Media Index (SMI).

Social Media Index refers to the frequency and intensity of an individual's social media use in the context of romantic relationships. In the present study, it was measured using the Social Media Index (SMI) developed by (Muise et al., 2009). Higher scores indicate greater engagement and involvement in social media use.

Digital Jealousy.

Feelings of unease, distrust, or jealousy brought on by a love partner's online contacts or social media activities that are seen as endangering the relationship are referred to as "digital jealousy." The Digital Jealousy Scale (DJS), created by (Gubler et al., 2023), was used in this study to quantify it. Greater levels of digital jealousy are indicated by higher scores.

Commitment Uncertainty.

Uncertainty about the stability, continuity, and long-term prospects of a love relationship is referred to as commitment uncertainty. The Commitment Uncertainty Short Scale (CUSS) was used to measure it in this study. Greater doubt about commitment in a romantic relationship is indicated with higher scores.

Measures

Using a self-created demographic form, information will be gathered on age, gender, education, relationship status, duration of relationship, average daily time spent on social media, type of the relationship and partner-monitoring behavior on social media. The reliability was evaluated using Cronbach's alpha coefficient. These findings indicate that all three instruments were sufficiently reliable for use in the present study.

Social Media Index (SMI). An adapted version of the Facebook Intensity Scale developed by (Ellison et al., 2007) and revised by (Kaitlyn Allen., 2024) will serve as the basis for measuring the Social Media Index. Eight items make up the test, which assesses the frequency, intensity, emotional engagement, and partner-monitoring behaviors of social media usage in intimate relationships. The Cronbach's alpha coefficient was used to assess the reliability. The dependability of the Social Media Index Scale has been shown to be satisfactory ($\alpha = .775$). A five-point Likert scale is used to record the responses, and the questions are reverse coded such that a higher score indicates greater use of social media.

Digital Jealousy Scale (DJS). Digital Jealousy will be evaluated through the Digital Jealousy Scale (DJS) (Gubler et al., 2023) which contains 9 items of cognitive, emotional and behavioral jealousy caused by the partner's online activities. The Digital Jealousy Scale has showed good reliability using Cronbach's alpha $\alpha = .895$. The response is on a 6-point scale from 1 (low) to 6 (high), with higher scores representing higher levels of digital jealousy.

Commitment Uncertainty Short Scale. The Commitment Uncertainty Short Scale, created by (Owen et al., 2014), will be used to assess Commitment Uncertainty. There are 10 items in the scale that are rated on a seven-point Likert scale of perceived

stability and certainness in romantic relationships. The Commitment Uncertainty Short Scale has demonstrated good reliability using Cronbach's alpha, $\alpha = .875$. Lower scores represent higher level of commitment uncertainty.

Procedure

Eligible participants will be selected by purposive sampling after the ethical approval from the appropriate authorities. Participants gave informed consent, and then filled out the demographic questionnaire, the Social Media Index (SMI), the Digital Jealousy Scale (DJS) and the Commitment Uncertainty Short Scale. All responses were kept private and anonymous, and participation was entirely optional. Before data processing and statistics, completed surveys were examined for completeness.

Ethical Considerations

The study followed recognized ethical guidelines in conducting the research. Every participant gave their informed consent, all data was utilized solely for academic reasons, anonymity and confidentiality were scrupulously maintained, and participation was entirely voluntary. Prior to data collection, ethics permission was obtained and consent to participate and withdraw without consequence was granted.

Data Analysis

IBM SPSS Statistics Version 26 was used to examine the data. To characterize the traits of the participants and the study's data, descriptive data was computed. The relationship between the Social Media Index (SMI), Digital Jealousy (DJ), and Commitment Uncertainty (CU) will be examined using Pearson product-moment correlation. Multiple regression analysis will be used to ascertain the predictive effects of SMI and DJ on CU. A statistically significant p value was defined as less than .05.

Results

To investigate the relationship between the research variables and evaluate the suggested hypotheses, the collected data was analyzed using the proper statistical procedures. Digital envy, commitment to self, commitment to partner, and relationship conflict brought on by social media were all examined using Pearson product moment correlation analysis. The predictive influence of digital envy and relationship conflict caused by social media on commitment to self and commitment to partner was investigated using hierarchical multiple regression analysis. To find variations in digital jealousy based on how frequently they check their partner's social media, one-way analysis of variance (ANOVA) and the Tukey's Honestly Significant Difference (HSD) post hoc test were employed. The correlation between the frequency of monitoring a partner's social media and the length of the relationship was also investigated using a Chi-square test of association. The findings of the independent-samples t-test comparing participants' levels of digital jealousy by gender. The results showed that there was no statistically significant gender variance in digital jealousy, indicating that the levels of jealousy reported by male and female participants were similar. As a result, the results were not displayed in a separate table.

Table 2 shows results of Pearson correlation among social media-induced relationship conflict, digital jealousy, commitment to self, and commitment to partner. Higher levels of social media-induced relationship conflict were linked to higher levels of commitment to self, according to the data, which showed a substantial positive association between the two. Additionally, there was a substantial moderately positive correlation between digital jealousy and self-commitment, indicating that higher amounts of digital envy were linked to higher levels of self-commitment. A significant weak positive relationship was also found between digital jealousy and commitment to partner, indicating that greater digital jealousy was associated with higher commitment to partner. Additionally, commitment to self was strongly and positively related to commitment to partner, suggesting that individuals with higher commitment to self also reported higher commitment to their partners.

Table 2

Means, Standard Deviations, and Correlations Among Social media index, Digital jealousy, Commitment uncertainty (self) and Commitment uncertainty (partner)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Social media index	27.43	5.74	—			

2. Digital jealousy	31.09	12.48	.11	—		
3. Commitment uncertainty (self)	17.38	6.64	.16*	.40**	—	
4. Commitment uncertainty (partner)	17.18	8.13	-.03	.23**	.63**	—

Note. $N = 190$. SMI = Social Media Index Scale; DJS = Digital Jealousy Scale; CUSS = Commitment Uncertainty Scale (self = self-uncertainty subscale; partner = partner-uncertainty subscale). Correlations are Pearson product-moment coefficients (two-tailed).

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

Table 3 shows the results of the hierarchical multiple regression analysis conducted to examine whether Social Media Index (SMI) and Digital Jealousy (DJS) significantly predicted self-Commitment uncertainty. Social Media Index was entered as the predictor in the first step, followed by the addition of Digital Jealousy in the second step. The assumptions of normality, linearity, and homoscedasticity were examined and were found to be satisfactory. In Step 1, Social Media Index was entered as the sole predictor of self-Commitment uncertainty. The regression model was statistically significant, indicating that Social Media Index significantly and positively predicted self-Commitment uncertainty. Digital Jealousy was entered into the regression model in Step 2. The overall model remained statistically significant and the inclusion of Digital Jealousy was significant as it added to the variance of the model. Digital Jealousy was a notable positive predictor for self-Commitment uncertainty, meaning that higher levels of digital jealousy were found to be associated with higher levels of self-Commitment uncertainty. After adding Digital Jealousy, however, Social Media Index was no longer statistically significant.

Table 3

Hierarchical Regression Analysis Predicting Commitment Uncertainty (Self) From Social Media Index and Digital Jealousy

Variables	B	95% CI for B		$SE\ B$	β	R^2	ΔR^2
		LL	UL				
Step 1						.025	.025
Constant	12.39	7.79	17.00	2.34	—		
Social media index	0.18	0.02	0.35	0.08	.16*		
Step 2						.175	.150
Constant	7.27	2.68	11.86	2.33	—		
Social media index	0.13	−0.02	0.29	0.08	.12		
Digital jealousy	0.21	0.14	0.28	0.04	.39**		

Note. $N = 190$. DV = Self-Commitment uncertainty. SMI = Social Media Index Scale; DJS = Digital Jealousy Scale; LL stands for Lower Limit, UL for Upper Limit, and CI for Confidence Interval. The significant values of R^2 and ΔR^2 are derived using hierarchical regression F-change statistics. $p < .05$, $p < .01$.

Table 4 shows the results of the hierarchical multiple regression analysis conducted to examine the predictive roles of social media index and digital jealousy on partner-commitment uncertainty. Social Media Index was added to Step 1 and Digital Jealousy was added to Step 2. Normality, linearity and homoscedasticity were tested before analysis and were deemed

acceptable. Social Media Index was the only predictor used in Step 1 (partner-Commitment uncertainty). The regression model was not statistically significant, indicating that Social Media Index alone did not significantly predict partner-Commitment uncertainty. Digital Jealousy was included in the regression model in Step 2. The overall model was statistically significant and the Digital Jealousy factor significantly increased the amount of variance accounted for. Digital Jealousy proved to be a major positive predictor of partner-Commitment uncertainty, such that a higher score on Digital Jealousy was associated with higher scores on commitment uncertainty directed towards one's partner. Social Media Index, on the other hand, was not a significant predictor even when Digital Jealousy was added to the model.

Table 4

Hierarchical Regression Analysis Predicting Commitment Uncertainty (Partner) From Social Media Index and Digital Jealousy

Variables	B	95% CI for B		SE B	β	R^2	ΔR^2
		LL	UL				
Step 1						.001	.001
Constant	18.24	12.53	23.95	2.90	—		
Social media index	-0.04	-0.24	0.17	0.10	-.03		
Step 2						.057	.056
Constant	14.39	8.38	20.39	3.05	—		
Social media index	-0.07	-0.27	0.13	0.10	0.05		
Digital jealousy	0.16	0.06	0.25	0.05	.24**		

Note. $N = 190$. DV = Commitment Uncertainty (Partner). SMI = Social Media Index Scale; DJS = Digital Jealousy Scale; LL stands for Lower Limit, UL for Upper Limit, and CI for Confidence Interval. The significant values of R^2 and ΔR^2 are derived using hierarchical regression F-change statistics. $p < .05$, $p < .01$.

Table 5 shows the results of the one-way analysis of variance (ANOVA) conducted to examine differences in digital jealousy across five levels of frequency of checking a partner's social media. The five groups were Never, Rarely, Sometimes, Often, and Daily. Levene's test was used to verify that the criteria of uniformity of variances were met before the ANOVA was performed. The frequency of monitoring a partner's social media was linked to variations in digital jealousy, according to the one-way ANOVA findings, which showed a significant difference in digital jealousy scores across the five groups. Tukey's Honestly Significant Difference (HSD) post hoc test was used to determine the precise group differences because the overall ANOVA was statistically significant. The post hoc analysis indicated that participants who sometimes checked their partner's social media reported significantly higher digital jealousy than those who never checked their partner's social media. No other pairwise comparisons were statistically significant. Descriptively, participants who reported checking their partner's social media often and sometimes demonstrated the highest levels of digital jealousy, whereas participants who never checked their partner's social media reported the lowest level of digital jealousy. Participants who checked rarely and daily reported intermediate levels of digital jealousy. Overall, these findings suggest that individuals who sometimes check their partner's social media exhibit significantly greater digital jealousy than those who never check it, while no statistically significant differences were observed among the remaining frequency groups.

Table 5

Means, Standard Deviations, and One-Way Analysis of Variance Comparing Digital Jealousy Across Frequency of Checking Partner's Social Media (N = 190)

	Never		Rarely		Sometimes		Often		Daily		F (4, 185)	η^2
Measure	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
DJS	27.26	11.84	30.30	12.85	35.28	12.78	35.52	11.14	30.95	11.22	3.04 [*]	.062

Note. DJS = Digital Jealousy Scale. Freq-ascheck = Frequency of checking partner's social media (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Daily). η^2 = eta squared (effect size). $p < .05$.

Figure 1

Mean Digital Jealousy Scores Across the Frequency of Checking a Partner's Social Media

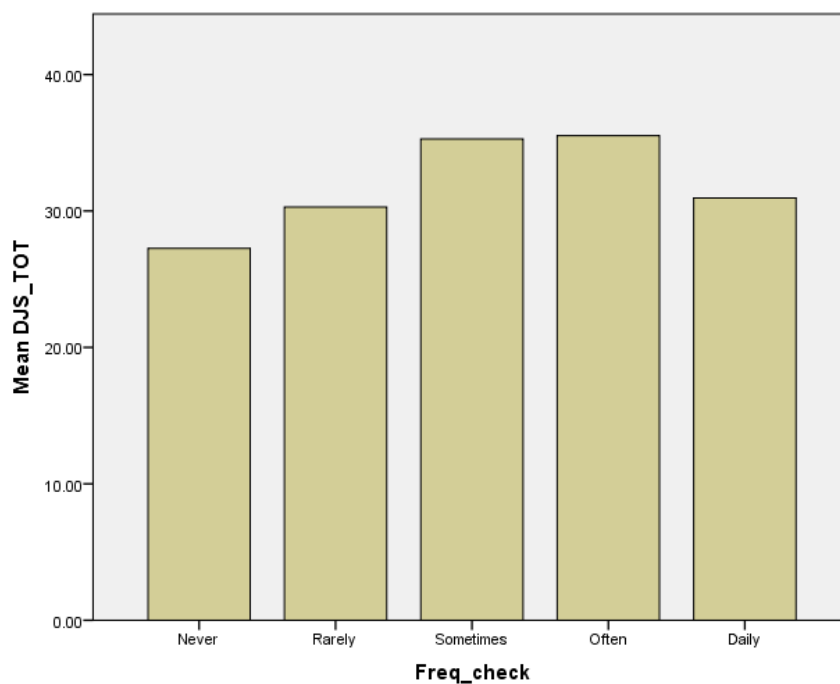


Table 6 presents the results of the Chi-square test that was performed to investigate the relationship between the frequency of checking a partner's social media and the duration of the relationship. The results found that there was a significant relationship between the variables, and that the length of the relationship influenced how much it was checked on their social media. The results showed that the length of the romantic relationship was correlated with participants' social media checking behavior.

Table 6

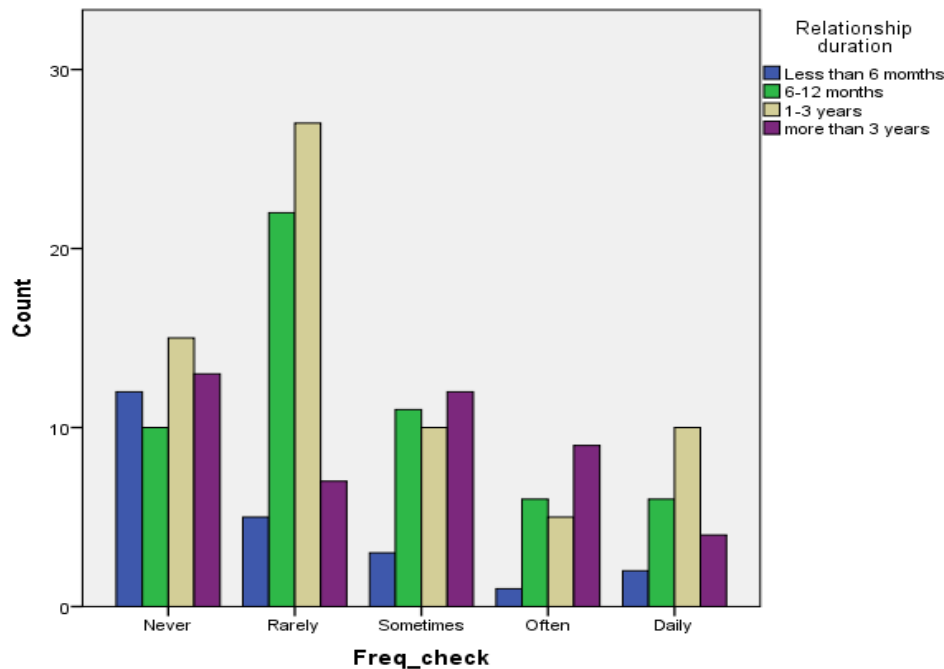
Chi-Square Test of Association Between Frequency of Checking Partner's Social Media and Relationship Duration

Test	Value	df	p
Pearson Chi-Square	23.345	12	.025
Likelihood Ratio	22.717	12	.030

Linear-by-Linear Association	2.571	1	.109
N of Valid Cases	190	—	—

Note. χ^2 = Pearson Chi-square; df = degrees of freedom; p = asymptotic significance (2-tailed). A significant p value ($p < .05$) indicates a statistically significant association between the variables.

Figure 2



Discussion

The present study was designed to explore the association between Social Media Index (SMI), Digital Jealousy (DJS) and Commitment Uncertainty (CUSS) among the university students. In particular, associations among the study variables were examined, as well as predictive roles of Social Media Index and Digital Jealousy on SDCU and PDCU, and demographic differences in Digital Jealousy. The results generally confirmed the proposed theoretical model and revealed the significant role of digital jealousy in understanding the commitment uncertainty in romantic relationships. While the Social Media Index demonstrated strong associations with the study variables, once Digital Jealousy was accounted for the predictive power of the index became less, indicating that emotional reactions to social media relationship experiences may be more important than the amount of social media use.

H1: Social Media Index is positively associated with Digital Jealousy and Commitment Uncertainty.

Results confirmed Hypothesis 1 that Social Media Index (SMI) positively predicted Digital Jealousy (DJ), and DJ positively predicted both self-directed and partner-directed commitment uncertainty. In addition, self-directed commitment uncertainty was positively related to partner-directed commitment uncertainty. The results indicate that increased social media engagement is correlated with increased digital jealousy, which in turn is correlated with a greater perception of uncertainty of commitment by the romantic partner and self. This aligns with earlier research that found that more social media use is linked to higher levels of relational surveillance, online jealousy, emotional insecurity, and relationship instability (Metellus et al., 2025; Imperato et al., 2023; Allen, 2024).

This may be due to increased exposure to a partner's online activity (likes, comments, followers, and other interactions). Repeated exposure can lead to heightened emotional insecurities, doubts, and relationship issues, thus fostering an increase in digital jealousy and commitment doubts. This can be understood by the Social Comparison Theory (Festinger, 1954) which states that people tend to make comparisons naturally both with themselves and with others. The constant opportunity for such comparisons is found on social networking sites, putting individuals at a greater risk for jealousy and insecurity when they try

to decipher ambiguous online communications. Thus, increased social media engagement could intensify emotional responses, impacting perceptions of relationships and uncertainty of commitment (Reza et al., 2024).

H2: Social Media Index and Digital Jealousy significantly predict Self-Commitment Uncertainty and Partner-Commitment Uncertainty.

The results partially confirmed Hypothesis 2. The regression analysis showed that Social Media Index was a significant predictor for the self-directed commitment uncertainty, but when Digital Jealousy was added to the regression equation, the Social Media Index was no longer significant. In the same manner, when Digital Jealousy was added to the model, Social Media Index was not a significant predictor of partner-directed commitment uncertainty. Digital Jealousy, however, was a strong positive predictor of self-directed and partner-directed commitment uncertainty.

The results indicated that the direct effect of the use of social media on commitment uncertainty is not necessarily valid. Rather, they seem to work via the emotional experiences that are created throughout online relationship encounters, such as digital jealousy. Increasing the amount of time spent on social media does not always lead to greater uncertainty in the relationship; it seems that the emotional meaning individuals ascribe to their partner's online behaviour is more significant. This is in line with earlier literature that suggests that emotional responses to online relationship behaviours rather than social media usage alone are more likely to predict relationship outcomes (Bouffard et al., 2022; Pellegrino et al., 2022). Similarly, past research has revealed that jealousy stemming from online encounters leads to decreased trust, emotional insecurities, and uncertainty about the relationship's stability (Emond et al., 2023; Black, 2024; Kovan, 2023).

The result is also in line with the theories of Interdependence Theory and Rusbult's Investment Model, which state that commitment to a relationship is highly dependent on emotional experiences, trust, and the perceived quality of the relationship. Digital jealousy is growing and growing, and when it comes to commitment, people are more and more unsure about their own and more and more unsure about their partner's. Emotional reactions to online relationship experiences, rather than the amount of social media use, thus seem to be the most important psychological factors associated with commitment uncertainty, with Digital Jealousy being the best predictor of commitment uncertainty among the three factors (Emond et al., 2023; Allen, 2024).

H3: Digital Jealousy differs according to demographic characteristics, including gender, frequency of checking a partner's social media, and relationship duration.

The results partly confirmed Hypothesis 3. The independent-samples t-test result showed that the mean scores of digital jealousy of the male and female participants did not differ significantly, meaning that the digital jealousy of males and females were not different. One way ANOVA, however, showed that there were significant differences pertaining to checking a partner's social media frequency and digital jealousy. Frequent checking of partner's social media was associated with higher levels of digital jealousy, suggesting that this behavior could lead to greater feelings of insecurity and jealousy. This aligns with previous research that found frequent partner monitoring via social media was linked to increased feelings of jealousy and relationship insecurity (Metellus et al., 2025; Imperato et al., 2023; Allen, 2024).

In addition, results from the Chi-square analysis showed that there was a significant relationship between the length of relationship and checking the social media of a partner, indicating that social media monitoring behaviours differ in each stage of the romantic relationship. In general, the results suggest that digital jealousy is more related to behaviours regarding the relationship online than to gender differences. The results support previous research suggesting that social media monitoring and relationship dynamics play an important role in shaping digital jealousy among young adults (Emond et al., 2023; Black, 2024; Kovan, 2023).

In general, the results of the present study suggest that Digital Jealousy was the most important and stable psychological factor related to Commitment Uncertainty whereas the direct effect of Social Media Index was not as significant when Digital Jealousy was taken into account. Results show that emotional reactions to online relationship experiences contribute more to commitment uncertainty than do social media use itself. The study thus contributes to the body of literature by drawing attention to Digital Jealousy as a significant psychological mechanism in the relationship of social media experiences and relationship uncertainty among university students. These results offer additional empirical evidence to better comprehend the role of online relationship behaviours in the emotional wellbeing and commitment of today's romantic relationships (Ralte, 2024; Ghanbarian et al., 2026).

Limitations

There are a number of limitations to the current study that should be taken into account when interpreting the results. First, the study's cross-sectional research methodology makes it impossible to identify causal links between its variables. Second, data were self-reported by means of questionnaires, and the results could be subject to response and social desirability biases. Third, the sample included only university students and the results may not apply to other age groups and populations. Last but not least, additional psychological elements that may possibly be connected to digital jealousy and commitment insecurity were not examined, including attachment type, trust, satisfactory relationships, and personality features.

Future Suggestions

Future studies should use a longitudinal or experimental design to gain a better understanding of the causal relationships between social media use, digital jealousy, and commitment uncertainty. It is also suggested that researchers can incorporate more diverse samples, from varying age groups, professions and cultural backgrounds, for more generalizability of findings. Furthermore, future research should include other psychological factors like attachment style, relationship satisfaction, trust, emotional regulation, personality type and so on to better understand the uncertainty of commitment in romantic relationships.

Recommendations

The results suggest that universities and mental health providers should create awareness initiatives on healthy social media usage and digital relationship boundaries for young adults. During counseling, relationship counsellors should help their clients tackle digital jealousy and over monitoring their partners online to enhance trust and relationship stability. It is also important to encourage individuals to improve their open communication, minimize partner's unnecessary monitoring on social media, and adopt healthy coping mechanisms for dealing with emotional insecurity in romantic relationships.

Conclusion

This study found that Social Media Index, Digital Jealousy and Commitment Uncertainty have significant relationship among the university students. Digital Jealousy was the most robust predictor of commitment uncertainty toward oneself and the partner, and Social Media Index was not a significant predictor once Digital Jealousy was taken into account. Furthermore, there were differences in digital jealousy depending on how often one checked their partner's social media and it was related to the length of the relationship, but not gender. The results revealed the significance of emotional responses to online relationship interactions in relation to commitment uncertainty in today's romantic relationships overall.

References

- Abbasi, I. S. (2019). Social Media and Committed Relationships: What Factors Make Our Romantic Relationship Vulnerable? *Social Science Computer Review*, 37(3), 425–434. <https://doi.org/10.1177/0894439318770609>
- Allen, K. (2024). *The Role of Social Media on Digital Jealousy and Relationship Satisfaction* (Doctoral dissertation).
- Apostolou, M., & Tekeş, B. (2023). Fear of Relationship Commitment and Singlehood. *Evolutionary Psychological Science*, 10(1), 10–18. <https://doi.org/10.1007/s40806-023-00382-z>
- Bergeron, S., Brassard, A., Mondor, J., & Péloquin, K. (2020). Under, Over, or Optimal Commitment? Attachment Insecurities and Commitment Issues in Relationally Distressed Couples. *Journal of Sex & Marital Therapy*, 46(3), 246–259. <https://doi.org/10.1080/0092623X.2019.1683664>
- Birnie, C., Joy McCLURE, M., Lydon, J. E., & Holmberg, D. (2009). Attachment avoidance and commitment aversion: A script for relationship failure. *Personal Relationships*, 16(1), 79–97. <https://doi.org/10.1111/j.1475-6811.2009.01211.x>
- Black, A. E. (2024). Responding to threatening online alternatives: Perceiving the partner's commitment through their social media behaviors. *Journal of Social and Personal Relationships*, 41(5), 1091–1112.
- Bouffard, S., Giglio, D., & Zheng, Z. (2022). Social media and romantic relationship: Excessive social media use leads to relationship conflicts, negative outcomes, and addiction via mediated pathways. *Social Science Computer Review*, 40(6), 1523–1541.

- Carraturo, F., Di Perna, T., Giannicola, V., Nacchia, M. A., Pepe, M., Muzii, B., ... & Scandurra, C. (2023). Envy, social comparison, and depression on social networking sites: a systematic review. *European Journal of Investigation in Health, Psychology and Education*, 13(2), 364-376.
- Chung, J., Ding, Y., & Kalra, A. (2023). I really know you: how influencers can increase audience engagement by referencing their close social ties. *Journal of Consumer Research*, 50(4), 683-703 .
- De Lenne, O., Wittevronghel, L., Vandenbosch, L., & Eggermont, S. (2019). Romantic relationship commitment and the threat of alternatives on social media. *Personal Relationships*, 26(4), 680-693. <https://doi.org/10.1111/pere.12299>
- Dungey, N. (2026). *Social Media Use and Type of Content Viewed: Associations With Attachment Style and Relational Satisfaction* (Doctoral dissertation, The Chicago School of Professional Psychology).
- Emond, M., Vaillancourt-Morel, M. P., Métellus, S., Brassard, A., & Daspe, M. È. (2023). Social media jealousy and intimate partner violence in young adults' romantic relationships: A longitudinal study. *Telematics and Informatics*, 79, 101956.
- Fernandez, A. M., Barone, P., Campino, T., & Zavalla, B. (2026). Individual differences in digital jealousy: Evidence from a South American-European comparison. *Personality and Individual Differences*, 257, 113772.
- Festinger, L. (1954). *A theory of social comparison processes*. *Human Relations*, 7(2), 117-140. <https://doi.org/10.1177/001872675400700202>
- Ghanbarian, M., Hooman, F., Hafezi, F., & Mashalpourfard, M. (2026). Marital Commitment as a Mediator Between Intolerance of Uncertainty, Sexual Satisfaction, and Attitudes Toward Infidelity Among Married Students. *Zahedan Journal of Research in Medical Sciences*, 28(28), e166228.
- Gubler, D. A., Schlegel, K., Richter, M., Kapanci, T., & Troche, S. J. (2023). The Green-Eyed Monster in Social Media – Development and Validation of a Digital Jealousy Scale. *Psychological Test Adaptation and Development*, 4(1), 13-27. <https://doi.org/10.1027/2698-1866/a000033>
- Han, R., Ding, X., Yang, M., Feng, W., Wang, Y., Cai, W., ... & Ma, A. (2025). The association between subjective socioeconomic status and depressive symptoms in women of reproductive age: the chain mediating effects of marital satisfaction and well-being. *Frontiers in Psychology*, 16, 1715488.
- Imperato, C., Everri, M., & Mancini, T. (2023). Does Facebook 'threaten' romantic relationships? Online surveillance and couple visibility behaviours in romantic jealousy and couple relationship quality in a sample of Italian women. *Journal of Family Studies*, 29(2), 792-806.
- Joel, S., MacDonald, G., & Shimotomai, A. (2011). Conflicting Pressures on Romantic Relationship Commitment for Anxiously Attached Individuals: Commitment and Anxious Attachment. *Journal of Personality*, 79(1), 51-74. <https://doi.org/10.1111/j.1467-6494.2010.00680.x>
- Johnson, D. J. (2026). Jealousy and Digital Distraction in Romantic Dyads: A Dyadic Analysis of Technology's Paradox of Connection.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal Relations: A Theory of Interdependence*. New York: Wiley.
- Kovan, A. (2023). Social media jealousy and life satisfaction in romantic relationships: Mediation role of communication skills. *Actualidades en Psicología*, 37(135), 111-127.
- Kumar, A. (2025). Decline of face-to-face communication in Modern society. *Knowledgeable Research A Multidisciplinary Journal*, 4(09), 1-11.
- Leahy, R. L. (2026). Jealousy: An Emotional Schema Model. *Journal of Clinical Psychology*.

- Métellus, S., Vaillancourt-Morel, M., Brassard, A., & Daspe, M. (2025). Attachment Anxiety and Relationship Satisfaction in the Digital Era: The Contribution of Social Media Jealousy and Electronic Partner Surveillance. *Journal of Marital and Family Therapy*, 51(4), e70074. <https://doi.org/10.1111/jmft.70074>
- Monk, J. K., Ogolsky, B. G., & Proulx, C. M. (2025). Clarifying relationship instability: Exploring the vital role of change in commitment. *Journal of Family Theory & Review*, 17(3), 527-548.
- Pellegrino, A., Abe, M., & Shannon, R. (2022). The dark side of social media: content effects on the relationship between materialism and consumption behaviors. *Frontiers in psychology*, 13, 870614.
- Peters, C., Schröder, K. C., Lehaff, J., & Vulpius, J. (2022). News as they know it: Young adults' information repertoires in the digital media landscape. *Digital journalism*, 10(1), 62-86.
- Ralte, L. (2024). Meaning Making of Intimacy, Passion and Commitment: Lived Experiences of Unmarried Adults in Online Romantic Relationships. *Journal of Education, Society and Behavioural Science*, 37(6), 525-537.
- Reza, A., Ilham, F., & Murdiono, W. (2024). The impact of social media on interpersonal relationships in the digital era. *Journal Social Civilecial*, 2(2), 64-77.
- Rus, H. M., & Tiemensma, J. (2017). "It's complicated." A systematic review of associations between social network site use and romantic relationships. *Computers in Human Behavior*, 75, 684-703. <https://doi.org/10.1016/j.chb.2017.06.004>
- Rusbult, C. E., & Buunk, B. P. (1993). Commitment processes in close relationships: An interdependence analysis. *Journal of Social and Personal Relationships*, 10(2), 175-204. <https://doi.org/10.1177/026540759301000202>
- Smith, E. E., & Storrs, H. (2023). Digital literacies, social media, and undergraduate learning: what do students think they need to know?. *International Journal of Educational Technology in Higher Education*, 20(1), 29.
- Tandon, A., Laato, S., Islam, N., & Dhir, A. (2025). Social comparisons at social networking sites: how social Media-induced fear of missing out and envy drive compulsive use. *Internet Research*, 35(2), 691-718.
- Trang, N. M., McKenna, B., Cai, W., & Morrison, A. M. (2024). I do not want to be perfect: investigating generation Z students' personal brands on social media for job seeking. *Information technology & people*, 37(2), 793-814.
- Van Ouytsel, J., Walrave, M., Ponnet, K., Willems, A.-S., & Van Dam, M. (2019). Adolescents' perceptions of digital media's potential to elicit jealousy, conflict and monitoring behaviors within romantic relationships. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(3). <https://doi.org/10.5817/CP2019-3-3>
- Wahring, I. V. (2025). *Gender Differences Across Major Relationship Phases: The Role of Emotional Support and Age* (Doctoral dissertation, Lebenswissenschaftliche Fakultät).
- Walle, Y. M., Asifaw, B. G., & Hadgu, B. S. (2026). The digital whistleblowing paradox: algorithmic retaliation, unequal witnessing, and intersectional vulnerability in the digitizing state. *AI and Ethics*, 6(2), 240.
- Wang, S. S., & Chen, S. T. (2025). Digital Surveillance and Relational Uncertainty: The Role of Geolocation Tracking in Romantic Relationships. *Social Science Computer Review*, 08944393251361455.
- Wang, W., Zhang, Y., & Zhao, J. (2023). Technological or social? Influencing factors and mechanisms of the psychological digital divide in rural Chinese elderly. *Technology in Society*, 74, 102307.
- Xia, Y., Deng, Y., Tao, X., Zhang, S., & Wang, C. (2024). Digital art exhibitions and psychological well-being in Chinese Generation Z: An analysis based on the SOR framework. *Humanities and Social Sciences Communications*, 11(1), 1-15.

