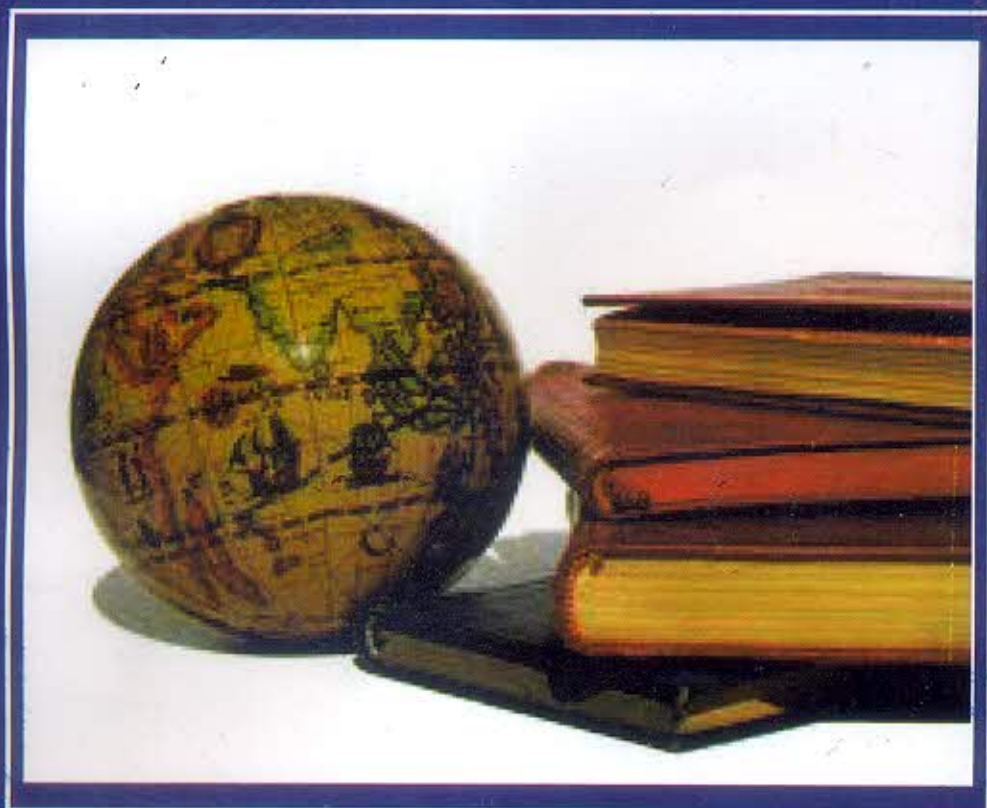


JOURNAL OF EDUCATION **AND** HUMAN DEVELOPMENT



INTERNATIONAL SUSTAINABLE DEVELOPMENT RESEARCH CENTRE

JOURNAL OF EDUCATION AND HUMAN DEVELOPMENT

INSTAGRAM USE, INSTAGRAM-RELATED CONFLICT AND NEGATIVE RELATIONSHIP OUTCOMES AMONG UNDERGRADUATES OF REDEEMER'S UNIVERSITY, OSUN STATE, NIGERIA

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ABSTRACT

Young adults' exposure to social networking sites such as Instagram is increasing and so is the potential of the use of such sites to complicate intimate relationships. Limited empirical evidence exists on social media use, social media related conflicts and intimate relationship outcomes among young adults. Hence, this study examined whether the use of Instagram by young adults who are in a romantic relationship has an impact on their relationship outcomes as reported by 249 undergraduates of Redeemer's University, Ede, Osun State. This study specifically examined the mediational effect of Instagram-related conflict on the relationship between active Instagram use and negative relationship outcomes. A set of regression and mediation analyses confirmed all the hypotheses. Findings revealed that active Instagram use influences and can predict Instagram-related conflict and negative relationship outcomes among young adults in a romantic relationship. In addition, Instagram-related conflict mediates the relationship between active Instagram use and negative relationship outcomes. The results have implications for romantic relationships and Instagram users in general.

Keywords: *Instagram use, Instagram related-conflict, Relationship outcomes, Mediation*

INTRODUCTION

Social media has become an embedded and important part of the daily lives of young adults as studies have shown that a large proportion of Nigerian youths spend their time on social media and networking sites (Buhari, Ahmad, and HadiAshara, 2014). From their waking moment till they fall asleep, young adults continual use of social media for different reasons ranging from initiating new relationships, keeping in touch with friends and families and bridging the gap that distance creates in relationships with an emphasis on maintaining relationships with others has been beneficial to them (Butler and Matook, 2015). This pattern of social media use by young adults play an important role in shaping their perception about their relationship partners, their relationships, including the formation, maintenance and dissolution of those relationships.

Various studies have been conducted on the media use of individuals in romantic relationships with the aim of examining the link between media use and couples' positive and negative communication (Coyne, Stockdale, Busby, Iverson and Grant, 2011), the link between the use of social networking sites and relationship satisfaction. Scholars have also revealed that the impact of social media use on relationships can be likened to a two-edged sword that has the potential of helping individuals find romantic partners and sustain a happy romantic relationship on one hand alongside having the potential to create relationship problems such as tension and jealousy that transcends the online medium for its users (Zurbriggen, Hagai & Leon, 2016; Elphinston & Noller, 2011). In view of the above, this study seeks to trace the link between the active Instagram use of unmarried young adults in romantic relationship, Instagram-related conflict and ultimately, negative relationship outcomes.

STATEMENT OF THE PROBLEM

Research has established that the use of social networking sites has both negative and positive effects on the romantic relationship of young adults. However, these studies have been limited to examining one

social media platform especially Facebook and Twitter. There are limited studies that have examined the use of Instagram and its possible negative effect on the outcomes of young adults' relationships. One of the few studies that explored the link between Instagram use and relationship outcomes is the study conducted by Ridgway and Clayton (2016). However, the study explored how body image dissatisfaction predicts the posting of selfies on Instagram and whether or not selfie posting on Instagram is associated with negative relationship outcomes. This study therefore seeks to fill the research gap by examining the influence of Instagram use on Instagram-related conflict and negative relationship outcomes. It explores the connection and interrelationships between Instagram use, Instagram related conflict and relationship outcomes. Most importantly, the paper seeks to find out whether or not Instagram-related conflict will be a mediating factor between Instagram use and negative relationship outcomes.

Research Questions

1. What is the frequency of Instagram use among undergraduates?
2. What is the nature of Instagram use among undergraduates?

Research Hypotheses

The following hypotheses were adopted for the purpose of this study:

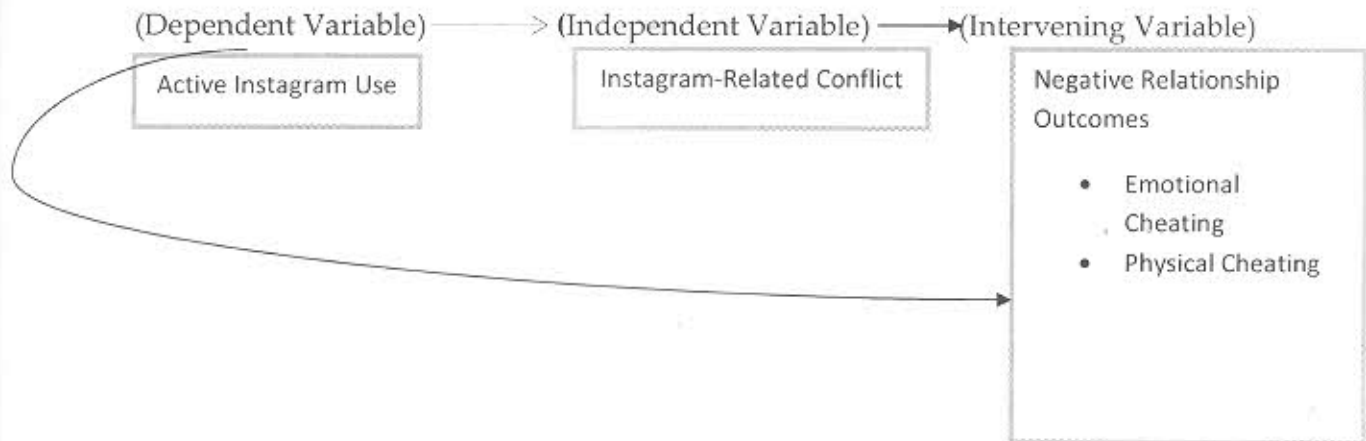
H1: Active Instagram use by young adults has a significant influence on Instagram-related conflict in relationships

H2: Active Instagram use by young adults has a significant influence on negative relationship outcomes.

H3: Instagram-related conflict has a significant influence on negative relationship outcomes.

H4: Instagram related conflict mediates the relationship between active Instagram use and negative relationship outcomes

Conceptual Model



REVIEW OF LITERATURE

Evolution of Instagram as a Social Networking Site

Since its creation and launch in 2010, Instagram, a free mobile photo sharing application has accumulated over 600 million monthly active users with millions of images and pictures uploaded over the years. Instagram, a mobile app that derives its name from a combination of "instant camera" and "telegram, provides users a platform for creating pictures and videos of a minute or less in real time, manipulating them with filters/frames and sharing them with others who know them offline or share similar interests with them on other social networking sites (Tolentino, 2012). Instagram allows users to write posts alongside pictures and videos uploaded on the platform like Facebook and Twitter. At the inception, it was strictly or sharing photographs but over the yers, Instagram has been improved and upgraded in the following ways - videos are supported and can be uploaded and shared by its users, live videos and streaming that are not preserved but removed after the user is done with the broadcast, the development of Instagram stories that allows users create stories from their pictures, amongst others.

As at 2016, the number of Instagram users have risen from the 200 million recorded in 2014 to over 600 million active users in 2016

(Statistica, 2016). Young adults top the list of the total population of people that use Instagram all over the world as research has shown that Instagram use is higher among younger adults within the age range of 18 – 29 (Pew Research, 2016). Female users top the list among Instagram users at 68% while male users constitute the remaining 32% (Pew Research, 2016). Hence, the reason this study focuses on young adults and the impact their use of Instagram has on Instagram-related conflict and negative outcomes of their romantic relationship.

Effects of Social Networking Sites on Romantic Relationships

Several studies have revealed that the effect of social networking sites on the romantic relationship outcomes of young adults can be either positive or negative. The positive effect it has on the quality of romantic relationships is aided by its ability to aid quality interaction between couples especially those in long-distance relationships (McGlynn, 2006; Boneva, Kraut, & Frohlich, 2001) while the negative effect of social networking sites on the outcomes or quality of a romantic relationship is aided by anxiety attachment styles (Marshall, Bejanyan, Castro & Lee, 2012). The use of Facebook and Twitter has been particularly examined by scholars to determine the influence of these social networking sites on romantic relationships.

In a study conducted by Fox, Osborn and Warber (2014) on the role of Facebook in romantic relationship escalation, maintenance, conflict and dissolution, their findings revealed that Facebook has the potential to influence offline relationships in terms of maintaining the relationship alongside triggering romantic conflict. Other scholars have also discovered a link between Facebook Intrusion, jealousy in romantic relationships and relationship outcomes (Elphinston & Noller, 2011). There have also been studies conducted on the impact of social networking sites like Twitter on relationships. For instance, Clayton (2014) found that active Twitter use influences Twitter related conflict amongst romantic couples and this in turn leads to infidelity, breakup or absolute dissolution of the romantic relationship.

Based on the findings from the studies discussed above, the researcher therefore predicts that Instagram use will influence Instagram-related conflict and negative relationship outcomes.

Theoretical Framework

This paper is hinged on the Technology Determinism theory. Technology determinism was a word coined by Thorstein Veblen in the 1920s. He was of the opinion that technology shapes the society and changes human behavior and interaction. The Technology Determinism theory was propounded by Marshall McLuhan and the basic principle of this theory is the fact that technology determines social and cultural change. The assumptions of this theory according to McLuhan include:

1. All technology is communication, an extension of ourselves that allows us to reach further through time and/or space;
2. These extensions mirror the human body; and
3. All media is, to some degree, "hot" or "cool."

Applying this theory to the study, it can be established that social networking sites with an emphasis on Instagram has the ability to shape the process of interaction between couples in a romantic relationship. Based on this theory, the researcher predicts that active Instagram use (technology) has the ability to influence the romantic relationship outcomes of young adults.

The Current Study

This study is grounded in the methodological framework of Clayton's (2014) survey study that explored the influence of Twitter use on romantic relationships with an emphasis on the meditational effect of Twitter-related conflict on negative relationship outcomes. In the study, Clayton (2014) found that Twitter-related conflict mediated the relationship between active Twitter use and negative relationship outcomes. To understand the effect of active Instagram use on romantic relationships, this study used the same intervening/mediating variable now termed as Instagram-related conflict and the negative relationship outcome items used in Clayton's study. For the purpose of this study Instagram-related conflict was conceptualized as the probability of

Instagram use to trigger conflict in romantic relationships. Negative relationship outcomes was also conceptualized as the likely influence that Instagram use can have on emotional cheating, physical cheating and break-up or final dissolution of the relationship. Hence, this study predicts that active Instagram use and negative relationship outcomes will be positively related, and that Instagram-related conflict will mediate the relationship between active Instagram use and negative relationship outcomes. Based on these, this study posits the following hypotheses:

H1: Active Instagram use by young adults has a significant influence on Instagram-related conflict in romantic relationships.

H2: Active Instagram use by young adults has a significant influence on negative relationship outcomes.

H3: Instagram-related conflict has a significant influence on negative relationship outcomes.

H4: Instagram related conflict mediates the relationship between active Instagram use and negative relationship outcomes

METHODOLOGY

This study adopted a quantitative survey research method that elicited responses from undergraduates of Redeemer's University in Osun State. To access participants and obtain data, the researchers drew a random sample of undergraduates who are in a romantic relationship, use Instagram, fell within the age range of 15 - 35 years and so qualified as young adults based on the classification of the African Youth Charter of the United Nations. In total, 249 respondents were used for this study. Respondents were asked to report their age, gender, educational level, relationship status and the length of time they had spent in a relationship with their current or former partners.

Active Instagram Use

This study adapted the Facebook Intrusion Questionnaire by Elphinston and Noller (2011) and used the questions therein to measure Instagram use. Frequency of active Instagram use was assessed through eight items created for this study. Participants were asked questions like 'how often

do you use Instagram with a 5-point Likert scale ranging from "Never", "Monthly" to "Daily". Respondents in this study also responded to statements as "I often think about Instagram whenever I am not using it", "I interrupt whatever I am doing whenever I feel the need to access Instagram" on a 7-point scale of "Strongly Agree" to "Strongly Disagree"

Instagram-related Conflict

This study adapted the items in Clayton (2014) survey study examining the influence of active Twitter use on romantic relationships. Items used to measure Instagram related conflict include: "How often do you have an argument with your former or current significant other as a result of excessive Instagram use", "how often do you have an argument with your former or current significant other as a result of posting selfies" and how often do you have an argument with your former or current significant other as a result of receiving direct messages from followers or admirers on Instagram". The questions were answered using a likert scale ranging from "Never" to "Hourly".

Negative Relationship Outcomes

For the purpose of this study, three questions were developed to measure negative relationship outcomes as a result of Instagram related conflict as a mediator variable. This study adopted Clayton et al's (2013) negative relationship questions with items such as "Have you physically cheated on your former or current significant other with someone you connected or reconnected with on Instagram", "Have you emotionally cheated on your former or current significant other with someone you connected or reconnected with on Instagram" and "Has your use of Instagram resulted in a breakup between you and your former or current significant other". The answers to these questions were condensed into a dichotomous yes/no answer choice.

DATA PRESENTATION AND ANALYSIS

Demographic Data of Respondents

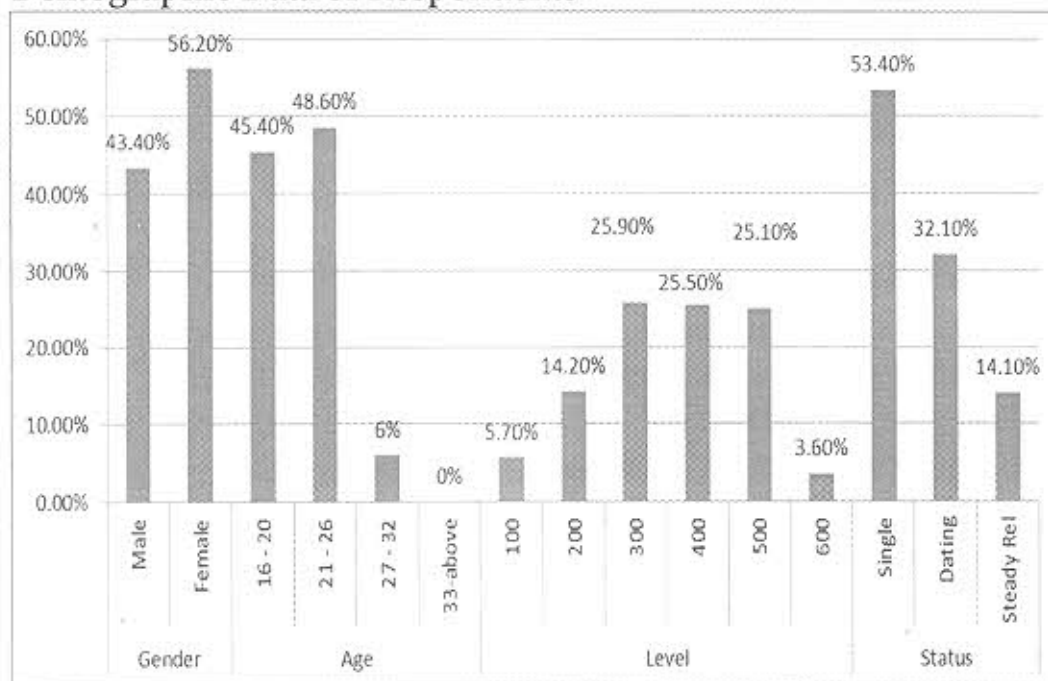


Figure 1 Gender, Age, Level and Relationship Status of Respondents

Figure 1 reveals the gender, age, educational level and relationship status of the respondents. Figure 1 shows that 56.2% of the respondents are female while 43.4% are male students. This is supported by research findings in literature which states that more women use Instagram than men (Hootsuite, 2016). It also reveals that 45.4% of the of the respondents fall within the age range of 16-20 years, 48.6% fall within the age range of 21 – 26 years while the remaining 6% fall within the age range of 27 – 32 years. This is supported by other findings in literature that reveals that majority of those who use Instagram fall within the age range of 18 – 29 years (Hootsuite, 2016). Majority of the respondents constituting 53.4% are currently single but have been in a relationship in the past, 32.1% are currently dating while 14.1% are currently in a steady relationship.

Presentation and Discussion of Findings

Research Question One: What is the frequency of Instagram use among undergraduates of Redeemer's University?

The frequency of Instagram use among undergraduates of Redeemer's University is presented in Figure 2 below.

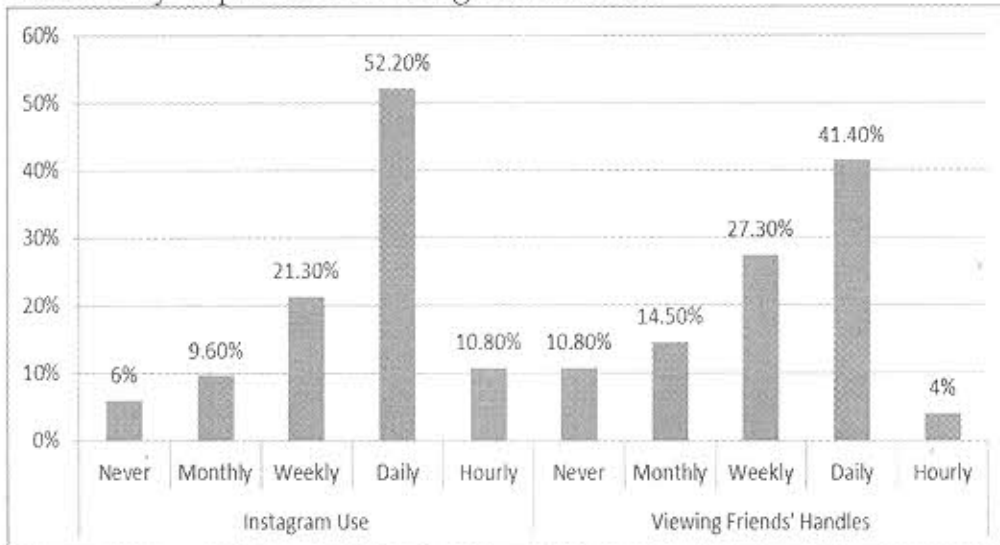


Figure 2: The Frequency of Instagram use

Figure 2 reveals that 94% of the respondents use Instagram with 6% accounting for respondents who have never used Instagram. From the remaining 94% who indicated that they use Instagram, 9.6% use it monthly, 21.3% use it weekly, 52.2% use it daily and 10.8% use it every hour. From Figure 2 above, it is also observed that in the respondents' use of Instagram, 10.8% have never viewed a friend's Instagram handle, 14.5% view a friend's Instagram handle monthly, 27.3% view it weekly, 41.4% account for the highest number of respondents who view a friend's Instagram handle daily and the remaining 4% view it hourly.

Research Question Two: What is the nature of Instagram use among undergraduates of Redeemer's University?

Table 1: Nature of Instagram Use among Respondents

Items	SD	D	SmD	NA/D	SmA	A	SA	Mean	St.D
I often think about Instagram whenever I am not using it	38 (15.3)	57 (22.9)	11 (4.4)	32 (12.9)	39 (15.7)	42 (16.9)	30 (12)	3.90	2.063
The thought of not being able to access Instagram makes me distressed	56 (22.5)	64 (25.7)	10 (4.0)	34 (13.7)	25 (10)	32 (12.9)	27 (10.8)	3.45	2.102
I interrupt whatever I am doing whenever I feel the need to access Instagram	55 (22.1)	66 (26.5)	12 (4.8)	19 (7.6)	27 (10.8)	44 (17.7)	24 (9.6)	3.51	2.143
I often use Instagram for no particular reason	26 (10.4)	56 (22.5)	10 (4.0)	14 (5.6)	31 (12.4)	75 (30.1)	34 (13.7)	4.34	2.097
I feel connected to others when I use Instagram	19 (7.6)	31 (12.4)	6 (2.4)	19 (7.6)	51 (20.5)	78 (31.3)	44 (17.7)	4.84	1.904
I have been unable to reduce my Instagram use	53 (21.4)	70 (28.2)	12 (4.8)	23 (9.3)	26 (10.5)	38 (15.3)	26 (10.5)	3.47	2.122

KEY: SA = Strongly Agree, A = Agree, SmA= Somewhat Agree, NA/D= Neither Agree nor Disagree, SmD= Somewhat Disagree, D= Disagree, SD= Strongly Disagree

Table 1 above reveals that majority of the respondents agreed that they think about Instagram whenever they are not using it, however majority of them do not agree that inability to access Instagram makes them distressed (M=3.45, S.D = 2.102). A large number of the respondents agreed that they use Instagram for no particular reason (M=4.34, S.D=2.097) and that they feel connected to others when they use Instagram (M=4.84, S.D=1.904). However, majority of the respondents disagree that they have been unable to reduce their Instagram use. The implication of this is that they have full control over their use of Instagram.

Test of Hypothesis

The preset level of significance for this study is 0.05 and the hypotheses predict a relationship between the variables being studied. Hence, the simple linear regression would be used for the purpose of analysis. The

p-value indicates the probability and significance value. The statistical decision rule for this study goes thus: if the probability value exceeds the pre-set level of significance ($p > 0.05$), the stated hypothesis will be rejected but if the p-value is less than or equal to 0.05 ($p \leq 0.05$), the stated hypothesis will be accepted.

Hypothesis One: Active Instagram use by young adults has a significant influence on Instagram-related conflict in romantic relationships.

The study employed simple linear regression analysis to analyze the data and test hypothesis one at 0.05% level of significant with the independent variable as active Instagram Use and the dependent variable as Instagram-related conflict. The analysis summaries are presented in Table 2 below.

Table 2: Simple linear regression analysis of Instagram-related Conflict by Instagram Use

Variables	B	Std.Error	t-val	P-val	R ²	R-Adjusted	F-val
(Constant)	.572	.099	5.756	.000			
Instagram Use	.162	.025	6.473	.000	.145	.142	41.90**

($F(1,247)=41.90$, $p < .05$, $R^2=.145$)

From Table 2 above, it is deduced that active Instagram use has a significant influence on Instagram-related conflict [$F(1,247) = 41.90$, $R^2=.145$, $p < 0.05$]. The result indicates that Instagram use independently predicts Instagram-related conflict ($\beta=.162$, $t=6.438$, $p < .05$). The findings show that Instagram use is a significant determinant of Instagram-related conflict among young adults. The hypothesis which states that active Instagram use by young adult will have a significant influence on Instagram-related conflict is therefore accepted.

Hypothesis Two: Active Instagram use by young adults has a significant influence on negative relationship outcomes.

A simple linear regression analysis was conducted to analyze the data and test the hypothesis at 0.05% level of significant. The predictor variable is Instagram Use while the dependent variable is negative relationship outcomes. The analysis procedure involved regressing negative relationship outcomes on Instagram use; the analysis summaries are presented in Table 3 below.

Table 3: Simple Linear Regression Analysis of Negative Relationship Outcomes by Instagram Use

Variables	B	Std.Error	t-val	P-val	R ²	R-Adjusted	F-val
(Constant)	.700	.109	6.402	.000			
Instagram Use	.189	.028	6.853	.000	.160	.156	46.96**

(F(1,247)=46.959, p<.05, R²=.160)

In Table 3, findings from the analysis show that active Instagram use by the respondents has a significant influence on negative relationship outcomes $\{F(1,247)=46.96, R^2=.160, p<0.05\}$. The table also reveals that active Instagram use explained 16.0% changes in the level of relationship problem. The result indicates that active Instagram use independently predicts negative relationship outcomes among young adults in romantic relationships ($\beta=.189, t=6.853, p <.05$). The hypothesis which states that active Instagram use by young adults will have a significant influence on negative relationship outcomes is therefore accepted.

Hypothesis Three: Instagram-related conflict has a significant influence on negative relationship outcomes.

The hypothesis was also tested by employing a simple linear regression analysis setting the level of significance at 0.05%. The predictor variable is Instagram related conflict while the dependent variable is negative relationship outcome. The analysis procedure involved regressing negative relationship outcomes on Instagram related conflict; the analysis summaries are presented in Table 4 below.

Table 4: Simple Linear Regression Analysis of Negative Relationship Outcomes by Instagram related conflict

Variables	B	Std.Error	t-val	P-val	R ²	R-Adjusted	F-val
(Constant)	.913	.086	10.639	.000			
Instagram related conflict	.418	.065	6.385	.000	.142	.138	40.77**
<i>(F(1,247)=40.77, p<.05, R²=.142)</i>							

In Table 4, results from the analysis indicates that Instagram-related conflict has a significant influence on negative relationship outcomes { $F(1,247)=40.77$, $R^2=.142$, $p<0.05$ }. Furthermore, it is observed that Instagram related conflict explained 14.2% variation in the level of negative relationship outcomes. The result indicates that Instagram-related conflict independently predicts negative relationship outcomes among young adults in a romantic relationship ($\beta=.418$, $t=6.385$, $p <.05$). The hypothesis which states that Instagram related conflict will have a significant influence on negative relationship outcomes is therefore accepted.

Hypothesis Four: Instagram-related conflict mediates the relationship between active Instagram use and negative relationship outcomes.

Table 5: Mediation Analysis showing Instagram-related Conflict as a Mediating Variable between Active Instagram Use and Negative Relationship Outcomes

Parameter	Estimate	Lower	Upper	P-val
Instagram-related Conflict	.047	.025	.073	.001

This hypothesis was tested by employing the Analysis of Moment Structure (AMOS) which is an extension of SPSS specially designed for structural equation modeling. The mediator variable is Instagram-related conflict while the independent and dependent variables are active Instagram use and negative relationship outcomes respectively.

After successful bootstrapping (2000), results of the analysis show that Instagram related conflict ($\beta=.047$, $p<.05$) significantly mediates the relationship between active Instagram use and negative relationship outcomes. Consequently, the hypothesis is accepted.

Discussion of Findings

Although a number of variables can trigger negative relationship outcomes among couples, the current study hypothesized that the use of social networking sites, specifically Instagram, has the potential to influence negative relationship outcomes among young adults who are romantically involved with a partner. In addition, this study examined whether the findings of Clayton (2014) that concluded that Twitter-related conflict mediated the relationship between Twitter use and negative relationship outcomes can be applied to other social networking sites apart from Twitter. Since Instagram allows users to share the same type of information allowed on Twitter, the researcher argued that the findings from Instagram may be the same as those reflected by Twitter and Facebook on the use of social networking sites, romantic conflict and negative relationship outcomes. The researcher theorized that if a young adult who is in a romantic relationship is actively using Instagram in terms of viewing friends' Instagram handles and pictures, receiving and sending Direct messages, posting selfies, liking and commenting on others' pictures, it can create conflict within the relationship which can ultimately lead to negative relationship outcomes. The results from this study largely support these propositions as it reveals that there is a significant relationship between active Instagram use, Instagram-related conflict and negative relationship outcomes. The findings are in accordance with the findings of Clayton et al (2013) and Clayton (2014) on the influence of active Twitter and Facebook use on relationship outcomes. The implication of this is that when the active use of social networking sites becomes an issue in a romantic relationship, there is a probability that negative relationship outcomes may follow.

Limitations and Implication for Future Research

This study has several important limitations that should be noted. First, the respondents of this survey were told that they would be answering questions on Instagram use and negative relationship outcomes, as a result, the data may have been skewed. Also, the selected sample is not representative of young adults given that only undergraduate students were sampled coupled with the fact that there were more females than males. Future research would need to be conducted to determine if the findings of this study can be generalized to populations of different demographics (for example, older adults and young adults who are married).

The present study did not differentiate between couples in different stages of their romantic relationship, hence, future research can examine how the relationship between active social networking use and negative relationship outcomes is influenced by the different stages the respondents are in their romantic relationship.

Conclusion

The results from this study show that there is a significant relationship between active Instagram use and the amount of Instagram-related conflict among romantic partners and this in turn can lead to negative relationship outcomes such as cheating and break up. The implication of this is that Instagram use can have damaging effects on romantic relationships especially amongst young adults.

REFERENCES

- Boneva, B., Kraut, R., and Frohlich, D. (2001). Using e-mail for personal relationships: The difference gender makes. *American Behavioral Scientist*, 45, 530–549.
- Buhari, S.R., Ahmad, G.I., and HadiAshara, B. (2014). Use of social media among students of Nigerian polytechnic. *International Conference on Communication, Media, Technology and Design*, 24 – 26 April, 2014, Istanbul – Turkey.

- Butler, B.S. and Matook, S. (2015). Chapter: Social media and relationships. *The International Encyclopedia of Digital Communication and Society*
- Clayton, R., Nagurney, A., and Smith, J. (2013). Cheating, breakup, and divorce: Is Facebook use to blame? *Cyberpsychology, Behavior, & Social Networking*, 16, 717-720
- Clayton, R. (2014). The third wheel: The impact of twitter use on relationship infidelity and divorce. *Cyberpsychology, Behavior, & Social Networking*, 17(7), 425 – 430.
- Coyne, S.M., Stockdale, L., Busby, D., Iverson, B., and Grant, D.M. (2011). "I luv u :)!": A descriptive study of the media use of individuals in romantic relationships. *Interdisciplinary Journal of Applied Family Studies*, 60, 150-162.
- Elphinston, R.A., and Noller, P. (2011). Time to face it! Facebook intrusion and the implications for romantic jealousy and relationship satisfaction. *Cyberpsychology, Behavior and Social Networking*, 14(11), 631-635.
- Fox, J., Osborn, J.L., and Warber, K.M. (2014). Relational dialectics and social networking sites: The role of Facebook in romantic relationship escalation, maintenance, conflict, and dissolution. *Computers in Human Behavior*, 35, 527-534.
- Marshall, T.C., Benjayan, K., Di Castro, G. and Lee, R.A. (2013). Attachment styles as predictors of Facebook-related jealousy and surveillance in romantic relationships. *Personal Relationships*, 20(1), 1-22.
- McGlynn, J. (2006). More connections, less connection: An examination of the effects of computer-mediated communication on relationships. Unpublished master's thesis. Denton, TX: University of North Texas.

- Mutekwe, E. (2012). The impact of technology on social change: A sociological perspective. *Journal of Research in Peace, Gender and Development*, 2(11), 226-238.
- Parker, S. (2016, July 2). Top instagram demographics that matter to social media marketers. Retrieved from <https://blog.hootsuite.com/instagram-demographics/>
- Pew Research (2016, November 11). Social media update 2016. Retrieved from <http://www.pewinternet.org/2016/11/11/social-media-update-2016/>
- Ridgway, J., and Clayton, R. (2016). Instagram unfiltered: Exploring associations of body image satisfaction, Instagram #selfie posting, and negative romantic relationship outcomes. *Cyberpsychology, Behavior and Social Networking*, 19(1), 2-7.
- Tolentino, M. (2012, March 26). Instagram: The history and evolution (blog post). Retrieved from <http://siliconangle.com/blog/2012/03/26/instagram-the-history-and-evolution/>
- Zurbriggen, E.L., Hagai, E.B., and Leon, G. (2016). Negotiating privacy and intimacy on social media: Review and recommendations. *Translational Issues in Psychological Science*, 2(3), 248-260