Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use

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Abstract

Recent news in the media has suggested that younger people are using popular social media such as Facebook less and are quickly adopting newer media, such as the self-destructing app Snapchat. Snapchat is unique in that it erases messages several seconds after they have been sent, affording its users a higher level of privacy. Yet, little research exists on Snapchat use in general, let alone its broader psychological implications. This article offers a preliminary comparison of Snapchat and Facebook use and psychological effects on romantic jealousy. General motives for using Snapchat and Facebook are examined, as well as the nature of the content that Snapchat users most frequently share. Further, because of the differences in privacy and persistence of information, potential psychological effects in the domain of romantic jealousy are also examined, which has been widely studied on Facebook in the last few years. Findings show that the main difference in motives were that Snapchat was used more for flirting and finding new love interests, whereas Facebook was still the main social networking site used for keeping in touch with friends. Further, when presenting users with a series of potentially jealousy provoking scenarios, Snapchat elicited higher levels of jealousy than did Facebook. These findings are explained based on an affordance approach.

Introduction

THE APP SNAPCHAT HAS RECENTLY been gaining in popularity. Among 18–34 year olds, it is now the third most popular app after Facebook and Instagram.[1] Snapchat is a photo-sharing app that allows users to send photos or videos, so-called snaps, to one or several friends. The unique feature is that these snaps dissolve after a few seconds. Thus, in contrast to Facebook and other social media where posts are persistent and often visible to a large audience, the app offers opportunities for less persistent and more private communication. Because Snapchat reduces the need for self-censorship, it has been linked to more intimate, personal forms of sharing, including sexting. This raises the question of what impact Snapchat has on interpersonal relationships. For instance, if a romantic partner is found to be sending snaps to a potential rival, does this lead to more jealousy than if the same picture were posted on Facebook?

This article contributes to the literature not only by providing insight into the motivations for using and actual use of Snapchat (currently little research is available) but also by demonstrating Snapchat's potential interpersonal impacts by directly comparing it with Facebook. Interpersonal impacts on jealousy were chosen here, as since the seminal study by Muise,[2] many other studies have repeatedly shown that social networking sites (SNSs) can trigger jealousy. Further, the stark differences in affordances between the two sites would likely lead to different interpersonal effects, including jealousy. That is, because of the public nature of Facebook, much more information about a partner is available, and it is even socially acceptable to monitor a partner. On Snapchat, in contrast, the information is only visible to a small number of people, and it lasts only for a few seconds. An affordance approach was taken to derive hypotheses on how these differences in visibility and persistence might influence the experience of jealousy.

Theoretical Background

Snapchat use

The PEW Research Institute assessed Snapchat use for the first time in 2013 and found a prevalence of 12% of all smartphone users.[3] Roesner[4] surveyed 127 adult Snapchat users in the United States and found that it was mainly used for sending funny pictures, selfies, or snaps from other people. Only 1.3% used it primarily for sexting. However, 14.2% used it for sexting occasionally. Slightly more common was joke sexting, that is, sending sexual or pseudo-sexual material

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as a joke.[4] Roughly a quarter of the participants had engaged in this behavior occasionally. In the first research question, whether this pattern also holds for a predominantly European sample is examined:

RQ1: What type of pictures do people send on Snapchat?

Previous research has shown that some motives for using SNSs are staying in touch with friends and acquaintances, staying in the loop, and receiving news.[5–7] But why do people use Snapchat? One could assume that they are mainly attracted by the privacy and the low persistence of the snaps. A recent report showed that college students in the United States felt they have the most privacy on Snapchat.[8] Also, Snapchat has a reputation for sexting.[4] Thus, it might be assumed that it is more often used for flirting than Facebook.

RQ2: What are the motives for using Snapchat?
RQ3: Are these motives different from the motives for using Facebook?

Jealousy

Jealousy is an emotion that occurs when there is a perceived threat to a valued relationship due to actual or imagined rivals.[9] Buunk[10] distinguishes between reactive, preventive, and anxious jealousy. Only reactive jealousy involves actual betrayal by the romantic partner. Anxious jealousy is characterized by obsessive worrying about the possible infidelity of the partner, and this form of jealousy can especially be influenced by the information provided on social media. In 2009, Muise et al.[2] developed a Facebook jealousy scale consisting of 27 items, asking how one would react to a specific scenario, for example when the partner posts pictures of him/herself with unknown members of the opposite sex. Most items covered anxious jealousy. Their study showed that frequent Facebook use did indeed increase jealousy.[2] Several studies since have shown that Facebook and the public information it provides about a partner can negatively impact relationships.[11–13] Expanding on this research, it is argued here that Facebook and Snapchat differ on some general affordances offered to users and might therefore also differ in the level of jealousy they elicit.

Treem and Leonardi[14] argue that social media differ in four main affordances: visibility, persistence, editability, and association. Here, the focus is mainly on the first two—visibility and persistence—as Facebook and Snapchat directly differ on these. Facebook is high in terms of visibility in that when users share something, it is often public to quite large audiences and can often be accessed indefinitely. Snapchat is low in terms of visibility and persistence. These differences in affordances may have different impacts on interpersonal relationships.

With regard to jealousy, it could be argued that a jealousy-evoking situation such as a partner posting a picture with a potential rival is perceived as a higher face-threat when it occurs in a more public context such as Facebook than on the more private Snapchat. It is known from face-to-face contexts that public self-threats evoke more jealousy than more private self-threats.[15] In the context of social media, it was shown that women (compared to men) were jealous when

threats to the relationship were more public on Facebook (i.e., their partner was tagged in a photo with an unknown woman, and this photo was public to their friends).[12] According to this argument, higher levels of jealousy should be experienced on Facebook than on Snapchat.

However, there is also an alternative line of reasoning focusing not only on the self-threat, but also on the attributions of social media (i.e., the privacy and availability of information) and the self- and partner-related perceptions that stem from these. Muscanell et al. also found that, regardless of gender, individuals felt jealous if they discovered that their partner had been tagged in a photo with an unknown person and that this photo was set to be private. Private information was seen as more secretive and suspicious, leading to jealousy within a relationship. Recent research further demonstrates that private communication elicits stronger negative emotions, and that more exclusive messages are seen as threatening to the relationship. Further, private communication and negative emotions were also linked to behavior outcomes—the intention to confront those involved (romantic partner or rival).[16] Because Snapchat has the reputation for being a private communication channel that allows one to send intimate communication more ''safely,'' learning of a partner's communication with unknown others on Snapchat may particularly elicit jealousy. Therefore, it is assumed:

H1: Snapchat jealousy is higher than Facebook jealousy.

In addition to differences in affordances, research has shown that personality differences can also explain jealousy on SNS. Specifically, Utz and Beukeboom[13] found that need for popularity was a predictor of Facebook jealousy. Need for popularity is a central motive for using SNS,[16] and is a consistent predictor of self-disclosure and other SNS behaviors.[17,18] Due to the affordance of editability, individuals high in need for popularity can carefully craft an idealized self-presentation, and due to the affordances of visibility, persistence, and association, they can reach a large audience.[13,17] Individuals with a high need for popularity also like to create an optimized picture of their relationship on SNS[13,19]; a partner posting pictures with rivals threatens this effort and elicits jealousy. It is expected that this effect would be replicated for Facebook jealousy:

H2: Individuals with a higher need for popularity experience higher levels of Facebook jealousy.

It is less clear how need for popularity is related to Snapchat jealousy. Due to the low persistence and visibility of snaps, Snapchat does not provide such an optimal stage for an idealized self-presentation. But using Snapchat might be driven by need for popularity because it is cool to be one of the early adopters. People high in need for popularity might also in general be more prone to react to signals indicating a potential threat to the picture they try to create of their happy relationship. Thus, it is expect that higher levels of need for popularity also predict higher levels of Snapchat jealousy.

H3: Individuals with a higher need for popularity experience higher levels of Snapchat jealousy.

Method

Participants

An online survey was conducted among users of both Snapchat and Facebook. The aim was to recruit active Snapchat users who also use Facebook by posts on social media sites such as Snapchat (network of one of the authors), Facebook, and Twitter (#snapchat). A total of 77 participants (18 male; $M_{age} = 22$ years, $SD = 4.21$ years; 31 from Scotland, 24 from England, three outside Europe, the remainder from other European countries) completed the survey. Two male and two female participants were homosexual, and one female participant was bisexual.

Procedure

After completing the consent form and being given general information about the study, participants answered basic demographic questions, and questions on Facebook and Snapchat use and motivations. Next, Snapchat and Facebook jealousy were assessed. Finally, need for popularity and self-esteem were measured. At the end, participants were debriefed about the goal of the study.

Measures

Participants indicated how often they logged into Facebook and Snapchat on a scale ranging from 1 = "several times a day" to 6 = "less often." For Snapchat, they also indicated how many snaps they sent in an average week, ranging from 1 = "5 or less" to 7 = "more than 100." Participants also indicated how many friends they had on the respective platforms.

Motivations for using Facebook and Snapchat were measured on a 5-point scale (e.g., "I mainly use Facebook/Snapchat to keep in touch with family and friends"). Based on Roesner et al.,[4] participants were given a list of content and asked to select all the ones they send via Snapchat. "Drunk Photos" was added as an option.

The jealousy scale by Muise et al.[2] was adapted. For the 14 items that could also be applied to Snapchat, parallel versions were developed by replacing "Facebook" with "Snapchat." Participants indicated the likelihood that they would become jealous in specific situations (e.g., "if your partner sends pictures of him/herself with a previous romantic or sexual partner") on a 7-point scale, ranging from very unlikely to very likely (Cronbach's $\alpha = 0.93$ for both forms of jealousy). The scale was also adapted to the sexual orientation of the participants.

Need for popularity was assessed with seven items from the popularity scale by Santor et al.[20] Participants indicated on 7-point scales their agreements with statements such as "I have neglected some friends because of what others might think of them" (Cronbach's $\alpha = 0.75$). For exploratory reasons, self-esteem was measured using Rosenberg's self-esteem scale[21] (Cronbach's $\alpha = 0.91$).

Results

Descriptives

Respondents logged into Snapchat less frequently (between daily and several times a week, $M = 2.36$, $SD = 1.35$) than Facebook (several times a day or daily, $M = 1.27$,

TABLE 1. TYPES OF PICTURES SENT VIA SNAPCHAT

The content I send via Snapchat includes…	Total participants (N = 77)
Funny things	98.7%
Myself	85.7%
What I'm up to	85.7%
Events	59.7%
Food	58.4%
People	57.1%
Animals	53.2%
Drunk photos	53.2%
Beautiful things	32.5%
Joke sexting	19.0%
Legally questionable activities	14.3%
Sexting	13.0%

$SD = 0.50$), $t(76) = 7.31$, $p < 0.001$. Respondents also had smaller networks (number of friends) on Snapchat ($M = 32$, $SD = 27$) than on Facebook ($M = 483$, $SD = 345$), $t(76) = -11.67$, $p < 0.001$.

With respect to RQ1 (see Table 1), it was found that almost all Snapchat users sent snaps of funny things. Selfies or "what I am up to" snaps were also very popular (85%). Snaps of events, food, other people, animals, or drinking photos were sent by 50–60%. However, only 19% engaged in joke sexting, 13% in sexting, and 14.3% in sending snaps of legally questionable activities.

To answer RQ2 and RQ3, the motives for Snapchat and Facebook use were compared. For Snapchat, procrastination was by far the most popular motive, followed by keeping in touch with family and friends, and seeing what people are up to. The same top three motives emerged for Facebook. As can be seen in Table 2, respondents scored significantly higher on almost all Facebook motives. However, Snapchat was used marginally more often for flirting and finding new love interests. Use for communicating with one's romantic partner was the only motive that did not differ between Facebook and Snapchat.

Hypotheses tests

In line with H1, Snapchat jealousy was higher ($M = 3.58$, $SD = 1.22$) than Facebook jealousy ($M = 3.37$, $SD = 1.24$),

TABLE 2. MOTIVES FOR SNAPCHAT AND FACEBOOK USE

	Snapchat	Facebook	p-Value
Distraction or procrastination	3.46	4.09	***
Keeping in touch with friends and family	2.87	4.20	***
Seeing what people are up to	2.82	4.15	***
Being part of the information loop	2.58	3.75	***
Communicating with my partner	2.51	2.45	>0.05
Flirting or finding new love interests	1.74	1.58	*
Meeting new friends	1.32	1.72	***

***$p < 0.001$; *$p < 0.10$.

$t(76) = 3.18$, $p < 0.01$. A closer look at item level (see Table 3) indicated that participants felt the most jealous (compared to Facebook, by level of significance) when the partner added or messaged a previous partner or an unknown person of the opposite sex. Only when the partner received a snap or wall post from an unknown member of the opposite sex was jealousy higher on Facebook.

Need for popularity correlated with both Facebook jealousy, $r(77) = 0.28$, $p < 0.05$, and Snapchat jealousy, $r(77) = 0.26$, $p < 0.05$, thereby supporting H2 and H3.

Finally, testing for gender differences and self-esteem revealed no significant influence for these variables on Snapchat or Facebook jealousy.

Discussion

This study is the first to compare directly Snapchat and Facebook—two social media that differ starkly in their general affordances and their potential interpersonal impacts. The levels of jealousy evoked by Snapchat were examined and contrasted with Facebook jealousy. Although both media did not trigger extremely high levels of jealousy, Snapchat did elicit more jealousy than Facebook. Moreover, need for popularity was positively related to both forms of jealousy. Overall, this study demonstrates how the affordances of social media may lead to different psychological consequences. People may perceive interpersonal behaviors differently based on the nature of the communication technology itself.

The study also shed more light on Snapchat usage and motivations, which currently is an understudied area. First, Snapchat is used less frequently than Facebook, and users have much smaller networks on Snapchat. One explanation could be that Snapchat is newer; it might take time to build larger networks. However, the smaller network size could also be driven by the more private nature of Snapchat. If people choose Snapchat to escape from the public one-to-many communication that is the default on Facebook, it would not make sense to build an equally large network on Snapchat.

Roughly 13–20% of participants engaged in (joke) sexting or sending snaps of legally questionable activities using Snapchat. Sexting rates are difficult to compare across studies because they are operationalized in different ways,[22] but these values are not unusually high.[23,24] Interestingly, roughly half of the participants had sent drunk photos, indicating that Snapchat users might share certain sensitive information because they do not have to worry about the reactions of parents, teachers, or potential future employers.

Respondents had lower scores on many of the Snapchat motivations, indicating that Snapchat is not (yet) as popular as Facebook. Procrastination and distraction was the most popular reason for using Snapchat, followed by keeping in touch with friends and seeing what others are up to. The top three motives are the same as those reported for Facebook use. Moreover, the most commonly sent snaps were funny pictures and selfies, indicating that Snapchat use resembles Facebook use in many respects. However, Snapchat was used somewhat more for flirting than Facebook.

Partner behaviors on Snapchat evoked higher levels of jealousy than the same behaviors on Facebook. Thus, people seem to be more distrustful if the partner chooses a more

TABLE 3. FACEBOOK VERSUS SNAPCHAT JEALOUSY

How likely are you to…	Snapchat, M (SD)	Facebook, M (SD)	p-Value
Become jealous if your partner sends pictures/makes wall posts of him/herself that are sexually provocative?	5.29 (1.73)	4.79 (1.86)	**
Become jealous if your partner sends pictures/makes wall posts of him/herself with a previous romantic or sexual partner?	5.18 (1.58)	4.82 (1.76)	**
Become jealous if your partner added a previous romantic or sexual partner to his or her friends list?	4.51 (1.80)	3.97 (1.82)	***
Become jealous if your partner private messaged an unknown member of the opposite sex?	4.26 (1.74)	3.61 (1.99)	**
Become jealous if your partner sends pictures/makes wall posts of him/herself with unknown members of the opposite sex?	4.09 (1.72)	3.75 (1.75)	**
Become jealous if your partner sends pictures/makes wall posts of him/herself with an arm around a member of the opposite sex?	3.97 (1.68)	3.45 (1.65)	**
Become jealous if your partner sends a snap/wall post to an unknown member of the opposite sex?	3.55 (1.71)	3.28 (1.80)	>0.05
Become jealous if your partner has added an unknown member of the opposite sex?	3.26 (1.85)	2.73 (1.62)	**
Check your partners "top friends"/Facebook page on a regular basis?	3.08 (2.11)	3.47 (2.04)	>0.05
Become jealous if your partner private messaged a mutual friend of the opposite sex?	3.06 (1.72)	2.81 (1.69)	>0.05
Become jealous if your partner has received a snap/wall post from an unknown member of the opposite sex?	3.04 (1.58)	3.40 (1.85)	*
Worry that your partner is using Snapchat/Facebook to initiate relationships with members of the opposite sex?	2.52 (1.62)	2.64 (1.77)	>0.05
Become jealous if your partner has received a snap/wall post from a mutual friend of the opposite sex?	2.22 (1.27)	2.22 (1.36)	>0.05
Become jealous if your partner sends a snap/wall post to a mutual friend of the opposite sex?	2.16 (1.32)	2.14 (1.31)	>0.05

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$.

private channel for communicating with a potential rival. Differences between Facebook and Snapchat jealousy were especially strong for items involving a former romantic partner or an unknown potential rival, indicating that uncertainty plays a role. Ex-partners might still be interested in their former partner, and it is more difficult to judge the intentions of unknown persons than of mutual friends. In general, the pattern suggests that a partner's choice of private communications is attributed as a more serious threat to the relationship. In general, scenarios in which the partner sent sexually provocative pictures were perceived as most threatening, but this behavior could be seen as reactive jealousy. There were no differences in monitoring behavior or general worrying that the partner might initiate a new relationship on Facebook or Snapchat. Interestingly, when it comes to *receiving* (vs. sending) a post from an unknown potential rival, jealousy was higher on Facebook. It seems that threats from third persons are perceived as more threatening when they are public. As in other studies, the jealousy levels were below the midpoint of the scale.[2,12,13] These results show that although social media can evoke jealousy, they do not make everyone highly jealous. No gender effects were found in the current study, but this might be due to the small sample of male participants.

This study is not without limitations. Although the invitations were spread not only in the Snapchat network of one of the authors, but also on Twitter using the hashtag #snapchat, the sample is relatively small. Although increasingly more people have an account, Snapchat remains far behind Facebook in popularity, at least in Europe, making it difficult to find *active* users. Nonetheless, this is one of the first examinations of mostly European Snapchat users. The majority of respondents were female and Scottish or English. Nevertheless, our findings on the types of snaps sent closely resemble the ones found by Roesner[4] for an American and predominantly male sample. A strength of the study is that within-subjects comparisons of Snapchat and Facebook use were used. The higher levels of Snapchat jealousy can therefore be attributed to the different affordances of the platforms and not to personality differences between Snapchat and Facebook users. Future research could use longitudinal designs to examine jealousy levels before and after Snapchat use and should also measure potential underlying processes, such as attribution processes and perceived face-threat. Further, other interpersonal consequences should be examined in addition to jealousy.

Author Disclosure Statement

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