The Effect of Social Media Platforms
On Perceptions of Flirtatiousness and Discomfort

Brynn Motal

California Polytechnic State University, San Luis Obispo

June 6, 2019
Abstract

This study examines recipients’ perceptions of an acquaintance’s message when sent through various social media platforms to identify the effect it has on the perception of discomfort and flirtatiousness. A posttest-only experimental design was utilized in which participants viewed hypothetical messages over varying platforms for each of the three conditions (Facebook, Snapchat, Instagram). After viewing one of the manipulated messages, participants (N = 71) completed measures to assess their perceptions related to perceived flirtatiousness and discomfort. Primary results indicate that there was no variation between perceptions of flirtatiousness between the three platforms. However, Facebook provided the most discomfort for recipients, Instagram provided moderate discomfort, and Snapchat provided recipients with the least perceived discomfort. This study suggests that different social media platforms can contribute to different levels of discomfort when receiving a somewhat vague message from an acquaintance.

*Keywords:* Flirtatiousness, discomfort, social media platform
The Effect of Social Media Platforms

In our technologically advanced society, there are a plethora of social media platforms that one can use to communicate a message; but how does one know which medium will most effectively convey their intended message? Social media platforms function as communication tools that allow users to send and receive messages. Though research has begun to study social media platform usage within broad domains, only a moderate number of studies have examined the variance in perception of messages when received on different social media platforms. For the purpose of this study, three social media platforms will be examined: Facebook, Snapchat, and Instagram. On this topic, one report indicates that college students in the United States feel that they have the most privacy on Snapchat (Bennett, 2014). Thus, it may be assumed that Snapchat is a more comfortable and more frequently used social media platform for flirting. The goal of this research is to examine recipients’ perceptions of an acquaintance’s message when sent through various social media platforms to identify the effect it has on one’s perception of discomfort and flirtatiousness.

Literature Review

Explicating Social Media Platforms

Social media is a global and ubiquitous phenomenon that has impacted the lives of billions. Internet tools have altered the way we interact through the myriad of different platforms one can choose from to communicate and engage with others daily. In particular, social media has a notable impact on young adults (ages 18-29), with 90% reporting being social media users (Perrin, 2015). For the purpose of this study, social media is defined as websites and applications that allow users to send and receive messages. A platform is defined as the web-based technology that enables the usage of social media services. The independent variable of
this study is the social media platform the recipient experiences a message on. Three levels of the independent variable will be examined in the study: Facebook, Snapchat, and Instagram.

**Facebook**

Facebook is a social media platform developed in 2004, which was designed with a mission to “give people the power to share and make the world more open and connected” (Facebook, 2016). Facebook allows users to add friends, send messages, and update personal profiles in order to notify friends and peers about themselves (Quan-Haase & Young, 2010). In 2008, amidst the rise of instant messaging, Facebook introduced its chat feature, “Facebook Chat,” which is a private chat room for users to exchange messages in real time (Facebook, 2016). To examine messages received from comparable platforms, this study will focus specifically on examining the “Facebook Chat” feature in this tool.

**Snapchat**

Snapchat, founded in 2011, is a social media mobile application that allows users to send and receive time-sensitive photos and videos, which expire upon viewing (Stec, 2015). The rise in Snapchat has been one of the most rapid and unprecedented in the history of instant messaging services, with its estimated user base growing from 10 million in mid-2012 to over 70 million in early 2014, and 100 million in early 2015 (Rufferty, 2017). Snapchat sets itself apart from the vast majority of social media platforms because it is a temporary form of social media, meaning the content, posts, pictures, and videos disappear or self-destruct after a specified time frame (Stanley, 2015). When sending a Snapchat message in the “chat room,” the message deletes after it is opened, unless it is held down by the recipient to use the “save in chat” feature or the recipient takes a screenshot of it. To examine messages received from comparable platforms,
this study will focus specifically on the messaging that takes place in the Snapchat “chat room” (solely focusing on text interactions).

**Instagram**

Instagram is an immensely popular platform that, as of June 2018, has generated nearly 1 billion active monthly users (Statista, 2018). Instagram is a free photo and video sharing social networking platform where users can upload photos or videos and share them with their followers or a select group of friends, and users can comment and like posts that are shared (Instagram, 2019). Additionally, Instagram has a direct message feature that allows users to send messages, photos, or videos to one or more people that are saved in the chat once sent or received. To examine messages received from comparable platforms, this study will focus specifically on examining text interactions in Instagram direct messages.

**Uses and Gratifications Theory**

One theory that is useful in explaining how and why different social media platforms may affect a person’s perception of a message is Uses and Gratifications Theory (UGT). UGT (Katz, Blumer, & Gurevitch, 1974) is a framework that explains that people actively seek out specific types of media. The primary objective of UGT is to explain people’s psychological reasons and motivations for using a certain media tool and how that gratification fulfills their intrinsic needs (Ko, Cho, & Roberts, 2005). Key assumptions of the UGT’s framework are that audiences are goal-directed in their media selection and actively interpret and integrate media messages within their daily lives, so as to achieve optimal levels of gratification (Katz, Blumer, & Gurevitch, 1974). Essentially, UGT provides a foundation for understanding why users of each social media platform may differ in motives for using, and gratifications derived from each social media platform. Therefore, differing perceptions of each platform may contribute to why a
sender may be more inclined to choose a certain social media platform over another in order to effectively convey their intended message. In addition, users may also experience different gratifications when receiving a message from different platforms as well.

Previous research has suggested why social media users may be more inclined to use social media platforms differently because of their individual uses and gratifications. As mentioned previously, a report on college students in the United States indicated that they felt they had the most privacy on Snapchat compared to other social media platforms (Bennett, 2014). Because Snapchat is a temporary form of social media, it reduces the need for self-censorship and is linked to more intimate and personal forms of sharing including sexting (Khalid, Muscanell, & Utz, 2015). Relatedly, a previous study found that the dominant difference in motives between Snapchat and Facebook was 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 (Khalid, Muscanell, & Utz, 2015). Essentially, UGT suggests Snapchat may be used for flirting more frequently. Therefore, it may be assumed to cause less discomfort for recipients. Still, more research is needed in connection to UGT to predict how varying social media platforms may impact the way a message is perceived.

Explicating Perceptions of a Message

Given that different social media platforms may contribute to various perceptions, it is necessary to examine how each platform might impact recipients’ perceptions of a message. For the purpose of this study, the perception of a message is defined as the unique perspective people use to interpret a communication message they receive. Two particular perceptions are examined in this study: flirtatiousness and discomfort.
**Flirtatiousness.** According to Feinberg (1996), the purpose of flirting is to portray sexual attraction. Similarly, this study defines flirtatiousness as behaving as if you are sexually attracted to someone. Although flirting has been traditionally perceived via face-to-face communication interactions, with the prevalence of social media, flirting is an online growing phenomenon. Previous research has examined the perceived impact of online versus offline flirting in romantic relationships. Research has suggested that behaviors online differ radically than behaviors offline due to online disinhibition when engaging in computer-mediated behavior (Suler, 2004). Thus, it may be assumed people flirt in ways on social media platforms that are different than their flirting behaviors exhibited in person. Additionally, Khalif, Muscanell, and Utz (2015) found that Snapchat was more frequently used for flirting than Facebook; therefore, it may be assumed users have different perceptions of social media platforms and would feel more comfortable receiving a flirty message on Snapchat rather than Facebook.

**Discomfort.** Scholarly research has previously indicated concerns that media users can potentially experience feelings of discomfort and some of them might suffer severe loss of mental well-being (Valkenburg, Peter, & Schouten, 2006). For the purpose of this study, discomfort is defined as making someone feel uneasy or anxious. Social media has the ability to make users feel uncomfortable, and among users, those who have had some kind of unwanted contact online that made them feel scared or uncomfortable are among the most likely to say that they limit what certain friends can see on their profile (Madden et. al, 2014). Each of us have a social media comfort zone; the behavioral space where activities and behaviors feel familiar and minimizes levels of stress and anxiety (Mayfield & Kryder, 2018). Thus, some social media platforms may be out of a user’s comfort zone, therefore, they may choose certain platforms based on their personal motives for using and gratifications they derive from each. Based on the
literature that has demonstrated a myriad of different motivations to choose a specific social media platform to send a message over another, the following two hypotheses are proposed:

**H1:** The *social media platform* a message is received on (Facebook, Snapchat, Instagram) will influence perceptions of *flirtatiousness* of the message; such that, (a) Snapchat will be perceived as the most flirtatious, (b) Instagram will be perceived as moderately flirtatious, and (c) Facebook will be perceived as the least flirtatious.

**H2:** The *social media platform* a message is received on (Facebook, Snapchat, Instagram) will influence perceptions of *discomfort* of the message; such that, (a) Facebook will provide the most discomfort, (b) Instagram will provide moderate discomfort, and (c) Snapchat will provide the least discomfort.

**Method**

This study tested how different social media platforms would affect perceptions of a message in terms of flirtatiousness and discomfort. To test the hypotheses, a posttest-only experimental design was utilized in which participants viewed hypothetical message over varying platforms for each of the three conditions (Facebook, Snapchat, Instagram). The hypothetical message was designed to be from someone the opposite gender of the recipient that they had known for a year and talk to from time to time.

**Participants**

Seventy-one college students from Cal Poly, San Luis Obispo were recruited for this experiment. Participants included 23.9% males and 76.1% females with a mean age of 21.16 years (SD = 1.29). They also represented a variety of student levels: 5.6% first-years, 22.5% second-years, 22.5% third-years, 46.5% fourth-years or above, and 2.8% graduate students. Regarding ethnicity, 1.4% were American Indian or Alaskan Natives, 8.5% were Asian or Pacific Islanders, 1.4% were Black or African American, 9.9% were Hispanic or Latino, 73.2%, and were White or Caucasian, and 5.6% were multiracial.
Procedures

Using a volunteer sampling method, students were primarily recruited through Cal Poly in-class participation. Using a snowball sampling approach, invitations to participate were also given via various Cal Poly Facebook groups. First, the questionnaire began with a consent form that informed students that their participation was voluntary and anonymous. Next, participants were randomly assigned to view one of three social media platform conditions (Appendix A1-3). After reading the hypothetical message written by an acquaintance, participants reported their perceptions regarding flirtatiousness and discomfort by filling out the appropriate measures (Appendix B). Lastly, respondents completed a manipulation check measure (Appendix B) to ensure they were cognizant of the platform they viewed the message on. The manipulation check was followed by questions about participant demographics (age, sex, year in college, and ethnicity). As an incentive, participants had the option to complete a Google form to receive extra credit. The Qualtrics data and Google form data were not linked.

Stimulus Materials

Participants were randomly assigned to read the hypothetical message on varying social media platforms: Facebook, Snapchat, and Instagram. Thus, the manipulated social media platform was our independent variable. Previous research employed similar inductions: for example, Khalid, Muscanell, & Utz (2015) looked at the difference in motives between Snapchat and Facebook. Similarly, Shane-Simpson et. al. (2018) examined why college students prefer Facebook, Twitter, or Instagram.

The hypothetical message imitated a message from someone of the opposite gender of the recipient (Taylor Doe) that they had “known for a year and talk to from time to time.” The message in the study was asking the recipient if they wanted to get dinner together (Appendix
A1-3). The message was constructed to appear as an actual message sent over one of the three social media platforms (Facebook, Snapchat, Instagram). Although the message text was the same in all three conditions, the platform used to send the message varied; therefore, the message visually appeared somewhat different.

**Measures**

**Flirtatiousness.** To assess perceived flirtatiousness as the first dependent variable, a flirtatiousness measure was adapted for this study. This adapted measure was composed of 5 Likert-scale items ranging from 1 - 7 (strongly disagree to strongly agree). Items included examples such as: “I would perceive this message as flirtatious” and “I would think this person is interested in me” (Appendix B). The reliability for this scale was high ($\alpha = .86, M = 4.78, SD = 1.39$).

**Discomfort.** To assess perceived discomfort as the first dependent variable, a discomfort measure was adapted for this study. This adapted measure was composed of 5 Likert-scale items ranging from 1 - 7 (strongly disagree to strongly agree). Items included examples such as: “I would feel uncomfortable” and “I would perceive this as abnormal” (Appendix B). The reliability for this scale was also high ($\alpha = .91, M = 3.43, SD = 1.65$).

**Manipulation Check.** To assess the degree that participants noticed the social media platform they received the message on (Facebook, Snapchat, Instagram) a manipulation check was utilized. In order to show that this manipulation was effective, participants should perceive the Facebook message as coming from Facebook, the Instagram message as coming from Instagram, and the Snapchat message as coming from Snapchat. This adapted measure was composed of 1 item asking, “Thinking back, what platform did Taylor Doe use to send you a message in the scenario listed at the beginning?” Those in the Facebook manipulation should
report a 1; those in the Snapchat manipulation should report a 2; those in the Instagram manipulation should report a 3. Results showed that this was the case for Facebook: ($M = 1.00$, $SD = 0.00$), and Snapchat: ($M = 2.00$, $SD = 0.00$), however, this was not the case for Instagram ($M = 2.27$, $SD = .93$). Thus, since the mean value of Instagram was 2.27, it is clear that the platform was conflated with Snapchat and Facebook. Although, this manipulation was shown to be effective overall as the differences were in the expected direction and significant $F(2,68) = 39.02$, $p < .001$. Still, Instagram and Snapchat were not seen as significantly different ($p = .179$). Therefore, the primary differences in this study emerged between Facebook and Instagram.

Results

SPSS version 25.00 was utilized to analyze experimental data. Given the proposed hypotheses, a one-way ANOVA was conducted to examine differences between groups regarding perceptions of flirtatiousness and discomfort when a message was received over varying social media platforms. Results and conclusions are subsequently discussed.

Hypothesis one predicted that the social media platform the message was received on would influence perceptions of flirtatiousness of the message. To test the hypothesis, an analysis of variance (ANOVA) was performed. Findings indicate that each of the three platforms had similar perceived level of flirtatiousness on Facebook ($M = 4.68$, $SD = 1.41$), Snapchat ($M = 4.70$, $SD = 1.32$), and Instagram ($M = 4.98$, $SD = 0.68$). Not surprisingly, differences were not statistically significant overall, $F(2, 67) = .475$, $p = .624$. Therefore, hypothesis one was not supported.

Hypothesis two predicted that the social media platform the message was received on would influence perceptions of discomfort of the message. To test the hypothesis, an analysis of variance (ANOVA) was performed. Findings indicate that the message received on Facebook
had the most perceived discomfort ($M = 4.12, SD = 1.91$), the message received on Instagram had a moderate level of perceived discomfort ($M = 3.24, SD = 1.0$), and the message received on Snapchat had the least perceived discomfort ($M = 2.92, SD = .86$). Differences were statistically significant overall, $F(2, 68) = 5.10, p = .009$. Therefore, hypothesis two was supported.

**Discussion**

This study tested recipients’ perceptions of an acquaintance’s message when sent through various social media platforms to identify the effect it had on perceptions of discomfort and flirtatiousness. After reading a message from an acquaintance asking them out to dinner on varying social media platforms, participants rated perceptions of flirtatiousness and discomfort. Overall, recipients perceived that the message was most flirtatious when received on Instagram, however differences were not statistically significant. Still, recipients did indicate that they felt the most discomfort when receiving the message over Facebook; these differences were statistically significant.

Hypothesis one predicted that the social media platform the message was received on (Facebook, Snapchat, Instagram) would influence perception of flirtatiousness of the message; such that, Snapchat would be perceived as the most flirtatious; Instagram would be perceived as moderately flirtatious; and Facebook would be perceived as the least flirtatious. This hypothesis was not supported. Findings indicate that it made little difference what platform the message was received on.

Hypothesis two predicted that the social media platform the message was received on (Facebook, Snapchat, Instagram) would influence perception of discomfort of the message; such that, Facebook would provide the most discomfort, Instagram would provide moderate discomfort, and Snapchat would provide the least discomfort. This hypothesis was supported.
Findings indicate that the message received on Facebook had the highest perceived discomfort, the message received on Instagram had a moderate level of perceived discomfort, and the message received on Snapchat had the least perceived discomfort. Therefore, when taking into account both findings, the social media platforms (Facebook, Snapchat, Instagram) affect perceptions of discomfort of the message, however, they do not affect perceptions of flirtatiousness.

These results do not fit into the context of past research. As previously mentioned, Bennett (2014) indicated that college students in the United States felt they had the most privacy on Snapchat, therefore, it was assumed that Snapchat would be a more comfortable and more frequently used social media platform for flirting. Additionally, Khalif, Muscanell, & Utz (2015) found that Snapchat was more frequently used for flirting than Facebook; therefore, it was assumed users would have different perceptions of social media platforms and would feel significantly more comfortable receiving a flirty message on Snapchat rather than Facebook. However, these assumptions were not fully supported.

Theoretical Implications.

These findings are useful to consider in the context of UGT (Katz, Blumer, & Gurevitch, 1974). As previously discussed, the primary objective of UGT is to explain people’s psychological reasons and motivations for using a certain media tool and how that gratification fulfills their intrinsic needs (Ko, Cho, & Roberts, 2005). Based on this theory alone, one might predict a user would be inclined to use a certain social media platform over another because of user perceptions. As previously stated, research has indicated Snapchat is more frequently used for flirting than Facebook (Khalif, Muscanell, & Utz 2015); therefore, if one is seeking a significant other, they may choose Snapchat to flirt in order to fulfill their intrinsic needs.
However, this study’s results instead suggest that a message is not perceived as more flirtatious on specific platforms, although, the message was perceived as more uncomfortable. Therefore, when looking to flirt, one may want to do so over Snapchat because it is perceived to be more comfortable. As such, this study pushes the boundaries of this theory forward to suggest that certain social media platforms can increase gratifications of comfort.

**Limitations**

This study had three predominant limitations, which are essential to acknowledge because they may have affected the results. The first limitation is that because this study measured participant perceptions through an internet questionnaire tool, it was not possible to control environmental influences that may have affected participant responses. There are many different reasons that people may have not self-reported their answers to the best of their abilities, such as rushing through the questionnaire or the contextual setting in which they completed the questionnaire. Different environments, such as work, school, home, or in public, may have distracted or impacted respondents’ self-reporting abilities or answers. Thus, there may have been unintended confounding variables that interfered with the study. Additionally, numerous other potential problems exist with online questionnaires, such as the potential for missing data, unacceptable responses, duplicate submissions, and internet-abuse (Schmidt, 1997). For this study, many responses had to be thrown away due to the reasons previously noted.

Second, the experimental design utilized in this study manipulated hypothetical scenarios. Since this study sought out to manipulate scenarios, there may have been an intrinsic threat to ecological validity. Ecological validity refers to the extent that findings can be generalized to real-life behaviors and interactions (Frey, Botan, & Kreps, 2000). When research is conducted in
natural environments, instead in manipulated scenarios, it is more likely to produce results suggestive of how participants respond in real life settings (Bormann, 1970; Dollar & Merrigan, 2002). Thus, it is unclear how people may perceive social media platforms in real-life scenarios because this study manipulates hypothetical messages only. Studies that examine real-life social media message interactions rather than self-reported perceptions may teach researchers more about social media platform perceptions.

Lastly, this study used social media platforms (Facebook, Snapchat, Instagram) to manipulate real-life text interactions. On social media platforms, users have an avatar or profile picture that may influence perceptions of the person they are communicating with. People use cues from a picture (photograph or avatar) from a profile when forming impressions (Bacev-Giles & Haji). In Facebook and Instagram manipulation there was no avatar, however, on Snapchat manipulation there was a gender-neutral avatar (Appendix A1-3). Thus, the avatar featured on the Snapchat manipulation could have altered participants perception of flirtatiousness and discomfort of the message.

**Direction for Further Research**

This study examined the ways social media platforms influence perceptions as perceived by message recipients. However, little research explores why people choose certain social media platforms to direct message people. One study found in regards to motivations to use Facebook, Snapchat, and Instagram, participants reported using all three platforms equally to share information (Alhabash & Ma, 2017). However, each platform differs starkly in their general affordances and potential interpersonal impacts (Khalid, Muscanell, & Utz, 2015). Therefore, more research is needed to examine the motivations and self-fulfilling purposes of selecting a social media platform for interpersonal messaging.
Additionally, an assortment of factors may play a role in social media platform selection. However, research exploring social media platform selection is currently lacking. Speculation suggests that whether we are digital natives or digital immigrants influences our use of social media as well as our communication preferences (Mayfield & Kryder, 2018). In other words, those who were born with social media may use and communicate on social media platforms differently than those who adopted social media in their lifetime. Because few studies have investigated this area, empirical research needs to better explore the factors that moderate social media platform selection.

**Concluding Remarks**

Though flirtatious communication once primarily took place via traditional face-to-face methods, with the rise and prevalence of social media platforms, increasingly online flirting is a growing phenomenon. Past research indicated that mediated text-based communication may lack relational cues necessary to convey emotion and build relationships (Dobransky & Frymier, 2004). Additionally, research has noted how people say and do things in cyberspace that they would not normally do in the face-to-face context (Joinson, 1998). Therefore, relational and social cues remain important components of social interactions and perceptions. The results of this study suggest that messages over Facebook are perceived as more uncomfortable; thus, social media users should apply this research to utilize different social media platforms in order effectively convey their intended message.
References


Khalid, Muscanell, & Utz, 2015 “Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use”


APPENDIX A1

Manipulated Message -- Facebook

*Imagine you are receiving this message from someone the gender opposite of yours on Facebook. You have known this person for a year and talk from time to time.*

![Facebook Message](image1)

APPENDIX A2

Manipulated Message -- Snapchat

*Imagine you are receiving this message from someone the gender opposite of yours on Facebook. You have known this person for a year and talk from time to time.*

![Snapchat Message](image2)
APPENDIX A3

Manipulated Message -- Instagram

Imagine you are receiving this message from someone the gender opposite of yours on Facebook. You have known this person for a year and talk from time to time.

Hey, what are you doing tonight? I am going out to dinner, are you free?
APPENDIX B

Outcome Measures

Flirtatiousness Measure (1-7 Strongly Disagree to Strongly Agree)

1. I would perceive this message as flirtatious.
2. I would wonder if this person is asking me on a date.
3. I would think this person is interested in me.
4. I would consider this a pick up line.
5. I would think this person has romantic feelings toward me.

Discomfort Measure (1-7 Strongly Disagree to Strongly Agree)

1. I would feel uncomfortable.
2. I would perceive this as abnormal.
3. I would feel awkward.
4. I would feel anxious about their intent.
5. I would feel unsettled.

Manipulation Check Measure

Thinking back, what platform did Taylor Doe use to send you a message in the scenario listed at the beginning?

1. Facebook
2. Snapchat
3. Instagram