

Self-Curated Temptation: Attention to Alternatives in the Age of Social Media

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### **Abstract**

It has been debated that some people, such as those who are higher in relationship commitment, are better equipped to ignore the temptations of alternatives to their romantic partner. However, the majority of the research on this topic has focused on self-reported recall of relationship alternatives or responses to stimuli curated by others. Recent technological advances and social media present new opportunities to be exposed to tempting alternatives, as well as curate tempting online networks. Two studies tested whether differences in relationship commitment predicted whether people curate relatively more or less tempting social media content. Consistent with prior research, study 1 (N=244) found people higher in relationship commitment reported following fewer attractive alternatives on Instagram. However, people relatively high and low in commitment did not differ in the actual proportion of attractive alternatives they followed on Instagram, as coded by the researchers. Furthermore, Study 2 (N=306) showed that although people who were more committed to their relationship derogated alternatives more following relationship reminders (i.e., a mating prime), they did not pay less attention to or follow fewer new Instagram accounts than people who were less committed. Likewise, people relatively high and low in commitment did not differ across any measure in the condition without relationship reminders (i.e., control condition). Overall, these findings suggest commitment plays a role in attention to alternatives on social media when people are asked to report on their behaviors, but it does not significantly impact people's actual behaviors on Instagram. There may be some form of cognitive protection when it comes to self-reporting about interest in alternatives, but actual social media behaviors are not allotted the same protection and can vary regardless of commitment level.

## CHAPTER 1

### Introduction

Few things undermine relationship stability like a wandering eye. Believing that there are many attractive fish in the sea erodes relationship satisfaction and threatens the bedrock of the relationship (Miller, 1997; Rusbult, 1983; Gangestad & Thornhill, 1997). Thus, limiting attention to attractive alternatives is important for the long-term success of a relationship (Maner, Gailliot, & Miller, 2009). Not everyone is equally susceptible to such temptation. For instance, people high in relationship commitment tend to overlook or devalue alternatives compared to their less committed counterparts, protecting them from the potential allure (Finkel et al., 2002; Maner, Rouby, & Gonzaga, 2008; Maner et al., 2009; Miller, 1997; Rusbult, 1983; Rusbult, Martz, & Agnew, 1998). However, rapid advances in technology mean that temptation is now often at a person's fingertips. In this modern day and age, social media presents unique opportunities to expose people to an ever-increasing pool of attractive romantic alternatives. Unlike conventional media (e.g., television; film), where content is selected by others, social media platforms, such as Instagram, enable users to curate their own content. For some, this gives them the control to "block out" temptations. For others, it may mean curating social media content that bombards them with countless temptations through beautiful and stylish images of attractive people. The question becomes, how do these decisions impact social media users' relationships, and is social media engagement indirectly affected by differences in a desire to avoid temptation? The current research aims to address the limitations in existing attention to alternative research that has focused solely on the forsaking of romantic alternatives curated by others (i.e., conventional media) and in-person interactions, rather than temptations on social media platforms where users have complete control over the content.

## CHAPTER 2

### **The Temptation of Relationship Alternatives**

Relationship alternatives come in many different shapes and forms. Anything or anyone that can fulfill needs currently filled by one's partner, such as hobbies, family, friends and other potential partners can be considered a relationship alternative (Rusbult, Martz, & Agnew, 1998). This current research looks specifically at alternatives in the form of potential partners. When people have high quality alternatives, they often report being less committed to their partner and, consequentially, the likelihood of their relationship persisting is lessened (Rusbult & Buunk, 1993). In monogamous relationships, alternative romantic partners pose as one of the greatest threats to the relationship. This is partially because alternative partners can negatively impact a person's perception of their own partner's mate value (Conroy-Beam, Goetz, & Buss, 2016). Mate value refers to how valuable a mate is as a reproductive partner based on the resources that they have and the means they possess to attain said resources (Barkow, 1989; Brase & Guy, 2004). Conroy-Beam, Goetz, & Buss (2016) refer specifically to mate value discrepancy which they conceptualize as how closely a partner matches with a person's ideal partner preferences. Evolutionary models suppose that ideal mate preferences, which have evolved from those of our early ancestors, map onto aspects of our partner and contribute to our reproductive success, specifically in regard to successfully raising an offspring (Gangestad & Simpson, 2000). Choosing a partner who is kind, fertile, healthy, and promotes overall evolutionary fitness has led to the success of modern humans today, and our present mate choices are largely linked to those of the past (Sugiyama, 2005). Mate preferences impact people directly through the attainment of resources and status, among other things, and these preferences also have a direct impact on one's offspring. Human offspring are essentially helpless for a longer period of time

than most animals, and mate preferences have evolved largely to find partners that will help support the offspring through the vulnerable period of development. From this particular evolutionary standpoint, with the emphasis on offspring, an ideal partner would be incredibly warm, unwaveringly loyal, in perfect health, stunningly attractive, and have the most social and financial capital. Unfortunately, no one person is capable of maxing out all of these ideals simultaneously across their entire adult life. Consequently, people end up compromising, ending up with partners who meet some of these ideals better than others.

These compromises create an opportunity to compare a partner's mate value against that of other potential partners. When a partner's perceived mate value is lower than that of an alternative partner, this may lead to questions of mate replaceability. Mate replaceability primarily describes cognitions of whether a person's partner, whom they have a large mate value discrepancy with, should be replaced with an alternative partner with a higher mate value. When a potential partner's mate value is seen as equal to or greater than the actual partner's mate value, people become less satisfied with their relationship and feel their partner is more replaceable (Conroy-Beam et al., 2016). Thus, the risk of leaving or cheating on a low-value partner might pay off if it gives someone the opportunity to upgrade to a higher value partner. Paying attention to alternative partners can therefore erode relationship stability if it leads people to see their partner as relatively less valuable, and consequently believe that they are possibly missing out on a better match. After all, humans have been defined as being "motivated tacticians," meaning that they are very selective in directing their attention to others who best fulfill their needs, and while more often than not this selectivity is intentional, other times humans are completely unaware of why their attention is grasped (Fiske, 1989; Bargh, 1994; Miller, 1997). Furthermore, Schmitt (2005) found evidence through his cross-cultural study of couples from 48 nations (6 continents,

10 islands, and 26 languages) that non-monogamous mating behaviors are in fact quite common. Schmitt therefore suggests that non-monogamous behaviors may be the preferred mating strategy for humans as men and women are not exclusively built for lifelong monogamous relationships, and various ecological factors influence the variabilities in human mating behaviors (Barash & Lipton, 2001). A number of these previous findings would make it appear as if people's default behavior is a constant awareness and allocation of attention to potential romantic alternatives.

### **The Benefits of Relationship Maintenance**

On one hand, there is a clear evolutionary rationale for keeping an eye out for better mating options. However, there is potentially an equally strong rationale for avoiding the temptations that can lead to a relationship dissolving, even if it involves a trade-in for a "better" match. Relationship dissolution is costly, and natural selection supports adaptations that reduce and avoid costs. For starters, people invest resources into their relationships, which can lead to serious personal costs if the relationship ends (Rusbult, 1983). These investments are resources that are given to or split between partners, and include everything from financial resources (e.g., shared bank accounts, shared living accommodations), to interpersonal resources (e.g., family members, intertwined social networks, offspring, pets), and even the time that has been invested into the partnership. When the relationship ends, these investments are either lost entirely (e.g., time) or need to be redistributed between the partners (e.g., finances, social networks).

Romantic partners are also an important resource when it comes to pursuing goals. Gomillion, Murray, and Lamarche (2015) provided evidence that a breakup can greatly impact the progress towards one's goals over time. The researchers found that when a person experienced a breakup with a partner that was influential to their personal goals, they moved further away from achieving their goals, meaning that people are far less likely to continue to

pursue the goals they had prior to the breakup. Partners provide instrumental and emotional support to each other, and partners who are instrumental to one another's goals ultimately facilitate goal pursuit rather than impede it. These conclusions emphasize the importance of maintaining one's relationship and the benefits that come along with it.

In addition to these heavy external costs other internal costs may include acute illness, increased stress, and a potential risk of mortality (Perilloux & Buss, 2008). Due to the nature of relationships leading to the intertwining of selves and causing one to progress from a "me" to an "us" perspective, breaking-up with a romantic partner can lead to a person not only losing an important person, but also lead to them losing a major source of how they defined themselves. Lewandowski et al. (2006) found that post-breakup, many of their participants reported feeling as if they had lost a piece of themselves. This great loss has been found to lead to confusion of self and also significantly linked to varying degrees of psychological distress and depressive symptoms (Boelen, Keijsers, & Van Den Hout, 2012; Drew, Heesakker, Frost, & Oelke, 2004). Chung et al. (2002) provided further evidence of psychological distress, or a negative impact on one's functioning in life, caused by a breakup. Through their research, they discovered that 43% of their participants experienced an increase in distress due to their breakup and scored beyond the cutoff values that screen for psychological distress, which could lead to them being thought of as psychiatric cases. Further research on the internal effects of relationship dissolution can be found in research by Sbarra, Hasselmo, and Bourassa (2015) who cite two meta-analysis studies which revealed that adults who had gone through divorce had a 20% to 30% increased risk of an early death compared to adults who were married. Thus, relationship dissolution is potentially very costly even in scenarios where people are leaving a less than ideal partner in favor of a "higher valued" alternative.

**Relationship Commitment & The Motivation to Stick Not Twist**

When people have invested a great deal into their relationships and feel their relationships are meeting their needs, they tend to be more committed to the relationship persisting, especially when the quality of attractive alternatives are low (Rusbult, Martz, & Agnew, 1998). Commitment more specifically describes the probability that involvement with a partner will persist (Arriaga & Agnew, 2001). Commitment to a romantic partner is associated with greater willingness to sacrifice for their partner, as well as a greater trust in a romantic partner (Stanley & Markman, 1992; Wieselquist et al., 1999; West, 2013). While the notion of commitment might seem rather straightforward, relationship commitment in reality is an extremely complex concept made up of a number of different factors (Adams & Jones, 1997). Rusbult and Buunk (1993) proposed that commitment is far more intricate and made up of more than just a person's want for the relationship to persist. They defined commitment as a state of mind that is subjective and includes emotional and cognitive components that directly influence an array of behaviors that function to benefit romantic relationships. A committed person is exceedingly connected to their partner and has a great desire to ensure the maintenance of their romantic relationship, "for better or worse" (Rusbult & Buunk, 1993). Furthermore, given the importance of relationship stability, people who are committed to their relationships have also developed a number of particularly interesting conscious and non-conscious pro-relationship behaviors to cope with the threat of attractive alternatives specifically. One such behavior is the disparagement of alternatives, which is comprised of the dismissal and/or derogation of alternative partners that may be tempting by expressing that they are less attractive and/or less ideal than one's current partner (Johnson & Rusbult, 1989; Miller, 1997). The notion of mate value discrepancy would propose that the derogation of alternative partners lowers their mate

value, which keeps a current partner's mate value high enough to justify persisting in the relationship. Disparagement becomes unnecessary if people are able to ignore alternatives altogether though. Because people are dependent on the good outcomes they receive from their partners, they should offer more of their attention to their partner and less to others. Additionally, because attention is finite and a major proportion of it is allocated to your partner, there is naturally less attention available for anything or anyone else (Shriffin & Schneider, 1977).

Highly committed people are able to further protect their relationships by ignoring the romantic alternatives available to them. Miller (1997) found evidence for this point when he conducted a study in which he had his participants look at slides of attractive targets. The targets were both same- and opposite-sex models from magazine advertisements. Miller measured satisfaction level, quality of alternatives, and commitment among other things. He also measured participants' attentiveness in three different ways: a) self-reports, b) time spent inspecting the targets on the slides, and c) skin conductance levels. Miller's results revealed that participants who looked at the slides of alternatives for longer, were less committed to their current relationship. Miller was confidently able to surmise that commitment and attentiveness to alternatives were significantly associated. The more a person is committed to their partner, the less interested and attentive they are to potential relationship alternatives, or put simply: "even though the grass is greener on the other side of the fence, happy gardeners will be less likely to notice" (Miller, 1997, pg. 759). Furthermore, inattentiveness to alternatives can be identified as a relationship maintenance mechanism that promotes the overall perseverance of romantic relationships. This not only helps preserve a person's commitment to their partner but can also lead to greater relationship satisfaction over time. Overall, people who are more highly

committed to their relationships should be better equipped to ignore and avoid temptations in the real-world.

### **Inattention in the Digital Age**

Due to the ways in which the rapid advances in technology have dramatically changed how people communicate and engage with others, the models previously used to understand romantic relationships and commitment may not fully reflect how interpersonal processes work in the modern world. Television brings attractive models and movie stars into living rooms, cellphones provide the ability to communicate instantaneously and cost-effectively with people at great distances, and social media has created an opportunity to connect with friends and strangers world-wide. Although all of these inventions have increased the possibility of accessing romantic alternatives, social media has changed the game in several unique ways. Compared to television, films, and advertisements, social media sites allow people to choose, curate, and control the media content that they are exposed to, as opposed to it being chosen by people at advertising and film production companies. Personalized algorithms utilized by websites and social media sites, have taken the place of the human editors or “gatekeepers” of information who were once charged with choosing the content one would be exposed to on television or on the internet. The algorithms utilized by sites like Facebook and Instagram learn from how people interact with the websites and tailor for to match that person’s specific interests (CS181Journalism, 2018). This increases the likelihood that the content curated will meet the user’s specific ideals and preferences, which can also greatly increase the number of available alternatives a user is exposed to in the “online world,” especially compared to the more general preferences provided by the previous traditional media curators (West, 2013).

With regards to the previous research on attractive alternatives, the majority of studies have looked at relatively constrained settings with targets selected by the research team (e.g., speed dating, television clips, advertisements). Research on attention to alternatives has not been examined with the naturally unconstrained aspects of social media, which provides unlimited and unrestricted opportunities. In addition to increased personalization, social media platforms are increasingly more anonymous and circumvent the possibility of rejection, which can provide additional opportunities of interactions that the “real-world” does not allowed for (West, 2013). For example, social media sites, like Twitter and Instagram, not only provide unprecedented access to others, but users can follow and engage with other users without explicit permission. This means that people can not only follow platonic friends and family, but also attractive alternatives, including models or movie stars who constantly share images of how they look, what they are doing, and what they enjoy. This information could increase the appeal of attractive alternatives, to the extent that this information about the lives and preferences of attractive alternatives overlap with a person’s ideal preferences and influence mate-value perceptions.

Some of the harmful consequences of social media for romantic relationships have been examined by previous research. For instance, internet usage has been linked to infidelity, lower commitment, and relationship dissolution (Hertlein & Piercy, 2008; Millner, 2008). Social media presents an opportunity to connect with, browse through, and follow a vast and diverse network of attractive alternatives, which would have a naturally negative influence on a partner’s mate value, in turn undermining the relationship. In this modern, digital age, clinicians are working with clients who are more fearful and concerned about what their partners are doing inside of the house (on computers, smartphones, tablets, etc.), rather than outside of the house (Hertlein &

Piercy, 2008). The combination of changing concerns over internet usage and its implications for relationships has led some researchers to question whether existing models of commitment are appropriate in the modern technological age (West, 2013). These critiques further raise the question as to whether relationship commitment can provide people with the same protective function when it comes to engaging with people on social media as it does when it comes to derogating potential dating partners or overlooking models in television advertisements.

### **CHAPTER 3**

#### **Overview of Current Research**

The current research aims to examine whether people with higher relationship commitment are better equipped to withstand the temptation of romantic alternatives in the real-world by limiting their engagement with attractive alternatives on social media. Some people are better at resisting the temptation of attractive alternatives than others. Higher relationship commitment is associated with a lower perceived quality of alternatives as well as an inattention to attractive alternatives. Technological advances have changed the way in which people interact with the world around them. Thanks to the development of social media and similar online applications and platforms, people now have unprecedented access and control over the tempting images they consume online. Although there are many different types of social media platforms, the current research focused exclusively on Instagram usage. Instagram is uniquely suited to test the hypotheses because it is 1) image driven; 2) curated entirely by the user; and 3) does not require reciprocal following (i.e., someone can choose to follow an account without permission from the other user). Instagram maintains a user base of over 1 billion people and, after Facebook, is the most popular social media application with approximately 100 million photos

and videos uploaded daily (Aslam, 2019). When users choose to “follow” another person/account, content from those accounts are automatically presented in the user’s “feed,” a chronological display of the content from all of the accounts a user follows. The more attractive alternatives a person follows (i.e., curates), the more opportunities for tempting photographs to appear in that user’s feed. Furthermore, Instagram allows users to interact with other accounts by “liking” and commenting on another user’s posts. Instagram statistics revealed that users utilize the “like” button 4.2 billion times a day (Aslam, 2019). Instagram also utilizes a powerful algorithm that takes into account what kind of content you “like” and the types of accounts you follow, to provide you with an array of suggestions that may interest you (Cooper, 2019). These suggestions appear on the site on what is known as the “Discover page.” All in all, Instagram enable users to curate their own content. For some, this means control to “block out” potential alternatives or temptations. For others, it may mean curating a feed of countless attractive alternatives. The questions become, how do these decisions impact social media users’ relationships, and is social media engagement indirectly affected by differences in a desire to avoid temptation? Thus, the current research aimed to better understand how social media usage is associated with attention to alternatives and relationship derogation, as well as whether relationship commitment influences how people respond to these temptations.

The following four hypotheses were tested across two studies:

**Hypothesis 1:** We predict that high relationship commitment will be negatively correlated with the number of attractive alternatives followed on Instagram (Study 1 & 2).

**Hypothesis 2:** People who follow relatively more attractive alternatives on social media are expected to derogate their relationship and their partners to a greater extent compared to those who follow relatively fewer alternatives (Study 1).

**Hypothesis 3:** People in the mating prime condition will follow fewer attractive alternative accounts, derogate the accounts more, and spend less time looking at the accounts than people in the neutral condition (Study 2).

**Hypothesis 4:** Commitment should moderate the effect of the mating prime condition, such that people with high commitment should be motivated to follow fewer attractive alternative accounts, engage in more derogation, and spend less time looking at alternatives following a mating prime than no prime, while the opposite pattern is expected for those low in commitment (Study 2).

### **Study 1 Design**

The purpose of Study 1 was to determine whether relationship commitment was associated with how people curate attractive others on Instagram. Participants answered questions about their Instagram usage, including the types of accounts they followed, and about their relationship with their partner. Participants also provided the researchers with their Instagram user-handle so that the types of accounts a participant followed could be independently determined and coded. People with relatively lower relationship commitment were expected to follow more attractive alternatives compared to people with relatively higher commitment, as assessed by the participant's self-reports of the percentage of alternatives followed and the researcher's independently calculated proportion of alternatives participants

followed (**Hypothesis 1**). “Alternatives” in this study are defined as selected targets that could potentially replace one’s partner and was based on the gender and sexual orientation of the participants (alternatives for a male, heterosexual participant, for example, would be the proportion of the total number of accounts he follows on Instagram that are women).

Additionally, people who follow more attractive alternatives on Instagram were expected to derogate their relationship by reporting lower relationship satisfaction and lower partner attractiveness (**Hypothesis 2**).

### Methods

**Participants.** Participants were recruited via the online recruitment platform Prolific Academic and received £0.50 for completing the study online using Qualtrics. Participants who provided a valid Instagram user ID received a bonus of £.10, for a total possible incentive of £.60. In order to be eligible to participate, participants had to be over the age of 18, have an Instagram account, be in a monogamous romantic relationship, and identify as heterosexual or homosexual. Bisexual participants were screened out so that alternatives could be more easily identified. Of the total 307 participants who completed the study, 63 were dropped for not meeting the eligibility requirements ( $n=14$  non-monogamous;  $n=49$  not having an active Instagram account), leaving a final sample of 244 participants who completed survey responses. Of those 244 participants, 152 participants provided a verifiable Instagram account for independent coding by the researcher. Participants were 30.61 years old on average ( $SD=9.17$ ), predominantly white (82.41%) and heterosexual (97.72%), and the proportion of men and women was nearly equal (49.51% men). The majority of participants were either exclusively dating (46.6%) or married (37.8%).

**Procedure.** First, participants completed a demographic questionnaire that asked questions about themselves (e.g., age, gender, sexual orientation) and their romantic relationship (e.g., relationship length, relationship status). Next, participants were asked to reflect on their Instagram activity and usage and were prompted to provide their Instagram username. Participants were also asked to reflect on how many men and women they believed they followed on Instagram, and the attractiveness of those accounts on average. Participants next answered questions about their relationship including their commitment, passion for their partner<sup>i</sup>, relationship satisfaction<sup>ii</sup>, and perceived quality of relationship alternatives. Lastly, participants rated their partner's attractiveness. Participants were then thanked and debriefed. See Table 1 and 2 for correlations and descriptive statistics for the measures in this study, and Appendix A for the full survey questionnaire.

**Table 1. Instagram Usage Statistics.**

Usage Questions	Mean ( <i>M</i> )	SD	Range
How often do you use Instagram?	3.68	1.41	1 – 5
Men	3.43	1.43	
Women	3.91	1.36	
How many accounts do you follow?	285.95	554.05	0 – 6147
Men	264.82	624.50	
Women	306.54	477.36	
What percentage of the accounts you follow are women?	56.68	22.84	0 – 100
Men	49.33	22.80	
Women	63.68	20.66	
What percentage of the accounts you follow are men?	35.98	20.81	0 – 100
Men	44.20	21.84	
Women	28.16	16.38	
What percentage of the accounts you follow are animals/wildlife?	12.38	18.79	0 – 100
Men	12.27	18.84	
Women	12.48	18.82	

*Note.* † $p < 0.1$  \* $p < .05$  \*\* $p < .01$  \*\*\*  $p < .001$

## Measures

**Instagram Usage.** Instagram usage was assessed using 8 questions using a variety of scales. Questions included how often participants checked their Instagram accounts (1=Never, 5=Every day), a self-report of how many total accounts they follow (open-ended numeric response), types of accounts they follow (food, fashion, friends), and a self-reported percentage of the gender of accounts followed. Participants were also asked to rate how attractive they believe the male and female accounts they follow are in general (1=extremely unattractive, 9=extremely attractive).

**Relationship Commitment.** Relationship commitment was assessed using the three commitment subscale items from the Perceived Relationship Quality Components Inventory (PRQC; Fletcher, Simpson & Thomas, 2000). Sample items include, “How committed are you with your relationship?” (1=not at all, 7=extremely). The three items were averaged, and higher scores reflected greater commitment to the relationship (Cronbach’s  $\alpha = 0.93$ ).

**Relationship Passion.** Relationship passion was assessed using the three passion subscale items from the Perceived Relationship Quality Components Inventory (PRQC; Fletcher, Simpson & Thomas, 2000). Sample items include, “How lustful is your relationship?” (1=not at all, 7=extremely). The three items were averaged, and higher scores reflected greater passion in the relationship (Cronbach’s  $\alpha = 0.89$ ).

**Relationship Satisfaction.** Relationship satisfaction was assessed using a 5-item measure (Rusbult, Martz, & Agnew, 1998). Participants reported how much they agreed with a proposed statement related to their relationship with their romantic partner (e.g., “I feel satisfied with our relationship”; 0=do not agree at all, 8=agree completely). The five items averaged, and higher scores reflected greater relationship satisfaction (Cronbach’s  $\alpha = 0.92$ ).

***Quality of Alternatives.*** Quality of alternatives was measured using a 5-item measure (Rusbult, Martz, & Agnew, 1998). Participants designated how much they agreed with a proposed statement related to their relationship with their romantic partner. (e.g., “The people other than my partner are very appealing”; 0=do not agree at all, 8=agree completely). The five items averaged, and higher scores reflected a higher perceived quality of relationship alternatives (Cronbach’s  $\alpha = 0.83$ ).

***Partner Attractiveness.*** Partner attractiveness was assessed using an adapted 1-item measure of perceived attraction (Baker & Churchill, 1977). Participants were asked to report how physically attractive they think their romantic partner is (1=extremely unattractive, 9=extremely attractive). Higher scores showed that participants believed their partners to be more physically attractive.

***Independent Coding of Alternatives by Researchers.*** Data from the participants’ Instagram accounts were recorded by a single researcher due to a number of logistical constraints (e.g., time, funding). Following collection of the survey data, the researcher used the Instagram ID information to determine the proportion of male accounts followed out of the total number of accounts followed and the proportion of female accounts participants followed out of the total accounts followed. First, the total number of accounts a participant followed was recorded for each participant with a valid Instagram account.<sup>iii</sup> Next, the researcher recorded the proportion of male accounts and female accounts the user followed. If the participant followed more than 100 accounts, a random subsample of 100 male and female accounts was used. An account was coded as “male” if the profile picture was of an individual male-presenting individual, or in cases where multiple individuals or no people (e.g., comic, object) were included in the profile picture, that the overall content featured on the account were predominantly images of men. The same

criteria applied for coding accounts as “female”. Accounts that did not meet these criteria were coded as “other”. The average attractiveness of the male and female accounts followed by participants was also determined based on a random subsample of the overall accounts followed. The researcher used the same measure of attractiveness from the survey to rate the first 10 female accounts and first 10 male accounts that were generated by the participants’ “Following” list. A small to medium correlation was found between the attractiveness of alternatives reported by participants and researcher ratings of attractiveness for alternatives ( $r(151)=.18, p=.03$ ), showing consistency between researcher and participant ratings. Ratings of attractiveness were then averaged to create a single factor of male attractiveness and female attractiveness for each participant. All coding was done blind to the participant’s reported gender and sexual orientation.

### Study 1 Results

#### Participant Instagram Usage.

On average, participants reported following 332.45 ( $SD=613.63$ ) Instagram accounts. Of those, people reported that 38.32% ( $SD=22.30\%$ ) of the accounts they followed were attractive alternatives (i.e., a member of the opposite sex for straight participants and members of the same-sex for gay/lesbian participants), while the percentage of attractive alternatives participants followed based on the researcher’s independent ratings was 17.94% ( $SD=20.88\%$ ).

#### Main Analyses.

**Social Media Curation (Accounts Followed).** First, linear regression was used to tested Hypothesis 1 by predicting the proportion of alternatives followed as assessed by 1) participants’ self-reports, and 2) the proportion of alternatives as coded by the researchers, from the main effect of relationship commitment (centered)\*. As expected, relationship commitment significantly predicted self-reported alternatives followed,  $b=-.05$ ;  $t(241)=-2.90$ ;  $p=0.004$ ;

95%CI[-.08, -.02]: People who reported being more committed to their partners reported following fewer attractive alternatives on Instagram. However, contrary to what we predicted and to the participant's self-reports, relationship commitment was not associated with the researcher-coded proportion of attractive alternative accounts followed,  $b = -.00$ ;  $t(146) = -.06$ ;  $p = .95$ ; 95%CI[-.04, .04]. Thus, although relationship commitment is negatively associated with self-reported Instagram behaviors, there were no apparent differences between people with relatively high compared to relatively low relationship commitment when it came to their actual Instagram behaviors.

**Relationship Derogation.** Next, we tested the hypothesis that following a greater proportion of attractive alternatives would result in greater relationship derogation. Regression analyses were used to predict relationship satisfaction, quality of alternatives, partner attractiveness, and passion, from (1) self-reported attractive alternatives followed and (2) the actual proportion of alternatives (Table 3).

First, contrary to our predictions, the proportion of alternatives people reported following was not associated with the ratings of partner attractiveness,  $b = -.69$ ;  $t(242) = -1.80$ ;  $p = .07$ ; 95%CI[-1.45, .07]. However, as expected, the self-reported proportion of attractive accounts followed was slightly significantly associated with relationship satisfaction,  $b = -.95$ ;  $t(242) = -2.01$ ;  $p = .05$ ; 95%CI[-1.90, -.02] and highly significantly associated with perceived quality of alternatives,  $b = 1.83$ ;  $t(242) = 3.60$ ;  $p < .001$ ; 95%CI[.83, 2.83]. Thus, the percentage of alternatives a participant reported following was not associated with how attractive they believed their partner was. However, people who reported following more attractive alternatives on Instagram were more likely to report less satisfaction with their relationship as well as having higher quality alternatives to their relationship partner.<sup>iv</sup>

The same narrative did not emerge for the actual proportion of accounts followed as rated by the researcher. The proportion of attractive alternative accounts a person followed was not significantly associated with satisfaction, quality of alternatives, nor partner attractiveness ( $ps > .37$ ). Thus, although people who reported following more attractive alternatives on Instagram reported having greater quality of alternatives to their relationship partner, this pattern was not confirmed when looking at how many alternatives participants actually followed on Instagram.

**Table 2. Study 1 Model Coefficients for Proportion of Alternatives Followed**

Variable	Self-Reported Percentage		Actual Proportion	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Commitment	-.05	-2.90***	-.00	-.06
Satisfaction	-.95	-2.01*	.23	.34
Quality of Alternatives	1.83	3.60***	.12	.18
Partner Attractiveness	-.69	-1.80	.17	.33

Note. † $p < 0.1$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

### Exploratory Analyses: Gender Differences

Moderation by gender was not part of the primary hypotheses. Men and women both value their relationships and benefit from protecting them. There were no significant differences between men and women's commitment in our sample,  $b = .08$ ;  $t(242) = 1.34$ ;  $p = .18$ ; 95%CI[-.04, .19]. However, prior research has shown that men and women differ in the extent to which they engage with, derogate and pursue attractive alternatives, as men have been found to be more attentive to alternatives than women (Miller, 1997). Thus, we included some exploratory analyses with gender (dummy coded: men=-1, women=1) added to the model. There were significant gender differences across both the self-reported percentage of alternatives followed,  $b = -.10$ ;  $t(241) = -7.93$ ;  $p < .001$ ; 95%CI[-.12, -.07], and the actual proportion of alternatives,  $b = -.05$ ;  $t(146) = -2.75$ ;  $p = .007$ ; 95%CI[-.08, -.01]. Thus, men followed significantly more attractive

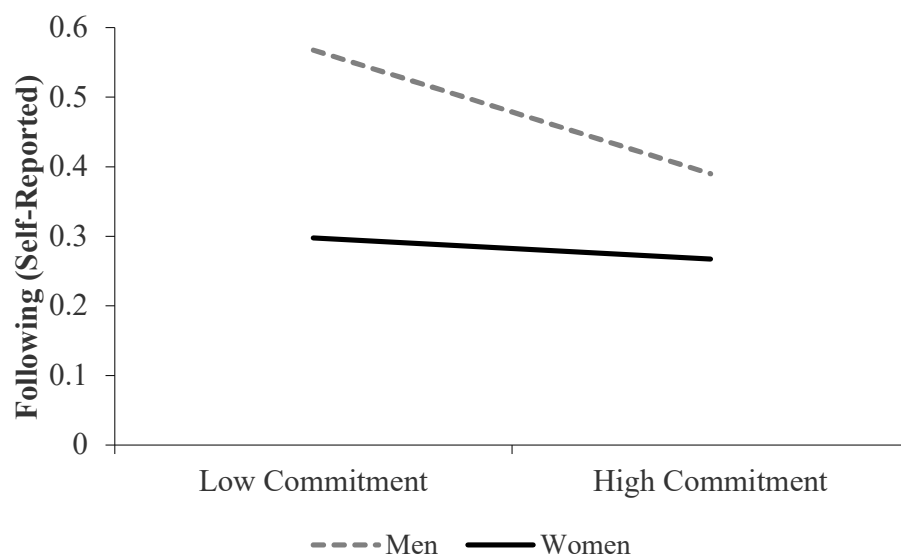
alternatives than women as assessed by both self-reported engagement with alternatives, as well as the actual proportion of alternatives they followed as coded by the researcher. Further analysis also revealed that when it came to the attractiveness of the alternatives the participants followed, men rated that their alternatives were more attractive than women did ( $b=-.27$ ;  $t(241)=-2.88$ ;  $p=.004$ ;  $95\%CI[-.46, -.09]$ ) even though the researcher ratings of attractiveness of alternatives had no significant gender differences ( $b=.03$ ;  $t(146)=.23$ ;  $p=.82$ ;  $95\%CI[-.25, .32]$ ).

Next, we tested the 2-way interaction between commitment and gender. A significant interaction only emerged for self-reported percentages of alternatives,  $b=.04$ ;  $t(240)=2.87$ ;  $p=.004$ ;  $95\%CI[.01, .07]$ . We decomposed the interaction to look at the simple effect of gender for people high and low in commitment. In all of the analyses, high commitment was +1SD from the mean and low commitment was -1SD. First, for people low in commitment, there was a significant simple effect of gender,  $b=-.13$ ;  $t(240)=-7.71$ ;  $p<.001$ ;  $95\%CI[-.17, -.10]$ , such that men self-reported following more alternatives than the women with low commitment (See Figure 1). A similar simple effect of gender also emerged for people high in commitment,  $b=-.06$ ;  $t(240)=-3.46$ ;  $p=.001$ ;  $95\%CI[-.10, -.03]$ , such that men, again, self-reported following more alternatives than the women. Furthermore, the simple effects of commitment were significant for men,  $b=-.10$ ;  $t(240)=-4.45$ ;  $p<.001$ ;  $95\%CI[-.14, -.06]$ , but not for women,  $b=-.02$ ;  $t(240)=-1.03$ ;  $p=.30$ ;  $95\%CI[-.05, -.02]$ . Thus, relatively higher commitment seemed to only have a greater impact on men's perceptions of their attractive alternatives on Instagram.

**Table 3. Study 1 Model Coefficients for Proportion of Alternatives Followed (Gender Differences)**

Variable	Self-Reported Percentage		Actual Proportion	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
<b>Main Effects Model</b>				
Commitment	-.05	-3.52***	-.00	-.06
Gender	-.10	-7.93***	-.05	-2.75**
<b>Interaction Model</b>				
Commitment	-.06	-4.15	-.00	-.14
Gender	-.10	-7.98***	-.05	-2.73**
Commitment x Gender	.04	2.87***	.00	.21

Note. † $p < .01$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

**Figure 1. Commitment x Gender Interaction.**

### Study 1 Discussion

The findings from Study 1 offered mixed support for our hypotheses. Contrary to our predictions, commitment was not associated with the researcher-rated proportion of attractive alternatives participants followed on Instagram. However, we did find that participants higher in commitment reported that they followed fewer alternatives compared to those relatively lower in commitment. Thus, the participants' actual behaviors on Instagram do not appear to align with

what they think or say they are doing on Instagram. This discrepancy is consistent with motivated cognition on the part of highly committed people, who may either be explicitly derogating or implicitly paying less attention to the attractive alternatives they follow on Instagram.

While certain cognitions may be protecting committed people from outright saying that they are consciously exposing themselves to potential alternatives, they may still believe that there is nothing wrong with their unspoken, actual behaviors and this could be due to the natural ambiguity of social media behaviors (West, 2013). Parker and Wampler (2003) found that when participants were asked to rate whether certain online behaviors constituted infidelity (e.g., going onto adult websites, engaging in cybersex), there was no agreement across gender as men found internet behaviors to be less serious than women did. Additionally, all of the participants were in agreement that in-person, physical sex was more likely to be infidelity than online, cybersex. The researchers concluded that behaviors through the internet are indeed quite ambiguous and the meaning of some behaviors can vary, potentially even between partners in a committed relationship (West, 2013). While following and liking content of attractive alternatives can be seen as harmless by one partner, the other partner may find this behavior to be a close equivalent to infidelity. Ambiguity over what particular behaviors and interactions with others on Instagram can be an explanation as to why commitment was not associated with the actual proportion of alternatives participants followed in Study 1.

Anonymity may also explain the discrepancies between self-reported and actual alternatives followed. People are naturally more willing to partake in monitoring attractive alternatives if they are under the impression that their actions are more or less private and they can hide the fact that they are involved in the monitoring altogether (Hertlein and Stevenson,

2010). As mentioned earlier, an important and unique quality of the self-curated online media is anonymity, which enables people to interact with content in “secret” if desired.

Another way to explain why our data showed the significant differences in the actual behaviors of participants and what they reported is in noting the protective cognitive processes of highly committed people that have been known to motivate them to generally overlook alternatives in the real world. These processes may very well work within the space of the online-world, meaning that, while highly committed people may follow a large amount of alternatives, they might think less about or interact less with these alternatives on Instagram than less committed people, due to them being motivated to overlook alternatives and make them less accessible. To this point, our data can reflect that highly committed people do not necessarily need to behave differently on Instagram than less committed people because their pro-relationship cognitions are strong enough.

As for the effects of gender and the differences found from the results, men were revealed to be following more attractive alternatives than women, both in their self-reported percentages and their actual proportions of alternatives. Moreover, men also rated the alternatives they followed as being more attractive than women did. Finally, men who were lower in commitment self-reported that they followed significantly more alternatives on Instagram than the men who were higher in commitment.

Although behavioral differences between people relatively high in commitment compared to low in commitment did not emerge, it is possible that we were missing information about the types of contextual factors that might motivate high/low committed people to behave differently. For example, when more committed people are reminded of the importance of their relationship, they may be more inclined to ignore attractive others on Instagram or derogate them

when they are exposed to them. This may chiefly be due to the salience of one's partner acting as a reminder of the three fundamental pillars of commitment based on the Investment Model (quality of alternatives, investment size, and satisfaction) (Rusbult, 1983), which in turn influence one's drive for the persistence of their relationship.

## **CHAPTER 4**

### **Study 2 Design**

Study 1 suggested that people relatively high and low in commitment may engage similarly with alternatives on social media at baseline levels. In Study 2, we wanted to determine whether contextual cues would motivate some people to engage in protective behaviors as a way of potentially protecting them from the risk of alternatives. As previously mentioned, the tendency for committed people to look away from romantic alternatives has been replicated repeatedly in lab settings and extended to relatively more automatic attentional processes and interpersonal goals. Maner et al. (2003) determined that even though people in committed relationships attended less to attractive targets over an extended period of time, they were just as likely as single people to attend to attractive targets when the targets were presented in a way that called for more rapid and automatic attention. These findings make sense because previous studies have proposed that at the early stages of visual perception, attractive people of the desired sex readily capture our attention (Duncan et al., 2007, Maner et al., 2003). Moreover, people actually have been found to have a difficulty directing their attention away from images of physically attractive alternatives, which has been defined as attentional adhesion (Maner, Gailliot, Rouby, et al., 2007). Research by Maner, Rouby, & Gonzaga (2008) introduced the rationale behind utilizing a mate prime as an environmental cue that would motivate relationship

maintenance behavior. A mate prime is thought to cognitively activate schemas and associations people have about their relationships. For people who are more committed, this makes the value of their relationships more salient. Consequently, people who are more committed become more motivated to protect it.

Maner, Rouby, & Gonzaga (2008) hypothesized that due to the phenomenon of attentional adhesion happening at an early stage of the process of visual perception and also being under significantly less conscious control, urging one to have thoughts and feelings about love for their partner might reduce the degree of attention towards attractive alternatives. To support their hypothesis, the researchers primed participants through an essay-writing task in which they wrote about a time in which they experienced intense feelings of love for their current romantic partner. Following the priming, Maner, Rouby, & Gonzaga measured participant attention to highly attractive targets and average-looking targets. Based on their findings, the researchers found support for their hypothesis, as those participants who were primed with thoughts of love for their partner paid less attention to the attractive alternatives than those who did not undergo priming. Instead of being captured by the highly attractive targets, the attention of the participants who were manipulated to think about love for their partners was actually repelled. This discovery exhibits that commitment alone may not be sufficient enough to trigger one's protection from alternatives by inattention, at least in the early stages of visual perception. Since there is evidence that mate priming has effects on inattention to alternatives, we believed that it would be beneficial to test whether a similar method of priming would affect attention to alternatives in the context of modern day self-curated media, more specifically Instagram.

In Study 2, we also were interested in further exploring the relationship maintenance behavior of disparaging attractive alternatives. The pro-relationship behavior of disparagement of alternatives entails that high commitment reduces one's interest in alternatives, in-turn translating as the derogation of alternatives (Johnson & Rusbult, 1989; Miller, 1997). With Study 2, we sought to identify whether highly committed participants would derogate the existing public Instagram profiles of the highly attractive people we handpicked by asking them how interesting, likeable, and attractive they would rate them, and combining these three components to generate an overall derogation score. The general pro-relationship behavior of decreased visual attention to alternatives was also incorporated into Study 2 as we sought to measure the time it took for participants to finish judging the 16 profiles.

Thus, in Study 2 we extended our original hypotheses in light of the findings from Study 1, and also had the following new predictions:

**Hypothesis 3:** People in the mating prime condition will follow fewer attractive alternative accounts, derogate the accounts more, and spend less time looking at the accounts than people in the neutral condition.

**Hypothesis 4:** Commitment should moderate the effect of mating prime condition, such that people with high commitment should be motivated to follow fewer attractive alternative accounts, engage in more derogation, and spend less time looking at alternatives following a mating prime than no prime, while the opposite pattern is expected for those low in commitment.

The aim and design of this study ties several findings from previous research together to determine if they all play a significant role in our overall inattention to potential alternatives, as well as if the psychological cognitions of relationship protection are persisting in this new age of technology.

### Methods

**Participants.** Participants were recruited via Prolific Academic and received £0.84 for completing the study online using Qualtrics. Similar to Study 1, in order to be eligible to participate, participants had to be over the age of 18, have an Instagram account, be in a monogamous romantic relationship, and identify as heterosexual or homosexual. Of the total 336 participant responses that were recorded, 29 were dropped for not meeting the eligibility requirements ( $n=5$  bisexual;  $n=6$  single;  $n=10$  non-monogamous;  $n=8$  did not complete the study), leaving a final sample of 307 who completed all parts of the survey. Participants were 30.01 years old on average ( $SD=8.75$ ), predominantly white (85.29%) and heterosexual (95.75%), and the proportion of men and women was nearly equal (58.82% women). The majority of participants reported that they were either exclusively dating (48.37%) or married (40.85%) when asked about their relationship status.

**Procedure.** Participants first completed the same demographic questionnaire, and relationship satisfaction (see modifications in measures below) and commitment measures as Study 1. As a cover story, participants were told that the overall aim of the study was to test how new Instagram formatting may impact their perceptions of the people in the profiles.

Participants were next asked to complete a series of six-word scrambles in order to assess individual differences in cognitive processing before continuing on to the main part of the study. In actuality, the word scramble task was used to prime participants with a relationship mindset (Maner et al., 2009). In the experimental condition (relationship prime), participants unscrambled six words associated with intimacy and mating (e.g. udcdle → cuddle, ulst → lust). In the control condition (neutral prime) participants unscrambled five neutral words (e.g. dwini → wind, olofr → floor).<sup>v</sup> In order to ensure that participants were equally primed in cases where they were unsuccessful in unscrambling the words, participants were shown the six target words unscrambled following the task and instructed to commit these words to memory for the remainder of the study. Throughout the study, participants were further asked to recall which word, from a list of 3 related words, they had been shown earlier. This also served to reinforce the priming throughout the study (see Appendix B for the list of primes).

Following the word scramble task, participants were presented with 16 Instagram profiles (8 men, 8 women) that had been piloted by the research team (103 independent raters) to include 8 attractive (4 men,  $M_{\text{attractiveness}}=5.32$ ; 4 women,  $M_{\text{attractiveness}}=6.20$ ) and 8 average (4 men,  $M_{\text{attractiveness}}=4.06$ ; 4 women,  $M_{\text{attractiveness}}=4.75$ ) profiles. For each profile, participants were asked whether they would follow the account (curation), and were also asked to rate how attractive, how interesting, and how likable the person in the profile was. Averages of the ratings of Interest, Likeability, and Attractiveness were averaged and then multiplied by -1 to reverse score to compute an average Derogation variable (higher scores reflecting more derogation). Time spent looking at each profile was also recorded in seconds. Participants were then thanked and debriefed. See Appendix B for the complete study materials. Table 3 (located in Appendix B) presents the descriptive statistics for the measures used in Study 2.

## Measures

***Relationship Commitment.*** Relationship commitment was assessed using the three commitment subscale items from the Perceived Relationship Quality Components Inventory (PRQC; Fletcher, Simpson & Thomas, 2000). Sample items include, “How committed are you with your relationship?” (1=not at all, 7=extremely). The three items were averaged, and higher scores reflected greater commitment to the relationship (Cronbach’s  $\alpha = 0.93$ ).

***Relationship Satisfaction.*** Relationship satisfaction was assessed using 1 of the items from the 5-item measure (Rusbult, Martz, & Agnew, 1998). Participants reported how much they agreed with the presented statement related to their relationship with their romantic partner (e.g., “How satisfied are you in your relationship with your partner?”; 0=do not agree at all, 8=agree completely). Higher scores reflected greater relationship satisfaction.

***Instagram Profile Attractiveness, Interest & Likability.*** The attractiveness, interest, likeability of the presented Instagram profiles was assessed using an adapted 1-item measure of perceived attraction (Baker & Churchill, 1977). Participants were asked to report how physically attractive, how interesting, and how likeable they thought the people in the chosen profiles were (1=extremely unattractive/uninteresting/unlikeable, 9=extremely attractive/interesting/likeable). Average ratings were created for each of the three categories by averaging the responses across the 4 profile types (attractive alternatives, average alternatives, attractive non-alternatives, and average non-alternatives). Higher scores showed that participants believed the people in the profiles to be more physically attractive, interesting, or likeable.

***Social Media Curation (Follow).*** Participants were asked whether they would be interested in following each of the profiles (1=yes, 0=no). Scores were summed across target

category, with higher scores reflecting an intent to follow more accounts and curate a larger Instagram network.

***Time Spent Looking at Accounts.*** Time spent looking at each profile was measured in seconds based on the recorded time it took participants to move onto the next page (i.e. click ‘next’). Time was averaged across profile categories, with high scores reflecting more time spent looking at those profiles.

## Study 2 Results

### Main Analyses.

Regression analyses were used to predict the number of the highly attractive (preferred-sex) accounts participants reported they would follow, their derogation of those accounts, and how long they spent looking at the accounts, from (1) the main effect of relationship commitment (centered), and the prime condition (dummy coded: mating prime=1, neutral prime=-1)<sup>vi</sup>; and, (2) the commitment by prime condition, controlling for responses to average alternatives accounts.

**Social Media Curation.** First, we tested the association between commitment and the number of attractive alternative accounts participants chose to follow. Contrary to what was predicted, the main effect of commitment,  $b=.01$ ;  $t(283)=.09$ ;  $p=.93$ ;  $95\%CI[-.16, .17]$ , and priming condition,  $b=-.01$ ;  $t(283)=-.12$ ;  $p=.91$ ;  $95\%CI[-.15, .13]$ , were not significantly associated with the following of the highly attractive alternatives. Furthermore, the commitment by prime condition interaction was also not significantly associated with the how many attractive alternatives accounts people said they would follow  $b=-.13$ ;  $t(283)=-1.59$ ;  $p=.11$ ;  $95\%CI[-.30,$

.03]. Thus, people high and low in commitment did not differ in the number of attractive alternative accounts they said they were interested in following even after a mating prime.

**Derogation of Alternatives.** Next, we tested whether commitment would be associated with more derogation of alternatives, and whether the mating prime would increase derogation among highly committed participants. The main effects of commitment,  $b=-.02$ ;  $t(283)=-.51$ ;  $p=.61$ ;  $95\%CI[-.11, .06]$  and prime condition,  $b=.01$ ;  $t(283)=.31$ ;  $p=.76$ ;  $95\%CI[-.06, .09]$  did not predict the derogation of alternatives. However, as predicted, the commitment by prime interaction was significant,  $b=.09$ ;  $t(282)=2.09$ ;  $p=.04$ ;  $95\%CI[.01, .18]$  (Figure 2).

Because the two-way commitment by prime interaction was significant, we decomposed the simple effects of commitment for people in the mating and neutral prime conditions. In the mating prime condition, people with high commitment derogated alternatives more than those with low commitment,  $b=.09$ ;  $t(282)=1.32$ ;  $p=.19$ ;  $95\%CI[-.05, .23]$ . In the neutral prime condition,  $b=-.09$ ;  $t(282)=-1.67$ ;  $p=.10$ ;  $95\%CI[-.20, .02]$ , the opposite was true, people with low commitment derogated alternatives more than those with high commitment. Following this, we examined the simple effects of priming condition for people with high and low commitment. Consistent with our predictions, people with high commitment,  $b=.09$ ;  $t(282)=1.70$ ;  $p=.09$ ;  $95\%CI[-.01, .20]$ , derogated alternatives more when they were primed with mating reminders compared to neutral primes. The opposite was true for those with low commitment,  $b=-.07$ ;  $t(282)=-1.29$ ;  $p=.20$ ;  $95\%CI[-.18, .04]$ , who derogated alternatives more when they were primed with neutral compared to mating primes. Although these effects did not reach significance, they were trending in the hypothesized direction and are consistent with prior research.

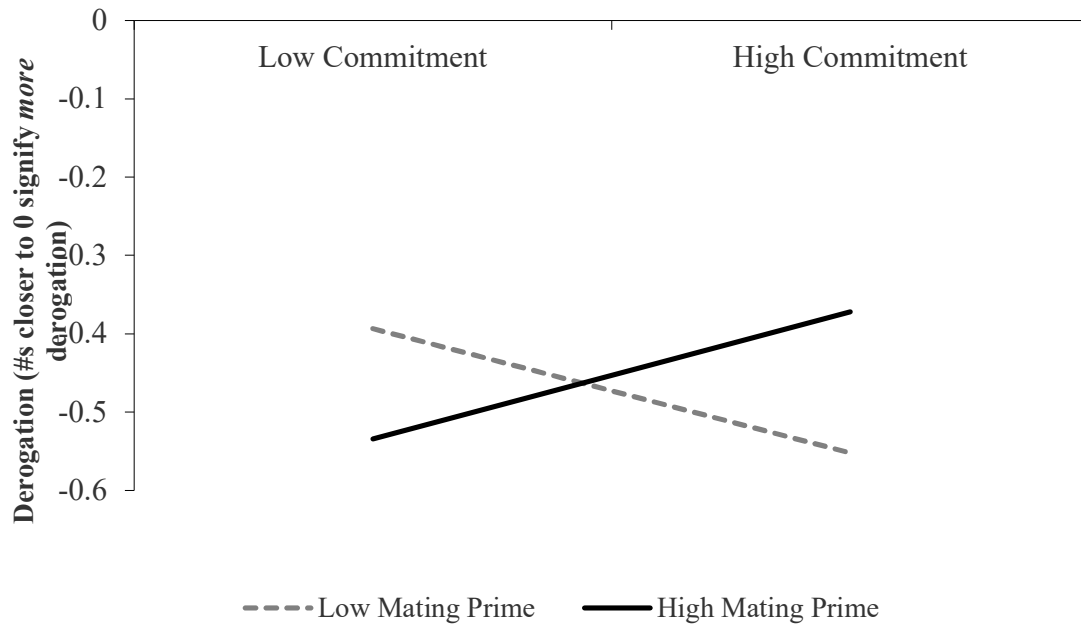


Figure 2. Prime x Commitment Interaction (numbers closer to 0 indicate MORE derogation).

**Time Spent Looking at Accounts.** Next, we tested whether people high and low in commitment differed in the time they spent on each profile when they were in different priming conditions. No significant differences emerged for the the main effects of commitment,  $b=-5.49$ ;  $t(282)=-1.22$ ;  $p=.22$ ;  $95\%CI[-14.34, 3.37]$  and prime condition,  $b=.90$ ;  $t(282)=.23$ ;  $p=.82$ ;  $95\%CI[-6.72, 8.51]$  or for the prime by commitment interaction,  $b=-.63$ ;  $t(282)=-.14$ ;  $p=.89$ ;  $95\%CI[-9.52, 8.26]$ . Thus, contry to our hypotheses and inconsistent with previous research (e.g., Miller, 1997; Maner, Gailliot, Rouby, et al., 2007), people who are more committed to their partners showed no evidence of inhibiting their attention to alternatives by spending less time on those profiles.

**Table 4. Study 2 Regressions**

Predictor	Attractiveness		Likeable		Interest		Derogation		Follow		Time	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Prime	-.00	-.04	-.03	-.41	-.02	-.27	.01	.31	-.01	-.12	.90	.23
Commitment	.07	.98	.00	.05	.01	.12	-.02	-.51	.01	.09	-5.49	-1.22
Prime x Commitment	-.14	-1.85†	-.17	-2.22*	-.20	-2.31*	.09	2.10*	-.13	-1.59	-.63	-.14

Note. † $p < 0.1$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

**Exploratory Analyses: Gender Differences.** Gender significantly predicted ratings of attractiveness for the template profiles,  $b = -.19$ ;  $t(282) = -2.90$ ;  $p = .004$ ; 95%CI[-.32, -.06], such that men rated their target alternatives as more attractive compared to women. Gender also significantly predicted the ratings of how interesting the template profiles appeared,  $b = -.16$ ;  $t(282) = -2.14$ ;  $p = .03$ ; 95%CI[-.31, -.01], such that men rated the alternatives as more interesting compared to women. These findings parallel those from Study 1 where men rated their alternatives as more attractive than the women did.

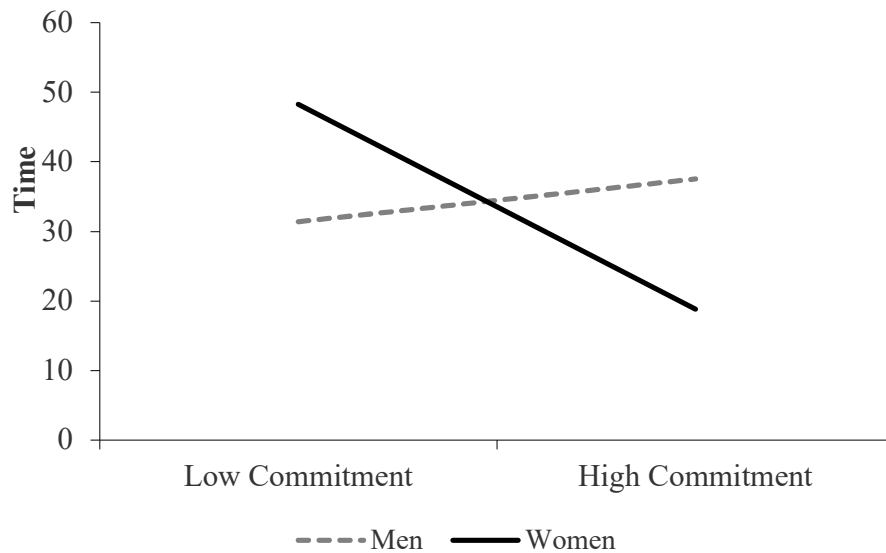
The higher-order 3-way commitment by gender by prime condition interaction was not significant for any of the outcome variables ( $ps > .10$ ). Therefore, we focused on the significant lower-order 2-way interactions. There was a significant 2-way commitment by gender predicting time spent looking at alternative accounts,  $b = -9.90$ ;  $t(279) = -2.26$ ;  $p = .02$ ; 95%CI[-18.51, -1.30]. Next we decomposed the interaction to test the simple effect of commitment for men and women. Highly committed women spent a lot less time observing the attractive alternatives than the women who were low in commitment,  $b = -14.32$ ;  $t(279) = -2.40$ ;  $p = .02$ ; 95%CI[-26.06, -2.58], while no differences emerged for men regardless of commitment,  $b = 5.49$ ;  $t(279) = .84$ ;  $p = .40$ ; 95%CI[-7.45, 18.43] (See Figure 3). Thus, unlike Study 1, in Study 2 we found that commitment influenced how women were engaging with alternatives using a more non-conscious or implicit

assessment of interest. In testing the simple effect of gender for the highly committed and the low committed, there were no significant differences found ( $ps > .11$ ) between men and women.

**Table 5. Study 2 Regressions (Gender Differences)**

Predictor	Attractiveness		Likeable		Interest		Derogation		Follow		Time	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Prime	-.02	-.27	-.03	-.45	-.03	-.43	.01	.35	-.02	-.23	.89	.23
Gender	-.19	-2.90**	-.04	-.60	-.16	-2.14*	.02	.53	-.12	-1.46	-.05	-.01
Prime x Gender	.02	.28	.01	.19	.04	.55	-.01	-.36	.04	.54	1.67	.42
Commitment x Gender	-.07	-.89	-.09	-1.12	-.03	-.36	.04	1.00	-.02	-.23	-10.36	-2.34*
Prime x Commitment x Gender	.09	1.22	.13	1.63	.07	.77	-.05	-1.14	.09	1.08	4.04	.89

Note. † $p < 0.1$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$



**Figure 3. Commitment x Gender Interaction.**

### Study 2 Discussion

Similar to Study 1, the findings from Study 2 produced mixed support for our hypotheses. Once again, no main effects of commitment emerged suggesting different approaches to engaging with alternatives on social media (e.g., likes, follows, time spent looking, derogation). Furthermore, contextual cues that could have potentially stoked the need to protect the relationship (e.g., mating primes) did not motivate highly committed individuals to change their

following behaviors as we would have expected. When people were more committed, a mating prime motivated them to rate the alternatives as significantly less desirable as they derogated them more overall. Thus, although the mating prime did not motivate more subtle behaviors, the cognitive appraisals of the alternatives emerged as expected and in keeping with prior research.

As with Study 1, gender was an important predictor of people's attitudes and behaviors towards the alternatives. Specifically, men overall showed a tendency to be more forthcoming than women with their perceived quality of the presented alternatives. Furthermore, gender and commitment interacted such that women who were more committed spent less time looking at target accounts. This suggests that women may engage in more subtle means of ignoring alternatives compared to men who showed the tendency to follow fewer people when they were more committed in Study 1.

## **CHAPTER 5**

### **General Discussion**

Attention to attractive alternatives to one's partner poses a major risk factor for the dissolution of a romantic relationship and all humans are affected by this (Miller, 1997; Maner, Gailliot, & Miller, 2009). However, prior research suggests that people who are more committed to their relationship have psychological defences that limit the degree to which they engage with and attend to alternatives can negatively impact the relationship (Finkel et al., 2002). The current research expands on prior studies and findings by attempting to understand the workings of commitment and attention to alternatives through a medium of modern-day social media, Instagram. The primary aim of our research was to discover whether the relationship maintenance behaviors and cognitions discovered in previous research associated with attention

to alternatives would reliably appear across particular Instagram behaviors. More specifically, we sought to find relationships between commitment and the proportion of attractive alternatives one followed on Instagram, and if there was a connection between the proportion of alternatives followed and derogation of one's partner. Additionally, we tested whether relationship reminders had an effect on the number of highly attractive accounts one would choose to follow, the degree to which they would derogate said accounts, and the time they would spend attending to these profiles. We also wanted to determine if commitment and reminders of commitment would interact to display even stronger effects on Instagram behaviors and self-reports.

While not many of our findings aligned with our hypotheses, we nonetheless discovered some results that were consistent with our predictions and prior research. First, in a more naturalistic study examining people's actual Instagram usage and profiles, we observed that participants who were highly committed to their partners reported that they followed fewer attractive alternatives on Instagram than the less committed participants. Despite these claims however, these differences were only true for self-reported behaviours, and did not reflect actual differences in the number of actual alternatives they followed on Instagram. Given that the self-reported and actual accounts followed, as rated by the researcher, were significantly correlated, ( $r(148) = .28, p = .001$ ), this discrepancy seems to reflect cognitive defences against relationship threats commonly reported by people who are more committed to their relationships. Whether people who were more committed were knowingly under-reporting the extent to which they were following alternatives, or whether less committed people are embellishing their behaviours remains a question for future research.

Next, we found that participants' higher perceived quality of alternatives was significantly associated with them also following more attractive alternatives. This finding

suggests that those participants who thought the alternatives to their partner were more attractive and/or fulfilling reported that they followed more attractive alternatives on Instagram than those who had a lower perceived quality of alternatives.

Finally, we explored whether the discrepancy between self-reported and actual engagement with alternatives in Study 1 could be attributed to contextual cues that motivate people to shift their behaviours. Specifically, we were interested in whether relationship reminders would motivate more committed people to avoid following new temptations. Despite there being no effect of the priming condition on their in-lab social media behaviours (e.g., liking, intentions to follow), highly committed participants who were primed to think about relationships rated the attractive targets as less interesting and likable, and they derogated the accounts of attractive alternatives far more overall. A main takeaway from these results is that essentially all of the participants were curating alluring content filled with attractive alternatives in some way, regardless of commitment. However, their cognitive appraisals suggested that more highly committed people were sensitive to the risks these alternatives represented.

There were also notable gender differences in both Study 1 and Study 2. In both studies, men followed more (self-reported and experimenter coded) and rated alternatives as more attractive than women, collapsing across commitment. Interestingly, gender and commitment also interacted in both studies. When men were more committed, they did in fact follow significantly fewer attractive alternatives than men who were low in commitment. For women, commitment did not influence the extent to which they reported or actually followed alternatives. However, in Study 2, it was women who showed differences as a function of their commitment. Specifically, more highly committed women spent less time looking over the Instagram targets than the less committed women. This suggests that men and women who are committed to their

relationships may have different strategies to cope with the threat of attractive alternatives in real life.

Consistent with that assumption, West (2013) determined through his research on attention to alternatives through the medium of Facebook that men reported they monitored attractive alternatives online at a far higher rate than women did. This is consistent with previous research that men generally pay more attention to alternatives than women do (Rusbult et al., 1998). Based on our data, this fact of men attending more to alternatives is representative through the medium of Instagram as well. Additionally, an explanation as to why we may have received the gender differences that occurred, that is more specific to Instagram, is that men and women may fundamentally be using Instagram differently. This point can be potentially supported by research conducted by Muscanell & Guadagno (2012) on research on gender differences and social media usage that showed that men reported using social media primarily to seek out new relationships, while women utilized it to maintain established relationships. Although this research refers to the usage of Facebook specifically, it is reasonable to assume that similar differences persist across social media platforms.

An essential takeaway from the present research is that there is evidence of cognitive defenses at play, and they are playing an essential role in the promotion of relationship maintenance for highly committed people when they are asked about their interactions with alternatives. Moreover, these cognitive defenses may have adapted to function similarly through the medium of social media where behaviors and communication are ever-changing.

### **Limitations**

The first limitation to the current research is related to Study 1, and it is based on the fact that the researchers were only able to have one independent rater to code and determine the

proportion of alternatives followed as well as their attractiveness. A natural rater's bias as well as simple mistakes were among the main concerns throughout the coding process of the study. Fortunately, participant values and reports were correlated with those of the rater ( $r(148) = .28$ ). This showed consistency of the independent rater and that the differences in coded values and reported values were likely a result of the commitment of participants. Nonetheless, future studies that use similar paradigms would benefit from having more independent raters to increase reliability.

A limitation for Study 2 was that the profiles were chosen by the research team, meaning that although they were rated as highly attractive by the independent raters recruited for the pilot study, they may not reflect participants' individual preferences. These preferences may play an especially important role if highly committed people are to be swayed from their current partner (i.e., why risk switching for someone who is not your ideal). This limitation also raises the question as to what people use to evaluate attractiveness. Is it a reflection of their personal preference for the target, or is it tapping into social norms and expectations? Although Study 1 attempted to address this drawback by examining participants' own Instagram accounts, future studies should also try to better understand how evaluations of attractiveness are anchored.

Another limitation of the current research that is more general is that it relied on a predominantly white and heterosexual sample. Although we recruited straight, gay, and lesbian participants for this research, the overwhelming majority of participants in both studies identified as straight (97.72% and 95.75%). Thus, it was not possible to reliably look at differences in sexual orientation and how they might have interacted with commitment. Past research suggests that gay men, in particular, are more likely to engage in extra-dyadic or open relationships to a greater extent than straight men and women and lesbians (Blumstein & Schwartz, 1983).

Interestingly, gay men in more open, consensually non-monogamous relationships have reported higher satisfaction than gay men in primarily monogamous relationships (Conley et al., 2012; Kurdek, 1988). Likewise, this research focused exclusively on people in consensually monogamous relationships as well as primarily heterosexual relationships. For people in consensually non-monogamous, heterosexual relationships, commitment to a current partner may not require that they engage in protective behaviors and derogation of others because they do not represent a threat to the stability of their current partnership. However, little is known about differences in how consensually monogamous and consensually non-monogamous people attend to relationship alternatives within heterosexual relationships.

### **Future Directions**

The current studies identify several future avenues of research. First, in order to best understand how people manage and curate relatively more or less tempting social media, researchers should use longitudinal methods to track behaviors over time. In particular, it would be worth testing whether the defenses people have developed break down and the extent to which the actual number of tempting accounts they follow can undermine their relationship persistence and satisfaction. According to models of interdependence (Wieselquist et al., 1999), commitment is directly associated with relationship persistence. Relationship commitment is sensitive to the number of quality alternatives people have in their environment (Rusbult, Martz, & Agnew, 1998). Because social media creates an environment where engaging with highly attractive and desirable people is both acceptable and encouraged, people may begin following alternatives with no ill-begotten intentions towards their relationship. However, over time, the increased number of alternatives they follow may start to impact and wear down on their commitment. This may subsequently influence their desires to derogate alternatives and persist

with their partner. Moreover, it would be telling if there would be an increase in the following of alternatives of Instagram after the dissolution of a relationship. An increase in the alternatives one follows could essentially be the equivalent of someone perusing the sea of potential alternatives, much like they would in the real world if they chose to go out and mingle in social environments (bars, clubs, parties) to potentially find a new partner.

Further future directions might focus on identifying among participants what internet behaviors are commonly seen as being problematic or dangerous for relationship success. Through the utilization of a pilot study where participants self-report what constitutes problematic internet behaviors, we may potentially have a better understanding of what's "okay" and what's not "okay" to do on Instagram. An additional future question worth exploring in regard to Instagram usage and exposure to attractive alternatives is, how much of the "over-exposure" to alternatives is to blame on the user-preference algorithms Instagram utilizes or on human behavior. Facebook has made claims that the answer to the question may in fact be that it is habituated human behaviors online that are a larger influence on what content a user is exposed to than the algorithms (CS181Journalism, 2018).

## **Conclusion**

Relationship commitment is a powerful force that influences people to keep a hold of the bountiful benefits they receive from a romantic partner. Even in the face of threats from highly attractive and desirable alternatives to one's partner, commitment impacts cognitions and behaviors in such a way that the desires to maintain a relationship overpower these external temptations. We sought to find if commitment had a similar impact on people in an age where communication with and connections to others has drastically evolved due to technological advancements. Through the medium of Instagram, we have found that commitment does indeed

have an impact on people's cognitions, but it remains to be seen just how powerful commitment is in shaping people's actual behaviors on the social media site.

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**Notes:**

<sup>i</sup> The variable of passion was examined for exploratory purposes, but no significant effects were found resulting in our choice to omit the data from our overall discussion.

<sup>ii</sup> Satisfaction and commitment are highly correlated, so we tested whether satisfaction better accounted for the observed effects instead of commitment. Our analyses showed it did not because the effects are not significant.

<sup>iii</sup> Users with private Instagram accounts were sent a "follow request" from a lab-identified Instagram account. Participants had been notified that they might receive such a request from the researchers. Of the 263 requests sent, 165 accepted. The remaining valid accounts were public and had no special privacy settings.

<sup>iv</sup> In order to maximize power, the entire sample ( $N=263$ ) was used for analyses with self-reported alternatives followed. However, the findings remain the same when participants who did not have their accounts independently rated by the researchers ( $n=98$ ) are excluded from the analyses.

<sup>v</sup> Although participants in both the experimental and neutral prime conditions were shown a final list of 6 words to remember, those in the neutral prime condition were only asked to unscramble 5 words due to an experimenter error.

<sup>vi</sup> In the regression analyses, participants who didn't recall all of the prime words were excluded from the analyses. Models were no longer significant when participants who could not recall the prime words were included in the analyses.

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## Appendix A: Study 1 Materials

### Demographic and Instagram Usage Questions

Gender:

- Male
- Female
- Not Listed

Age: \_\_\_\_\_

What is your ethnic identity? If more than one category applies, please select the one with which you most strongly identify. (Please check one)

- White/ Irish/ Gypsy or Irish Traveller/ Other White
- Asian or Asian British
- Arab or Arab British
- Black/African/Caribbean/Black British
- Mixed/Multiple Ethnic Groups
- Other Not Listed (please specify)

Which of the following best matches your sexual-orientation?

- Heterosexual (Attracted to people of the opposite gender)
- Homosexual (Attracted to people of the same gender)
- Bisexual (Attracted to people of both genders)
- Not Listed

Which of the following best captures your current relationship style?

- Monogamous
- Consensually non-monogamous/Polyamorous
- Other (not listed)

Which of the following classifications best describes your current romantic relationship?

- Single (not in a romantic relationship)
- Casually dating
- Exclusively dating/In a committed dating relationship
- Engaged
- Married/Civil Union/Common-law

Do you and your romantic partner live together (i.e., share a primary residence)?

- Yes
- No

How long have you and your partner been together? Please select the year and month you started your relationship. \_\_\_\_\_

In the average week, how often do you check your Instagram account?

- Never or almost never
- At least once a week
- A few times per week
- Nearly every day
- Every day

How many accounts do you follow? \_\_\_\_\_

What types of accounts do you typically follow (check all that apply)?

- Automotive
- Business
- Celebrities & Entertainment
- Fashion
- Fitness
- Food
- Home & Garden
- Pets, Animals & Nature
- Sports
- Technology
- Travel

Using your best estimate, what percentage of the Instagram accounts you follow are women?

Using your best estimate, what percentage of the Instagram accounts you follow are men?

Using your best estimate, what percentage of the Instagram accounts you follow are animals or wildlife?

On average, how attractive are the women in the Instagram accounts you follow?

Extremely Unattractive: 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 :Extremely Attractive

On average, how attractive are the men in the Instagram accounts you follow?

Extremely Unattractive: 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 :Extremely Attractive

### **Commitment and Relationship Questions**

#### **Perceived Relationship Quality Components Inventory (PRQC)**

(Fletcher, Simpson & Thomas, 2000)

Please indicate what your current partner/relationship is like:

#### *Commitment*

1. How committed are you to your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

2. How dedicated are you to your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

3. How devoted are you to your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

*Passion*

1. How passionate is your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

2. How lustful is your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

3. How sexually intense is your relationship?

1	2	3	4	5	6	7
Not at all						Extremely

### Satisfaction Scale

(Rusbult, Martz, & Agnew, 1998)

Please indicate how much you agree with the following statements about your current relationship:

1. I feel satisfied with our relationship.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

2. My relationship is much better than others' relationships.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

3. My relationship is close to ideal.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

4. Our relationship makes me very happy.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

5. Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

### Quality of Alternatives

(Rusbult, Martz, & Agnew, 1998)

Please indicate how much you agree with the following statements about your current relationship:

1. The people other than my partner with whom I might be involved are very appealing.

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

2. My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.).

1	2	3	4	5	6	7	8	9
Do not				Agree				Agree
agree at all				somewhat				completely

3. If I weren't dating my partner, I would do fine – I would find another appealing person to date.

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Do not  
agree at all

Agree  
somewhat

Agree  
completely

4. My alternatives are attractive to me (dating another, spending time with friends, or on my own, etc.).

1  
Do not  
agree at all

2

3

4

5  
Agree  
somewhat

6

7

8

9  
Agree  
completely

5. My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship.

1  
Do not  
agree at all

2

3

4

5  
Agree  
somewhat

6

7

8

9  
Agree  
completely

### Attractiveness Scale (Baker & Churchill, 1977)

How physically attractive do you think your partner is?

1  
Extremely  
Unattractive

2

3

4

5

6

7

8

9  
Extremely  
Attractive

## Appendix B: Study 2 Materials

### Study 2 Measures

#### Perceived Relationship Quality Components Inventory (PRQC) [Fletcher, Simpson & Thomas, 2000]

1	2	3	4	5	6	7
Not at all						Extremely

#### *Commitment*

4. How committed are you to your relationship?
5. How dedicated are you to your relationship?
6. How devoted are you to your relationship?

#### **Interest Scale**

(adapted from Baker & Churchill (1977) Attractiveness scale)

How interesting is the person in this profile?

1	2	3	4	5	6	7	8	9
Extremely Uninteresting								Extremely Interesting

#### **Likeability Scale**

(adapted from Baker & Churchill (1977) Attractiveness scale)

How likeable is the person in this profile?

1	2	3	4	5	6	7	8	9
Extremely Unlikeable								Extremely Likeable

#### **Follow on Instagram Measure**

Would you follow this account on Instagram?

- Yes  
No

### **Mating Prime**

#### **Prime Words**

Mating Prime: CUDDLE, SLEEP, LUST, HUG, KISS, PILLOW

Neutral Prime: REST, FROG, BENCH, ROLL, CUP, LITTLE

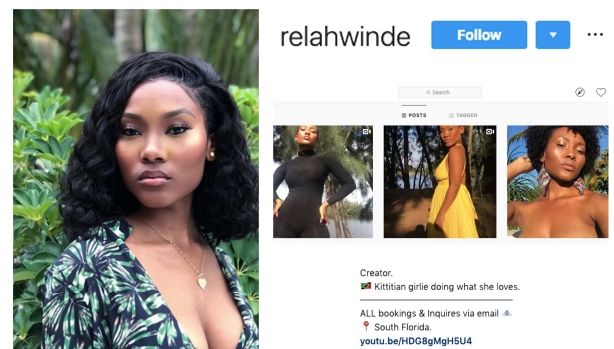
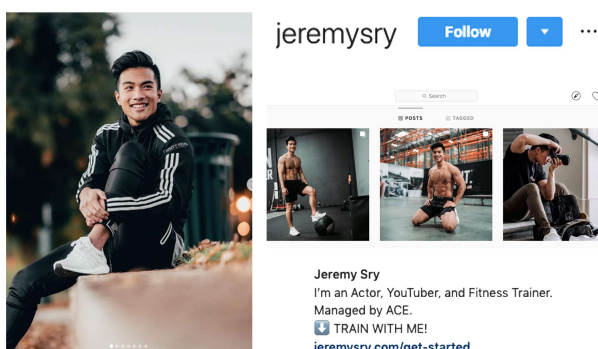
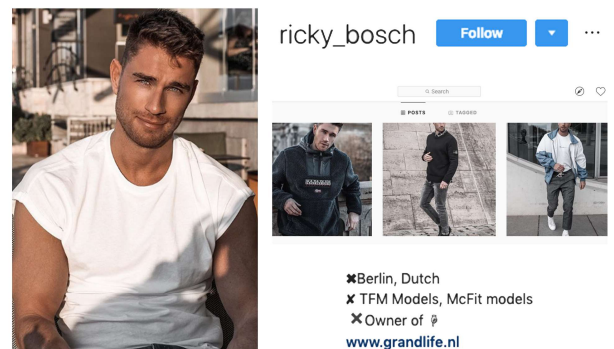
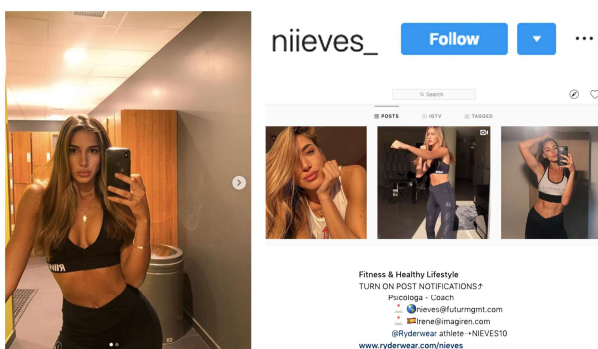
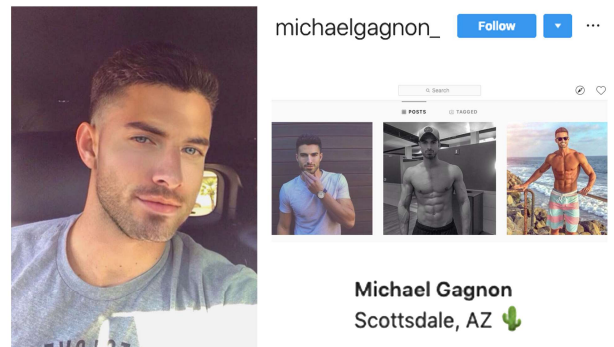
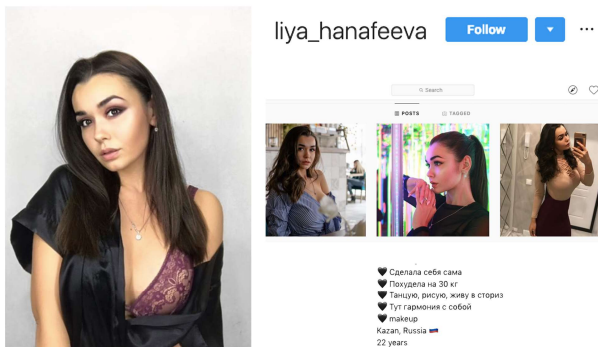
#### **Word Recognition Task**

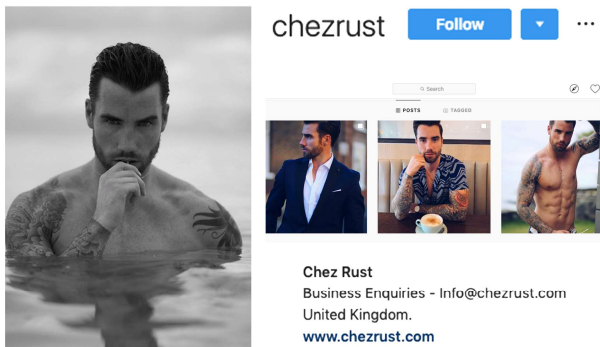
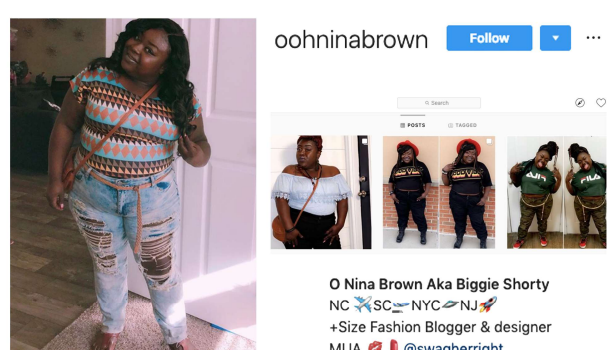
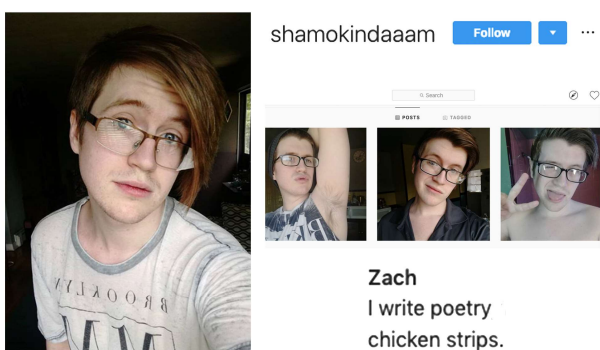
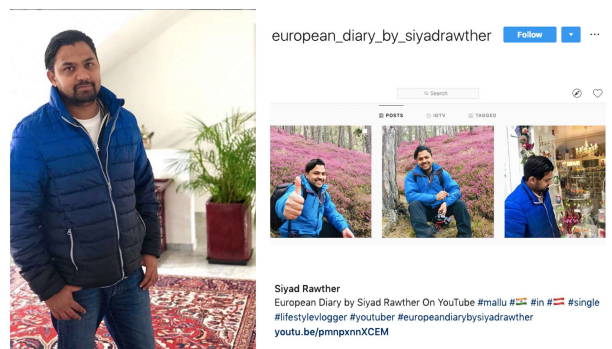
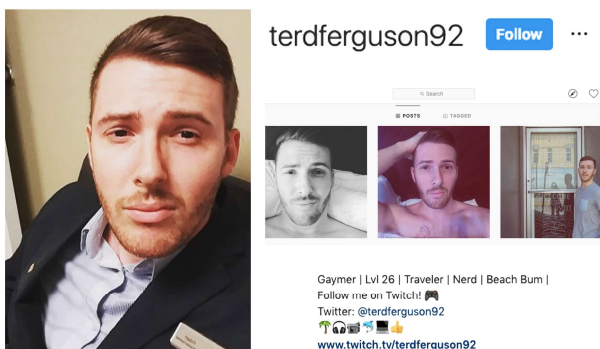
Which of these words is from the list of 6 words from the word scramble?

CUDDLE  
DATES  
KITCHEN

## Instagram Template Profiles

### Attractive:



Average:



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Amber Paige Petrovich (Snapp)  
Female/25  
Mother of 1  
I love art, I'm always snappin pictures, writing poetry or singing a song.  
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19 Casual Low Budget  
Owner of @dhanie\_oc  
➡ @dhanie\_oc  
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👉 Poles Boy  
📅 February 22 - 95  
🎵 Gaming & Singing  
📧 DM for collab  
🌐 dhanie\_oc.com

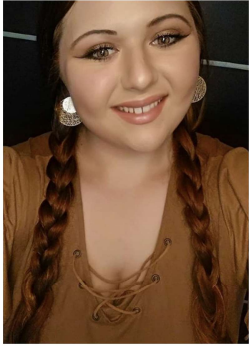


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sarah.poupeau    Follow    ...

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Sarah  
❤️ 5 ❤️  
@sarah.poupeau  
at 16-17  
Regularly  
#poupeau #poupeau #poupeau  
#poupeau #poupeau #poupeau  
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Table 5. Study 2 Descriptive Statistics & Correlations

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Commitment											
2. Satisfaction	.67***										
(A) 3. Attractive Male	.08	.02									
4. Average Male	.04	.04	.55***								
5. Attractive Female	.09	.09	.47***	.30***							
6. Average Female	.12*	.02	.39***	.66***	.36***						
(B) 7. Attractive Male	.02	-.01	.67***	.40***	.28***	.28***					
8. Average Male	.08	.05	.54***	.79***	.29***	.58***	.49***				
9. Attractive Female	-.01	.03	.25***	.23***	.56***	.23***	.60***	.28***			
10. Average Female	.10*	.04	.39***	.56***	.34***	.78***	.45***	.70***	.40***		
(C) 11. Attractive Male	.04	.01	.64***	.39***	.28***	.26***	.89***	.48***	.51***	.44***	
12. Average Male	.10†	.08	.54***	.74***	.32***	.55***	.44***	.88***	.21***	.63***	.46***
13. Attractive Female	.06	.09	.27***	.22***	.59***	.22***	.55***	.26***	.85***	.35***	.60***
14. Average Female	.14*	.08	.43***	.55***	.41***	.73***	.34***	.64***	.28***	.85***	.37***
(D) 15. Attractive Male	.03	.00	.32***	.05	.16**	.02	.55***	.12*	.34***	.18**	.53***
16. Average Male	.01	-.01	.13*	.28***	.15**	.20***	.22***	.37***	.17**	.27***	.19**
17. Attractive Female	-.03	.01	-.03	-.10†	.28***	-.10†	.19**	-.07	.48***	.03	.15**
18. Average Female	.03	-.01	.09	.16**	.13*	.32***	.16**	.19**	.21***	.45***	.15**
(E) 19. Attractive Male	-.07	-.05	.01	.01	-.01	.03	-.04	.03	-.09	.04	.05
20. Average Male	-.02	-.01	.05	.04	-.07	.02	-.07	.04	-.15†	.00	.01
21. Attractive Female	.07	.07	-.01	.05	.05	.01	-.05	.07	-.01	.04	.02
22. Average Female	.02	-.01	.12*	.13*	.15*	.16***	.08	.20***	.03	.18***	.15*
<i>M</i>	6.42	6.04	6.56	3.53	6.80	4.59	4.87	3.61	5.00	4.51	5.10
<i>SD</i>	.87	.99	1.80	1.38	1.37	1.57	1.74	1.43	1.54	1.56	1.72
<i>Range</i>	2.67 – 7.00	2.00 – 7.00	1.00 – 9.00	1.00 – 8.00	2.25 – 9.00	1.00 – 8.75	1.00 – 9.00	1.00 – 7.50	1.00 – 9.00	1.00 – 8.25	1.00 – 9.00

Variables	12	13	14	15	16	17	18	19	20	21	22
(C) 13. Attractive Female	.25***										
14. Average Female	.71***	.31***					.				
(D) 15. Attractive Male	.11†	.32***	.10†								
16. Average Male	.37***	.14*	.26***	.32***							
17. Attractive Female	-.13*	.47***	-.04	.43***	.26***						
18. Average Female	.17**	.17**	.38***	.35***	.46***	.37***					
(E) 19. Attractive Male	.03	-.08	.07	.03	.10†	.00	-.02				
20. Average Male	.06	-.11*	.03	.05	.08	-.03	.00	.75***			
21. Attractive Female	.10†	.05	.08	-.02	.11†	.00	-.07	.36***	.35***		
22. Average Female	.22***	.07	.19***	.17**	.30***	.01	.03	.36***	.29***	.37***	
<i>M</i>	3.94	5.16	5.05	1.03	.34	1.05	.71	70.54	74.81	72.04	73.12
<i>SD</i>	1.49	1.46	1.56	1.26	.65	1.31	1.07	64.55	86.61	43.40	66.44
<i>Range</i>	1.00 – 8.25	1.50 – 9.00	1.00 – 8.75	.00 – 4.00	.00 – 4.00	.00 – 4.00	.00 – 4.00	24.11 – 867.73	21.48 – 1001.08	23.50 – 27.04	19.58 – 73.12

Note. † $p < 0.1$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$