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# Cyber Dating in the Age of Mobile Apps: Understanding Motives, Attitudes, and Characteristics of Users

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**ABSTRACT:** With the advent of the Internet and social media, relationships and relationship formation have significantly changed. This is especially true in terms of finding romantic partners or "hook up" partners. The following study examined motives for using online dating websites and mobile dating applications, as well as attitudes toward those platforms, and demographic differences related to their use. A survey of college students revealed that the primary reasons for using cyber dating platforms are "Fun," "Relationship," and "Hook Up." There were also differences in the attitudes of those that have experienced cyber dating platforms and those that have not. In addition, individuals with high self-esteem were less motivated to use cyber dating to hook up. Older users and women were more likely to use them for relationship reasons. Theoretical contributions of this study relate to our understanding of uses and gratifications theory and theory of reasoned action.

**KEYWORDS**: cyber dating; attitudes; uses and gratifications; self-esteem; online dating

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With the advent of the Internet, social media, and other technologies, relationships and relationship formation have significantly changed. This is especially true in terms of finding romantic partners or "hook up" partners. In addition to traditional dating, cyber dating platforms have become common ways to meet people. Cyber dating consists of online dating websites and mobile dating applications ("apps"). Online dating websites are characterized by detailed profiles, searching and viewing multiple dating matches, and giving users the option to search for specific criteria (Stewart, 2015). Additionally, online dating websites are accessed from a web browser on a laptop or desktop. Unlike online dating sites, mobile dating apps are accessed from mobile devices such as phones or tablets. They are often location based, easier to use, and are associated with "hooking up" (Stewart, 2015). One does not have to spend hours creating a profile on dating apps as most are accessed through other social media accounts. While this simplifies the process of logging in, it makes it harder to find someone based on more than physical attraction.

While there are clearly differences between online dating websites and mobile dating apps in terms of features, both platforms boast their ability to help people find romance in one form or another. In fact, most dating sites also offer a dating app version of their site. The idea that a potential mate is just one click or swipe away is appealing to many. This is evident through the number of people that have tried online dating. According to the Statistic Brain Research Institute (2016), 49,250,000 people have attempted online dating. The online dating industry obtains $1,749,000,000 in annual revenue, and the average dating site customers spends about $243 on a dating site (Statistic Brain Research Institute, 2016). As more individuals turn to the Internet and their mobile devices for dating purposes, there is a particular interest in what drives them to do so.

Several studies have examined motives for usage of online dating websites (e.g., Couch & Liamputtong, 2008; Lawson & Leck, 2006; Wang & Chang, 2010). While various reasons exist for why people choose to partake in online dating, little has been noted about reasons for mobile dating app use. As a result, this study applies uses and gratifications as a theoretical background to determine motives for using online dating website and mobile dating apps. Specifically, the goal is to exemplify the differences between motives for website dating and mobile app dating. Additionally, attitudes toward cyber dating, self-esteem, age, and gender are measured in order to understand how they relate to motives for using cyber dating platforms.

**Uses and Gratifications Theory**

The premise behind the uses and gratifications theory (U&G; Katz, Blumler, & Gurevitch, 1974) theory is that people are active participants in seeking the media that will satisfy their specific needs. Those needs are often called "motives." Most U&G studies have looked at the motives for different media use, and often apply factor analysis as a statistical procedure to combine similar motive items and motivational themes (Mull & Lee, 2014).

Motives are referred to as the factors that impact individuals' behaviors to satisfy one or more of their needs (Magsamen-Conrad, Dowd, Abuljadail, Alsulaiman, & Shareefi, 2015). While most motives are specific to a particular media source, some motives generally apply to all forms of media. These motives are information, entertainment, personal identity, and social interaction (McQuail, 1983). One of the uses and gratifications theory strengths is its applicability to a diverse range of media contexts. Thus, U&G theory has been applied to various new media technologies, including Twitter (e.g., Chen, 2011), Facebook (e.g., Krause, North, & Heritage, 2014; Sheldon, 2008), Pinterest (e.g., Mull & Lee, 2014), and Instagram (e.g.,

Sheldon & Bryant, 2016). As a result, new categories have emerged explaining why people use social media, emails, tablets, and smartphones. For example, while most people watch television for entertainment purposes, most people use social network sites for social interaction (Sheldon, 2008). Whiting and Williams (2013) identified several uses and gratifications of social media that did not exist when the original U&G theory was developed. This includes convenience, expression of opinion, and knowledge about others. Similarly, Mull and Lee (2014) discovered new motivations for Pinterest usage: fashion, entertainment, creative projects, virtual exploration, and organization – most of them not identified in previous SNS studies either. Sheldon and Newman (2016) found that the main reasons for Instagram use among teens are social interaction, documentation, popularity, escapism, creativity, and lurking. Lurking and escapism were never before identified as motives for Instagram use. As uses and gratifications theory has been applied to these forms of new media, the model can also work to help us understand motives for using online dating sites as well as motives for using mobile dating apps.

**Uses and Gratifications and Cyber Dating**
Various studies yield results that contribute to the list of motivating factors behind why people use online dating sites. Couch and Liamputtong (2008) found several reasons related to why people use dating websites, including looking for fun, seeking sex, searching for a soulmate, to ease boredom, for relaxation purposes, and it is an easy way to meet people. Similarly, Lawson and Leck (2006) discovered that people use online dating sites for companionship, control over presentation and environment, comfort after a life crisis, adventure, freedom from stereotypic roles and commitment, and to indulge in romantic fantasy. In Wang and Chang's (2010) study, motives included the opportunity to meet new people, anonymity, curiosity, easier communication, social compensation, emotional support, love, escape, and obtaining sexual partners. Among these studies, the most commonly found motives for using an online dating site are seeking companionship, ease of communication, adventure, and looking for sexual partners (Couch & Liamputtong, 2008; Lawson & Leck, 2006; Wang & Chang, 2010).

While there is ample literature on motives for online dating website use, motives for usage of mobile dating applications have yet to be identified. However, researchers have looked at motives behind general usage of mobile applications. For example, Lin, Fang, and Hsu (2014) found that users are motivated to use mobile apps due to immediate access and mobility, social benefits, self-status seeking, entertainment, information seeking, pursuing happiness, and socializing. Gerlich, Drumheller, Babb, and De'Armond (2015) discovered similar results in their study on mobile application motives such as pass time, knowledge and education.

In order to uncover motives of online dating sites use and mobile dating apps use, the following question is posed in this study:

RQ1a: What are the motives for using online dating websites and mobile dating applications?

Furthermore, there is importance in understanding the differences between what motivates people to use online dating websites as opposed to mobile dating apps and vice versa. Consequently, the study asks the following question:

RQ1b: Are there any differences between motives for website dating and mobile app dating?

In order to better understand the motives behind online and mobile dating use, it is useful to examine the attitudes people hold in relation to cyber dating, and specifically website and mobile dating.

**Theory of Reasoned Action and Attitudes toward Cyber Dating**
According to the theory of reasoned action (TRA; Ajzen & Fishbein, 1980), a person's behavior is determined by his or her intention to perform the behavior, and that this intention is, in turn, a function of his or her attitude toward the behavior. Attitude refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991, p. 188). According to TRA, people's evaluations of, or attitudes toward, behavior are determined by their accessible beliefs about the behavior. A belief is defined as the subjective probability that the behavior will produce a certain outcome (Fishbein & Ajzen, 1975). This outcome expectancy originates from the expectancy-value model. Individuals evaluate their own performance based on perceived benefits. Attitudes consist of beliefs about the outcome of a behavior and evaluation of the possible outcome (i.e. the outcome is likely or unlikely; the outcome is good or bad). Therefore, the attitudes that people hold toward online and mobile dating might impact the motives for which they use such forums, as well as the likelihood of a person using them.

While literature on attitudes specifically geared toward mobile dating apps is wanting, the literature provides various results on attitudes toward online dating websites. For example, Smith and Duggan (2013) found that attitudes toward online dating have changed a significant amount among Internet users. Results that the authors reported from a survey on Americans' use of the Internet indicate that 59% of Internet users agree that "online dating is a good way to meet people" as opposed to only 44% in 2005 (Smith & Duggan, 2013, p. 3). Other findings show that 53% of people that use the Internet agree that "online dating allows people to find a better match for themselves" compared to 47% in 2005. Lastly, only 21% of Internet users concur with the statement that "people who use online dating sites are desperate" instead of 29% in 2005 (Smith & Duggan, 2013, p. 3).

Other research suggests that there is a positive relationship between those with an affinity for the Internet and perception of online romantic relationships (Anderson, 2005). Thus, those who enjoy using the Internet are more open to the idea that interpersonal relationships can be formed through online means. As Internet users and those with Internet affinity are likely to hold more non-conventional values, it is necessary to understand how those with conventional beliefs feel about online dating. Anderson (2005) also found a negative relationship between the romantic beliefs that people hold and perception of online relationships. Thus, people with more conventional romantic beliefs are less in favor of online relationships (Anderson, 2005).
The various attitudes that people hold toward online romantic relationships will likely predict their motives and intent to use technology-based dating. As a result, the study poses the following questions:

> RQ2a: What attitudes do people hold toward online dating websites and mobile dating applications?
> RQ2b: How do attitudes impact potential motives for online dating website and/or mobile dating application use?
> RQ2c: How do attitudes influence the likelihood that one will use an online dating website and/or a mobile dating application?

U&G theory suggests that factors such as one's social and psychological circumstances, motives, and expectations influence media use and effects (Katz et al., 1974). Research have sought to understand how attitudes and dispositions influence gratifications sought and audience behavior. Certain psychological factors should influence use of cyber dating platforms.

**Predictors of Cyber Dating**

*Self-esteem*. Self-esteem is defined as the positive or negative attitudes one holds about himself or herself (Rosenberg, 1965). Kim, Kwon, and Lee (2009) discovered that highly sociable people that also have high self-esteem are more likely to use Internet dating than highly sociable people with low self-esteem when they consider romantic relationships to be of importance. This result suggests that those with higher self-esteem may have more confidence in their ability to find a companion through online and/or mobile dating. Another finding from the study shows that highly sociable people with low self-esteem used Internet dating more than those with high self-esteem when romantic relationships were not as vital to them (Kim et al., 2009). Perhaps those with low self-esteem use technology-based dating in an attempt to boost their self-confidence and gauge what their options are rather than to form relationships. More research is needed to determine the relationship between self-esteem and cyber dating usage. Another predictor of why and if people are likely to use online and/or mobile dating concerns different age ranges.

*Age.* Valkenburg and Peter (2007) found that the most active online dating users are between the ages of 30 and 50. Smith and Duggan (2013) reported slightly different results from a survey based on Americans' Internet use. The authors state that online dating and mobile dating are mostly used by people in their mid-twenties to mid-forties. One potential reason for the slight difference between the results from the two studies is that one only measures for online dating use while the other measures for both online and mobile dating use. The age demographics from previous studies suggest that people ages 25-50 are more likely to use online dating and mobile dating apps than teenagers or the elderly. Gender may also provide insight into whether a person will use online and/or mobile dating and for what reasons.

*Gender*. When it comes to cyber dating, males and females may be motivated to use sites or apps for different purposes. According to Statistic Brain Research Institute (2015), 52.4% of online daters are male, whereas 47.6% are female. While slightly more men use online dating than women, the differences may be larger in reference to specific dating websites or applications. For example, McGrath (2015) reports that the ratio of men to women on the Tinder mobile dating app is 60:40. With this knowledge, gender could potentially influence the type of website or mobile dating app that people choose in the future.

In order to better understand the relationships between self-esteem, age, gender, and cyber dating, the following questions are asked:

RQ3a: How do factors of self-esteem, age, and gender influence motives for online dating websites and/or mobile dating applications?
RQ3b: How do factors of self-esteem, age, and gender impact likelihood that one will use online dating websites and/or mobile dating applications?

**Methodology**
*Participants and Procedure*
Participants were 364 college students, including 95 men and 269 women (mean age = 22.1; *SD* = 4.91). Approximately 76% of participants self-identified as Caucasian, 13% African

American, 4% Hispanic, 1% Asian American, 1% American Indian, and the remaining participants (5%) did not fit into provided categories.

Following approval from the Institutional Review Board, participants were recruited through courses offered at a medium-sized research university in the Unites States. They filled out a paper-based questionnaire in which they answered demographic and self-esteem questions. Additionally, they answered questions about cyber dating attitudes and the likelihood that they would use cyber dating. Of the total number of participants, 105 use or used cyber dating platforms (72 women and 33 men).

*Measures*

**Cyber dating uses and gratifications.** A pool of gratification items was assembled from prior online dating gratifications studies (Clemens, Atkin, & Krishnan, 2015; Wang & Chang, 2010). In addition, we conducted informal focus groups with undergraduate students to find out why they use online and mobile dating. All items were measured on a 5-point Likert scale (1 = *never*; 5 = *always*). Sample items include: "It is easier to talk to people in a cyber- context than face-to-face," and "It is fun to look at pictures and view profiles." Factor analysis extracted factors related to cyber dating use. This resulted in three factors that accounted for 65.52% of the variance (Table 1).

**Cyber dating attitudes.** A 15-item scale was developed to measure attitudes toward cyber dating. Sample items include: "It is appropriate to create an online/mobile dating profile," and "Mobile dating apps and online dating sites are primarily for non-committal relationships." Survey participants indicated the degree to which they agree or disagree with various attitudes regarding online and mobile dating. All items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = s*trongly agree*). Factor analysis extracted factors related to cyber dating attitudes. The factor analysis used a principal component solution and varimax rotation. To be retained, eigenvalues had to be greater than 1.0. This resulted in three factors that accounted for 53.64% of the variance (Table 2).

**Likelihood of cyber dating.** The likelihood that participants would use online dating websites and mobile dating applications was measured with a 2-item scale ("I am likely to use a mobile dating app" and "I am likely to use an online dating website") created by the primary investigator. Both items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*); $M_{mobile}$ = 2.31; $SD_{mobile}$ = 1.25; $M_{online}$ = 2.07; $SD_{online}$ = 1.09. Higher scores indicated a greater likelihood of using cyber dating platforms.

**Self-Esteem.** The Rosenberg Self-Esteem Scale (RSE) measured participants' self-esteem. The RSE contains 10 statements that measure global self-esteem (Rosenberg, 1965). All items on the RSE were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Sample items include: "On the whole, I am satisfied with myself," and "I certainly feel useless at times." The internal consistency of the scale showed that participants could not relate to one of the scale items ("I wish I could have more respect for myself"), so the item was deleted. The remaining 9 items were averaged into a subscale: $M$ = 3.91; $SD$ = .67; Cronbach's α = .89. Higher scores indicated a greater self-esteem.

**Demographics.** To measure demographic information**,** participants answered questions about their gender, age, and their ethnicity.

Table 1
*Motives for Cyber Dating Use: Primary Factor Analysis*

| | Loading | Eigenvalue | Variance | α |
|---|---|---|---|---|
| *Factor 1: Hook Up* | | | | |
| To find a person/people to have sexual relations with. | .91 | 5.10 | 34.02 | .91 |
| To find sexual partners. | .91 | | | |
| To find people to "hook up" with. | .90 | | | |
| To have a casual fling. | .83 | | | |
| To engage in a non-committed relationship. | .79 | | | |
| To be free from commitments. | .78 | | | |
| I would rather meet someone through a cyber-format than in person. | .45 | | | |
| *Factor 2: Relationship* | | | | |
| To find a companion. | .91 | 3.01 | 20.10 | .87 |
| I'm looking for a long-term relationship. | .82 | | | |
| To look for a potential boyfriend/girlfriend. | .80 | | | |
| Meeting people online and through mobile apps is convenient. | .66 | | | |
| *Factor 3: Fun* | | | | |
| It is a form of entertainment. | .84 | 1.71 | 11.41 | .78 |
| It is fun to look at pictures and view profiles. | .84 | | | |
| . | | | | |

Table 2

*Attitudes for Cyber Dating: Primary Factor Analysis*

| | Loading | Eigenvalue | Variance | α |
|---|---|---|---|---|
| *Factor 1: Desperate* | | | | |
| Mobile/online dating are only used for hookups. | .77 | 5.12 | 34.16 | .83 |
| People that use online/mobile dating are desperate. | .71 | | | |
| Individuals that use mobile apps and online dating sites have difficulty with non-cyber relationships. | .71 | | | |
| Most relationships from mobile/online dating result in flaky, shallow connections. | .69 | | | |
| When people use online/mobile dating, it means they cannot find someone on their own. | .70 | | | |
| Mobile dating apps and online dating sites are primarily for non-committal relationships. | .70 | | | |

|  | | | | |
|---|---|---|---|---|
| *Factor 2: Socially Acceptable* | | | | |
| Online/mobile dating is a great way to meet potential partners/ "hook up." | .74 | 1.81 | 12.10 | .67 |
| Mobile apps and online dating sites are socially acceptable ways to form relationships or "hook up." | .65 | | | |
| Mobile apps and online dating sites have a good chance of leading to a relationship or "hook up." | .63 | | | |
| Mobile dating apps and online dating sites are popular ways to meet people. | .61 | | | |
| *Factor 3: Committed Relationship* | | | | |
| Mobile/online dating sites often lead to monogamous relationships. | .72 | 1.11 | 7.39 | .63 |
| Committed relationships often come as a result of mobile/online dating. | .69 | | | |
| People "hook up" and form serious relationships as a result of mobile/online dating on a regular basis. | .64 | | | |

## Results

### RQ1: Motives for Online and Mobile Dating Use

Results of the factor analysis (Table 1) revealed three factors or motives for using online dating websites and mobile dating applications. The three factors are defined as: "Hook up," "Relationship," and "Fun." The Cronbach's alpha values for all three factors indicated good internal consistency of the items. The main reason users used cyber dating services was to have fun. *Fun* had the highest mean score ($M = 3.76$; $SD = .90$), followed by *Relationship* ($M = 3.33$; $SD = .99$), and *Hook Up* ($M = 2.39$; $SD = .79$).

In addition, an independent t-test was used to find out if the users of websites and users of mobile apps have different motives for using cyber dating platforms. Results revealed statistically significant differences in motives for using these two platforms. First, the users of mobile apps were more interested ($M = 2.50$, $SD = .82$) in hooking up than the users of online dating websites ($M = 1.97$, $SD = .72$); $t(86) = 2.06$, $p = .042$. The users of dating websites, however, were more interested in creating a long-term relationship ($M = 4.03$, and $SD = .32$) than the users of mobile apps ($M = 3.12$, $SD = .99$); $t(86) = -3.01$, $p = .003$. Lastly, mobile dating app users were more interested in using cyber dating for fun ($M = 3.95$, $SD = .79$) than users of online dating websites ($M = 3.09$, $SD = 1.07$); $t(86) = 3.21$, $p = .002$.

### RQ2: Attitudes toward Online Dating and Mobile Dating

Results of the factor analysis revealed three general attitudes people hold toward cyber dating platforms: "Desperate," "Socially Acceptable," and "Committed Relationship." (Table 2) The *Socially Acceptable* attitude ($M = 3.51$; $SD = .61$) had the highest mean score; followed by *Committed Relationship* ($M = 3.00$; $SD = .61$), and finally *Desperate* ($M = 2.57$; $SD = .69$).

Additionally, there were differences in attitudes between those who have tried using cyber dating platforms and those who have not. Thus, those who have never used it scored

higher on attitude *Desperate* (*M* = 2.68, *SD* = .69) than those who have used it (*M* = 2. 31, *SD* = .61) and that difference was statistically significant; *t*(362) = -4.77, *p* < .001.  Also, those who used cyber dating platforms were more likely to find it socially acceptable (*M* = 3.70, *SD* = .48) than those who have not used cyber dating (*M* = 3.43, *SD* = .64); *t*(362) = 3.90, *p* < .000.  Lastly, those who used cyber dating were more likely to believe that cyber dating produces committed relationships (*M* = 3.15, *SD* = .60) compared to those who have never experienced it (*M* = 2.94, *SD* = .60); *t*(362) = 2.96, *p* = .003.

Pearson product-moment correlations were conducted to determine relationships between attitudes toward online and mobile dating and motives for online and mobile dating.  There were two significant relationships between attitudes and motives for cyber dating.  First, the *Socially Acceptable* attitude was positively and significantly related to the *Relationship* motive, *r*(105) = .26, *p* = .007.  Secondly, the *Committed Relationship* attitude was positively and significantly related to the *Relationship* motive, *r*(105) = .35, *p* < .000.  In addition, attitude *Desperate* was negatively and significantly related to likelihood to use both online dating, *r*(364) = -.33, *p* = .000, and mobile dating, *r*(364) = -.34, *p* < .000, while attitude *Socially Acceptable* was positively and significantly related to likelihood to use both online, *r*(364) = .27, *p* < .000, and mobile dating, *r*(364) = .32, *p* < .000.  Lastly, attitude *Committed Relationship* was positively and significantly related to likelihood to use both online dating, *r*(364) = .38, *p* < .000, and mobile dating, *r*(364) = .33, *p* < .000.

### RQ3: Self-esteem, Age, and Gender, and Online and Mobile Dating
In order to determine the relationship between self-esteem and cyber dating motives, a Pearson product-moment correlation was conducted.  Two significant relationships were found. First, self-esteem was negatively and significantly related to the *Hook Up* motive, *r*(105) = -.30, *p* = .002.  Additionally, self-esteem was negatively and significantly related to the *Fun* motive, *r*(105) = -.24, *p* = .013.

Next, Pearson product-moment correlations were computed to gauge relationships between age and potential motives for cyber dating.  Two significant results were found.  First, age and the *Relationship* motive were positively and significantly related, *r*(105) = .27, *p* = .005.  Second, age and the *Fun* motive were negatively and significantly related, *r*(105) = -.38, *p* < .000.

Lastly, to determine how gender influences potential cyber dating motives, independent t-tests were conducted.  First, results revealed that there was a significant difference between men (*M* = 2.81, *SD* = .91) and women (*M* = 2.19, *SD* = .65) when it comes to hooking up; *t*(103) = 3.99, *p* < .000.  Men were more willing to hook up through online or mobile dating. Secondly, in terms of *Relationship* motive, there was again a significant difference between men (*M* = 2.96, *SD* = .93) and women (*M* = 3.50, *SD* = .97); *t*(103) = -2.66, *p* = .009.  Women were more willing to use cyber dating to develop serious relationships.

When it comes to the relationship between self-esteem, age, and gender and the likelihood that one will use cyber dating platforms, results did not reveal any significant relationships (*p* > .05).

### Discussion
The following study examined motives for using online dating websites and mobile dating applications, as well as attitudes toward those platforms, and demographic differences related to their use.

### *Motives for Cyber Dating*

The main reason for using cyber dating platforms is to have fun ("Fun" motive). Several authors (e.g., Couch & Liamputtong, 2008; Lawson & Leck, 2006; Wang & Chang, 2010) have discovered this motive in terms of online dating websites. However, it is a newly found motive for using mobile dating applications. It is plausible to conclude that people use cyber dating for the "Fun" motive because each platform provides its own level of entertainment. Platforms may allow users to scroll through various pictures of people, read different profiles, or even let friends partake in the cyber dating process. Additionally, cyber dating can be a form of adventure for some as they may be trying new ways to meet people or branching out to meet different types of people.

The second most influential reason for using cyber dating is to develop relationships ("Relationship" motive). Several other studies have identified this as a motive for online dating websites (e.g., Couch & Liamputtong, 2008; Lawson & Leck, 2006; Wang & Chang, 2010). Many cyber dating platforms exist to aid people in finding a relationship. It appears that cyber dating users may feel more at ease talking and attempting to form connections with others behind a screen as opposed to face-to-face interactions that feature a plethora of nonverbal cues. While cues-filtered-out theories (Culnan & Markus, 1987) indicate that the lack of nonverbal cues in CMC hinders social function, this is not necessarily true. In fact, according to social information processing theory of CMC interaction (Walther, 1992), people want to reduce uncertainty and develop affinity in online settings just as much as they do in offline settings. Lack of nonverbal cues in online and mobile dating means that users must communicate in private messaging and emailing at a deeper level, and perhaps disclose more information than they would in face-to-face interactions.

The third, but the least salient reason for cyber dating was "Hook Up." This cyber dating motive is similar to the seeking sex motive that Couch and Liamputtong (2008) discovered for online dating websites. The "Hook up" motive is novel for mobile dating apps. The idea that a person is behind a screen in regard to either online dating websites or mobile dating applications means that cyber dating platforms may allow one to be more forthright about wanting to "hook up" than he or she might be in person. People with a desire to "hook up" may also gravitate toward online and mobile dating because some consider cyber dating to be impersonal. Those motivated to "hook up" might just not be interested in an emotional or personal connection. Another potential reason for this motive is that cyber dating platforms typically allow people a greater chance of finding a person to "hook up" with than they might find in their immediate environment.

This study also found that due to the more serious nature of online dating websites, people are likely to use them for relationship reasons as opposed to mobile dating applications. As mentioned before, dating sites typically involve thorough profiles in which people reveal personal information about themselves (Stewart, 2015). Revealing such information gives users a basis for conversation and may aid their ability to form deep connections with others. This is the idea of uncertainty reduction theory (Berger & Calabrese, 1975), which states that people need to reduce uncertainty of others by gaining information about them. Reading through cyber dating profiles is an example of a passive uncertainty reduction strategy, meaning that users obtain information about others in an indirect, unobtrusive manner. However, the desire to obtain information and reduce uncertainty is less pertinent to people with the "hook up" motive as they are less likely to seek a relational bond with other users. In addition to a lack of profile information, dating apps are accessed from handheld devices, so "hook ups" are at the tip of a

user's fingers and go wherever the user goes.  Mobile dating apps are also more image-based than online dating websites, so those motivated by "hook up" reasons might be more interested in a platform that provides many pictures of potential "hook ups," as physical attraction of a partner is important to them.

*Changing Attitudes*

Our results suggest that most people view cyber dating as socially acceptable.  These results support Smith and Duggan's (2013) research about the changing attitudes toward online dating websites.  This is likely due to the familiarity with technology that most people have today.  We also found that nonusers are more likely to hold the "Desperate" attitude, which explains their lack of experience with cyber dating.  People do not want to be perceived as desperate as there are many negative connotations that accompany the word.  For example, if one is desperate, he or she is "clingy," needs constant affirmation of relationship status, and lowers standards (eHarmony Staff, 2015).

Additionally, those that believe that cyber dating is permissible by societal standards are mostly motivated by relationship factors.  This is an intriguing finding, and can possibly be explained by the fact that people see friends, family, and acquaintances forming relationships in a cyber dating context, which contributes to their "Socially Acceptable" attitude, and motivates them to find their own relationship through cyber dating.  According to Smith and Anderson (2015), nearly half of the public knows somebody that has met a partner or spouse through online dating.  While this explanation may seem farfetched, the growth of cyber dating and the drive to form relationships could have an impact on this correlation.

*Antecedents of Cyber Dating*

Those with high self-esteem are less motivated to use cyber dating for "hook up" reasons. This idea is plausible as those with a high self-esteem might view themselves too highly to engage in a "one-night stand" or the occasional "hook up."  Another study (Paul, McManus, & Hayes, 2000) found that individuals that "hook up" generally have lower self-esteem than those that do not.  As a result, people with high self-esteem probably do not partake in hook up behaviors, and are unlikely to be motivated by such reasons.  High self-esteem also indicates that one is less motivated to utilize cyber dating for fun.  One possible explanation is that cyber dating users with high self-esteem may use such platforms for more serious reasons than simply having fun or passing time.

In relation to age and potential cyber dating motives, results revealed that older cyber dating users are more likely to use these platforms for relationship reasons and less likely to use them for fun.  This notion is expected as the older people get, the more serious they are likely to become about committed relationships.  Single people in their 30s concentrate more on marriage, finding "The One," and starting a family (Taylor, 2015).  Conversely, singles in their 20s are less concerned with long-term commitment, and are more interested in finding someone to have fun with (Taylor, 2015).  This exemplifies how motives differ in terms of age, and also explains why older cyber dating users are influenced by relationship factors.

Lastly, men are more motivated to use cyber dating to "hook up," whereas women are more influenced by relationship aspects.  These findings support societal expectancy for what men and women desire in terms of romantic relationships and sex.  According to Paul, McManus, and Hayes (2000), the traditional gender roles that exist within society warrant different sexual expectations for men and women.  For example, men see the majority of women, even strangers, as possible sexual partners.  Conversely, women typically require a close relationship with a man before he can be considered as a sexual partner.  Thus, as young adults,

men have a more recreational orientation toward sexuality whereas women lean toward a relational orientation (DeLamater, 1987).

*Implications*

There are various implications to the results found in this study.  First, the discovered motives are novel for dating applications because other studies have only focused on motives for dating websites. Also, the detection of motives for cyber dating allow people to see the many ways that online dating sites and mobile dating applications are used in real life. While a dating website or a dating application may advertise one thing, understanding why cyber daters actually use this website or app determines the decision one will make in choosing which platform to use.  This idea is furthered as there are certain motives that apply more to dating websites and ones more associated with dating apps.  For example, because people are more likely to use dating apps for the "Fun" motive, people that are less interested in using these platforms for fun might choose to use a dating website instead. A second implication is that attitudes allow others to see how people generally feel about cyber dating. The results indicate that more people have positive views of technology-based dating, but negative views still exist. Attitudes are good indicators of whether people will use cyber dating as seen in relation to the theory of reasoned action. A third implication is that this study goes beyond determining who uses cyber dating based on self-esteem, age, and gender, but what motivates them to cyber date in the first place. Thus, the results show that when people encounter others on dating apps or sites that are interested in "fun" and "hooking up," they are more likely to have lower self-esteem. Also, when determining who to date based on personal motivations, it is significant to know that those younger in age use cyber dating to "hook up" more, while those older in age are less concerned with fun and want relationships from cyber dating. Lastly, while the idea that men want to "hook up" and women want "relationships" is not new, this finding suggests that people should be cautious and willing to discuss what they want at the beginning of an interaction with someone on a cyber dating platform.

*Limitations and Future Research*

It has to be noted though, that this study has limitations.  The first limitation is the lack of questioning regarding relationship status.  Relationship status may have impacted the likelihood of one using cyber dating in the future.  Next, participants were recruited through non-random, convenient sampling.  As a result, generalizations cannot be made about the entire population.  Future research should include a more diverse sample.  Additionally, this study did not specify participant sexual orientation, which may have influenced answers in relation to motives, attitudes, and other measures.  Future research should ask about relationship status and sexual orientation in order to determine relationships between motives, attitudes, self-esteem, age, gender, and likelihood for cyber dating use.  Additionally, others could try to obtain motives that pertain only to mobile dating applications.  To discover even more specific motives, future research should focus on one online dating website or mobile dating application. It could also test how other personality predictors relate to cyber dating.

**Conclusion**

Despite these limitations, there are several contributions of this study.  From a theoretical perspective, this study further advances our understanding of uses and gratifications theory.  The study uncovers new motives for using mobile dating apps not identified in previous uses and gratifications theory literature.  Hooking up, relationship formation, and fun are three reasons

why students engage in mobile dating.  The discovered motives are novel for dating applications because other studies have only focused on motives for dating websites.

Second, this study aligns with the assumptions of the theory of reason action (Ajzen & Fishbein, 1980).  Not only most people approve technology-based dating, but attitudes are also a good indicator of whether people will use cyber dating or not. In this study attitudes toward online and mobile dating impact the motives for using those platforms, as well as likelihood to use both online and mobile dating apps.

Overall, this study shows the various ways in which people are motivated to cyber date, and also indicates the importance of factors working together to determine who will use cyber dating in the future.

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