

# The Significance of Written Responses as a Nonverbal Cue that Contributes to Online Young Adult Relationship Initiation

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This research study investigates the influence typed statements has on the decision-making process for adolescents when choosing to initiate communicating with an online dating match. Undergraduate students (n=247) were administered a 42-item survey, where participants replied to questions that asked if typed responses to prewritten questions influences their decision to initiate communicating with an online dating match.

Results indicate typed responses did not adversely impact whether a person will initiate communicating with a match, but additional data does suggest other nonverbal cues are significant.

*Keywords: friendship development, impression formation, online dating, paralanguage, and social networks*

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Online dating sites are just one type of social network, which research suggests is becoming an acceptable approach for developing a romantic relationship (Smith & Duggan, 2013). According to the Pew Research Institute, 10% of adults have used an online dating site, or know of someone who has attempted online dating, approximately 23% of online daters have either committed to a long-term relationship or married someone they met through an online dating site, and roughly 5% of people since this study was originally conducted in 2005, have admitted to meeting a dating partner through an online dating site (Smith & Duggan, 2013). Broadly, social networking sites effect how people perceive romantic relationships because of the tools that these kinds of sites give users for learning about potential partners, and because of the ways in which people live out their romantic relationships online (Smith & Duggan, 2013). For example, roughly 30% of online daters have used SNS to retrieve background information about a potential partner, roughly 12%

of people have followed a possible dating match at the recommendation of a friend, and roughly 15% have asked someone out through an online dating site (Smith & Duggan, 2013). Reasons why online dating has become a more widely-accepted practice stem from the possibility that social networking sites give users various techniques for virtual interaction, which are considered to be benefits of Internet use (Bargh & McKenna, 2004). For instance, anonymity pertaining to Internet use is considered to be a source of encouragement for people who are generally shy because it gives them an opportunity to share their ideas that may otherwise be difficult to contribute within face-to-face (FTF) settings (Haines, Hough, Cao, & Haines, 2014). The Internet also is reported to be a nonthreatening environment because it fosters communication with others, which gives individuals the option to possibly form new close and meaningful friendships (Bargh & McKenna, 2004). "Broadly, the Internet largely facilitates disinhibition, which is behavior that is characterized by an apparent reduction in concerns for self- presentation and the judgment of others. In other words, disinhibition is the term used to describe the phenomenon where people tend to do or say things online that they would not be likely to do or say in real life" (Donn & Sherman, 2002, p. 110). Thus, as a form of computer-mediated communication (CMC), the Internet makes forming relationships possible because nonverbal cues such as, facial-expressions, gender, physical attractiveness, and tone of voice have little effect on relationship development (Bargh & McKenna, 2004). This is crucial for relationships that are formed online because cyberethnography research indicates that relationships formed online will have a greater probability of becoming more intimate as people share personal details, relationships evolve, and trust is cultivated (Carter, 2004).

### **Purpose of Study**

The Internet has become a critical component for adolescent development and issue exploration (Subrahmanyam & Lin, 2007). For instance, research indicates that adolescents use blogs, chatrooms, and instant messaging to communicate with peers (Subrahmanyam & Lin, 2007). The Internet also plays an important role during adolescent exploration concerning identity formation, partner preference, and sexuality (Subrahmanyam & Lin, 2007). Research shows that some reasons why adolescents use the

Internet is partially determined by friendship development, number of friendships established, parental-emotional support, and self-esteem, which are variables that cause some adolescents to consider themselves Internet dependent (Gera & Kaur, 2014). Thus, as a form of peer support, the Internet is used by adolescents to enhance friendships and cultivate closeness and intimacy (Chandra, 2016; Gera & Kaur, 2014), which for some, can lead to the development of an online romantic relationship (Pujazon-Zazik & Parker, 2010). Therefore, the aim of this study is to learn if prewritten responses within online dating profiles, as a form of nonverbal communication, influences an adolescent's choice to initiate or reject communication with a potential dating partner. This study will review how online friendships are formed and maintained, as some evolve into online romances, while discussing the essential role paralanguage has on relationship management as a form of nonverbal communication.

## **LITERATURE REVIEW**

### **Online Friendship Development**

The Internet facilitates a new approach for friendship development that gives individuals an opportunity to participate in accelerated self-disclosure in order to become intimate with others online (McKenna, Green, & Gleason, 2002). Intimacy as it pertains to friendship formation is defined as a pleasant exchange of feelings with others who are responsive and can understand one another (Reis & Shaver, 1988). For young people, intimacy is part of the ever-changing process of establishing friendships, which is germane for interpersonal closeness (Gross, Juvonen, & Gable, 2002). Thus, friendships are defined as mutually beneficial social relationships between two people (Glüer & Lohaus, 2016). Research concerning adolescent relationships indicates the feeling of connectedness or commonality with others is directly attributed to positive feelings of appreciation and self-esteem (Boucher, 2014; Gross et al., 2002). Derlega and Chaikin (1977) concur with this belief, and further posit that self-validation is important for friendship development. This is critical for friendships that form online because the Internet is a virtual space where people can bypass the stage of learning about another's commonalities by joining topic-based online social groups, and as a result of being a member of a common group, people can begin sharing their experiences in order to gain validation (Lewis, Rosenrot, &

Messner, 2012; McKenna et al., 2002; Murray, Holmes, & Griffin, 2013). This is when the online benefit of anonymity becomes essential because individuals can share aspects of themselves and not be restrained by expectations from people who know them directly, and since the risk for sanction is minimized, the motivation for sharing is more likely (Bargh, McKenna, & Fitzsimons, 2002). Because anonymity gives people the freedom to behave in ways not visible in FTF relationships, research indicates that trust can be developed between individuals or a group of people, resulting in a more accurate representation of “the self” (Bargh et al., 2002). Furthermore, self-projection is also viewed as a component of online friendship development because research indicates people who place their perceived ideals or hoped-for partner qualities onto another will likely develop a favorable impression of liking for the person they are communicating with (Bargh et al., 2002). This tendency for self-projection is thought to contribute to closeness and intimacy among online friendships because of the belief a person has for presuming the other person possesses idealistic qualities, known as the self-fulfilling prophecy (Bargh et al., 2002). The self-fulfilling prophecy is defined as “a false definition of a situation, evoking a new behavior which makes the originally false conception come true” (Merton, 1948, p. 194). Thus, it is through self-projection that CMC will have a positive effect on an individual’s self-esteem (Gonzales & Hancock, 2011), which research suggests has the potential to broaden one’s social network of friendships (Bargh et al., 2002). Therefore, it is through this rapid evolution of friendship development that close relationships are formed, which can become integrated into one’s offline personal life (McKenna et al., 2002). Moreover, it is through this shift of friendship migration that suggests people who form online friendships may inadvertently transform these into traditional friendships, which may evolve into romantic relationships without notice (McKenna et al., 2002).

### **Online Romantic Relationship Development**

While it is true that online friendships and romantic relationships are different, both share similar qualities, such as commonality, intimacy, loyalty, self-disclosure, and time investment (Boucher, 2014). For many people, forming a romantic relationship is an important personal and social objective to meet (Henry-Waring & Barraket, 2008). Given the emphasis placed on securing a romantic partner, results are not surprising, which

show that roughly 20% of Internet traffic in the United States is observed to be directed toward online dating sites (Henry-Waring & Barraket, 2008). Online dating is defined as “the use of web sites that provide a database of potential partners that one can browse and contact with the goal of meeting a partner online and forming an offline relationship” (Jin & Martin, 2015, p. 320). The attraction people have for choosing this medium to facilitate romantic relationship development is largely hinged on a person’s innate desire to form close or intimate relationships (Henry-Waring & Barraket, 2008). For young people who choose to pursue an online dating partner, research indicates this approach has become acceptable because the risk for harm overshadows traditional forms of rejection (Henry-Waring & Barraket, 2008). Anonymity, blogs, websites, and the comfort people have become accustomed to when communicating electronically—all contribute to this novel method for dating (Havrilesky, 2002). Because of these contributions, searching for a romantic partner online is viewed as a cost-effective way to participate in the dating process, while maintaining some control over one’s own self-image as dating sites give users screening features that maximize their opportunities for romance, diminish anxiety about physical appearance, and remove embarrassing FTF experiences (Henry-Waring & Barraket, 2008). This approach is cited to be beneficial for individuals who are shy, and for those people who feel more comfortable typing their responses versus talking (Henry-Waring & Barraket, 2008). Thus, the Internet plays a unique role in relationship development because it frees individuals from developing an emotional connection prematurely, which research indicates is positively correlated to adolescents being more likely to perceive online romance more favorably, and subsequently may result in the amenability of young people to develop online romantic relationships (Rambaree, 2008).

### **Online Paralanguage**

Nonverbal communication is essential for message management because nonverbal cues help regulate the relationship between message and meaning for both receivers and senders of messages (Shin-Young & Akira, 2006). Nonverbal communication is defined as an unconscious approach for sending messages that can be incongruous or confirming when compared to a verbal message from a sender (Shin-Young & Akira, 2006). This is where online paralanguage becomes significant because it helps mitigate some of the

ambiguity that exists for users of CMC (Shin-Young & Akira, 2006). Online paralanguage is defined as a socially shared method of communicating online by using typewritten clues to compensate for the lack of verbal cues that are not present in virtual contexts (Carter, 2003; Donn & Sherman, 2002; Tu, 2002). Characteristics of online paralanguage include: abbreviations, acronyms, capitalization, emoticons, flaming, font size, quotation, and typewritten expressions (Goldsborough, 2015; Tu, 2002). Research indicates these techniques are critical when forming online relationships because paralanguage used in CMC messages, and the social context in which these interactions occur is how individuals form impressions about others (Donn & Sherman, 2002; Kralj Novak, Smailović, Sluban, & Mozetič, 2015). Because CMC lacks many nonverbal physical cues a person uses to make inferences about others, research suggests the use of textual cues become associated to certain personality traits (Donn & Sherman, 2002). For example, space between words may represent a pause, the running together of words may represent an onomatopoeic effect, repeated vowels may represent drawn-out words, and lexical surrogates for vocal segregates, which are typed-out vocal phrases such as “hmm” or “ha ha” may be used (Donn & Sherman, 2002). Thus, once people become regular online participants they may engage in interrogation, self-disclosure, or deception detection, which are several different kinds of interrogative probes a person can use to learn more about a person’s beliefs, intentions, and motives (Donn & Sherman, 2002). This is why using typed responses is significant for relationship development because research shows that text responses are unaffected by emotional, physical, or social characteristics, and subsequently, as a benefit of CMC, receivers and senders of messages can communicate asynchronously, which gives said individuals the ability to deliberately craft well-thought responses (Carter, 2003). Therefore, because online dating gives people the ability to virtually meet a wider variety of potential dating matches, greater control over their approach and method for communication, and the ability to edit responses (Roth & Gillis, 2015), the following research question is of interest.

**RQ1:** How significant are text responses to prewritten questions to adolescents when deciding to either accept or reject communication with an online dating match?

## METHODS

Participants for this research study consisted of  $N = 500$  undergraduate students (250 females and 250 males) enrolled at a large southwestern university. An online survey link was distributed by email to students enrolled in interpersonal communication and public speaking classes that directed the participant to SurveyMonkey, an online survey research service. The survey method for gathering data has been deemed appropriate for this study because these types of research instruments are commonly used in social science research, and as such, survey questionnaires can be developed to focus on particular research ideas (Neuman, 2003). Furthermore, the research survey is ideal for this study because this kind of research method relies on self-reported attitudes, beliefs, or behaviors of respondents for helping produce statistical evaluations (Neuman, 2003). Out of the total number of survey links distributed, about half of the number of respondents completed the questionnaire, reducing the total sample size to  $N = 247$ . More than half of the participants were female ( $n = 166$ , 67%) and most were White (74%,  $n = 183$ ), while 6% ( $n = 15$ ) were Black/African American, 3% ( $n = 8$ ) were Asian, 14% ( $n = 35$ ) were Hispanic, 1% ( $n = 2$ ) were Native Hawaiian/Pacific Islander, and 2% ( $n = 4$ ) were classified as "Other." The only requirement is that students completing the survey should be currently involved in, or should have been previously involved in an online romantic relationship at the time of taking the survey. Since the aim of this study is to identify whether typed responses to prewritten questions (independent variable) significantly affected a young adults' desirability to initiate a relationship online (dependent variable), only four questions were taken from the overall survey (the questions are numbered as they correspond to the survey):

14. When evaluating an online profile of a potential partner the detail to which questions are answered gives me some insight into their level of commitment about online dating.

31. When evaluating the online profile of a potential partner how they respond to prewritten questions determines whether or not I will initiate communication with him or her.

41. When evaluating the online profile of a potential partner other nonverbal cues – photos, photo settings, and other nonverbal cues directly impact my desirability to want to begin communicating with him or her.
42. Responses to prewritten questions are a significant factor when deciding whether or not to begin communicating with a potential partner.

## RESULTS

A two-tailed t-test was performed on each of the questions to observe significance and trends. The data in Table 1 illustrate the findings as they were calculated. It is important to convey that the primary research was qualitative in nature, but to provide numerical figures, modifications were made to the data. The most important modification that was implemented was necessary to provide a statistical foundation for the results. Therefore, since the questions were answered using a Likert scale, a similar variable scale was integrated. To capture the most accurate data possible, respondents who skipped a question were excluded from each sample mean. For all the questions that were the primary areas of emphasis, an alpha level of 0.05 was used. The null hypothesis for all the questions was equal to the neutral value and the alternative hypothesis was not equal to the neutral value, thus if accepted, would indicate a variability of significance.

It is fair to approximate that roughly a large majority of the subjects had a high degree of tolerance and/or understanding about the overall topic of adolescent online dating (see Table 1). Moreover, it seems apparent from the data that the respondents had a moderate level of agreement about the effect written responses to prewritten questions has in determining whether a relationship will commence. However, the detail to which the questions are answered did not seem to negatively affect a person's likelihood from engaging in an online relationship. Furthermore, it is also apparent those respondents who answered "moderately agree" for the question inquiring about other nonverbal cues directly impacts a person's desirability to initiate communication with a potential partner, perhaps suggests that nonverbal cues outside of written responses are highly significant in determining whether or not to initiate communication with a prospective romantic partner.



Table 1  
*Participant Responses*

Data	Q17	Q34	Q41	Q42
Sample Mean	0.444	0.586	0.7446	0.4893
Standard Deviation	0.942	0.7476	0.9661	0.90583
Sample Size	245	246	247	247
$\mu_0$	0	0	0	0
t-statistic	3.162	5.324	5.284	3.703
P-value	0.002835	3.097	3.366	0.0056
Alpha Level	0.05	0.05	0.05	0.05

## DISCUSSION

This study found that participants are tolerant and understanding about the topic of online dating as it pertains to adolescents. One reason for this might be that young people are highly exposed to the notion of online dating as a regular occurrence, which due to the wide-scale adoption, has contributed to roughly 10% of U.S citizens reporting they have used online and/or mobile dating agencies to search for a dating match, and roughly 25% of people indicate they have met a dating partner or spouse through one of these services (Paul, 2014; Wiederhold, 2015). Research posits that since the inception of the Internet, online dating has always been an attractive approach for dating, which at its inception was practiced marginally, but now has become a socially accepted behavior (Valkenburg & Peter 2007; Wiederhold, 2015). Adding to the understanding participants have about this topic is the fact that Millennials spend roughly 6.5 hours daily using the computer for completing coursework, developing new online friendships, or forming online romantic relationships (Smith & Duggan, 2013; Wilhelm, 2002).

This study has found that participants share moderate agreement concerning the indifference prewritten responses have in deciding if communication with a match will be

initiated or terminated. This is believed to stem from the ambiguity of text descriptions, which in some cases makes one's ability to discern intent challenging, and in other cases makes discerning intent easy (Fullwood, Quinn, Chen-Wilson, Chadwick, & Reynolds, 2015; Van Der Heide, D'Angelo, & Schumaker, 2012). One way ambiguity makes deciphering the authenticity of a text description challenging is through self-deception, which often occurs for users of online dating sites. This distortion of facts increases uncertainty and unreliability of online self-presentations (Walther, Van Der Heide, Hamel, & Shulman, 2009). Conversely however, self-disclosure gives users the ability to observe nonverbal textual markers, such as grammatical errors, or intentional identity claims (Fullwood et al., 2015; Weidman, Chang, Chisholm, & Tracy, 2015). When forming an impression of a potential dating match, the amount of information, and the kind of information shared are additional text cues that are used when assessing the compatibility of a match because individuals who disclose more details about their personal beliefs and interests are perceived to be agreeable, extroverted, and open (Weidman et al., 2015). Furthermore, individuals who use positive, rather than negative words, and who use little cursing are deemed more likable (Weidman et al., 2015). Thus, text profiles partially contribute to the allure people have in participating in online dating because when assessing a potential match, users make inferences from textual cues that allow them to glean information about a match (Fiore, Taylor, Mendelsohn, & Hearst, 2008).

Finally, this study has found that other nonverbal cues outside of written responses may predict if communication with a dating match is likely. Outside of prewritten responses, people who online date generally use a filtering process to exclude undesirable matches, which gives users of dating web sites the ability to preselect certain criteria they want in a potential partner (Heino, Ellison, & Gibbs, 2010). This filtering process allows individuals to focus on static cues, which are nonverbal characteristics that focus on demographics, such as age, gender, and income (DeGroot & Gooty, 2009; Heino et al., 2010). A more salient nonverbal cue is physical attractiveness, which research contends is key when filtering through match results because users generally will form their impression on the photograph, as it is the more memorable component of a match profile (Van Der heide et al., 2012). While photographs are considered to be the more effective

aspect of an online profile, text responses should not be overlooked because together both components help users gain a more complete representation of a potential dating partner (Brand, Bonatsos, D’Orazio, & DeShong, 2012; Van Der Heide et al., 2012). Finally, as people participate in online dating, the number of potential matches may be high, which research suggests contributes to a lower probability of finding a desirable partner (Yang & Chiou, 2010). This is due in part to an individual focusing on unintended nonverbal aspects of a dating profile, which obfuscates the original intent of participating in the online dating process (Yang & Chiou, 2010).

### **Future Research**

Online dating research shows that the process of online dating suffers from a prodigious number of potential matches, which contributes to people who date online to be less likely to get married (Paul, 2014). This outcome is amplified by giving people who date online the awareness of knowing that other potential matches exist if their current relationship fails, and because online relationships take longer to cultivate, solidifies one’s resolve to stay in a non-marital relationship (Paul, 2014). Research on attachment theory significantly predicts how a person will behave based on their attachment style. Specifically, findings on this theory suggests that people with an avoidant attachment style will generally be anxious with potential dating partners, whereas anxious people will be preoccupied with their ex-dating partners (Fox & Tokunaga, 2015). Thus, one line of possible research is learning if the high number of potential dating matches inadvertently predisposes a person to remain avoidant or anxious throughout a romantic relationship that has been formed as a result of online dating, specifically targeting individuals who exclusively use mobile dating apps such as, Bumble, OKCupid, Tinder, and Zoosk. Since the immediacy for finding new online matches is high with these platforms, and because research shows that young people are heavy users of mobile telephony (Baker & Carreño, 2016), as mobile phone use has redefined culture and social interaction (Oksman & Turtiainen, 2004), is why this demographic is of interest. Furthermore, another topic that might contribute to the nonverbal area of the discipline is investigating the role text-messaging has on conflict communication among dating relationships that have been formed online specifically looking at the rate of transition when cyber-abusive behaviors

manifest into physical altercations. Current research shows that roughly 86.5% of young people communicate primarily through text-messaging, and as a result of being cell phone users, are more likely to experience cyber-abusive behaviors such as, harassment, monitoring, stalking, and receiving cyber-abusive messages (Baker & Carreño, 2016). Therefore, since the process of self-disclosure occurs faster online, and cyber-abuse is cited to be a prevalent effect of poor communication among online couples, does this serve as the catalyst for physical abuse to manifest more frequently.

### **Limitations**

The Internet is a fruitful avenue for conducting qualitative research because it provides researchers the opportunity to reach large numbers of people who already use the Internet for communication, discussion, and knowledge acquisition (Wright, 2005). However, online survey research must tackle the lack of cohesiveness among online populations, and the general disinterest among people, which may partially explain why online participation is difficult (Andrews, Nonnecke, & Preece, 2003). Addressing the low response rate of this study, research suggests that invitational survey requests for participation is not very effective because individuals can perceive this as a type of intrusion (Andrews et al., 2003). Additionally, individuals may choose to not respond to a survey invitation if they are not able to preview the questionnaire, or individuals may partially complete a survey, but stop if questions cannot be skipped (Andrews et al., 2003). Furthermore, participation can be low if participants have weak computer literacy skills, if access to a computer and the Internet is challenging, or if personal interests do not align with the survey objective (Andrews et al., 2003). By implementing survey flexibility through a partial item response survey, or a unit response survey may yield better survey participation (Bosnjak & Tuten, 2001).

### **CONCLUSION**

In closing, the Internet has supplanted the traditional practice of dating. It is now possible for adolescents and adults to find a dating partner online by using SNS. These networks give people unprecedented background access about a possible dating match, give people the chance to communicate through an assortment of channels, and give

people the opportunity to ultimately form friendships or romantic relationships. Thus, it is through online paralanguage where users of the Internet begin mediating their nonverbal communication because textual cues are the bases by which personality is derived, and impression is formed. The purpose of this study sought to determine if prewritten responses to online dating profile questions have a direct correlation to a person's decision to either start or reject communication with a dating match. Results indicate that respondents to the online survey have some knowledge about adolescent online dating, which stems from the ubiquity of adolescent computer use, and the knowledge of online dating and marriage being socially accepted practices. Furthermore, participants did not believe prewritten responses to questions were a conclusive factor in deciding to either initiate or terminate communication because the ambiguity of text responses can elicit competing interpretations, which makes determining the intent of a match nebulous. When combined with other nonverbal cues, such as photos, and static cues, text responses did have some effect on a person's ability to form a complete impression of a match, but ultimately photos are considered to be the more influential element of a dating profile that effects the decision-making process. This is due to photos being the more memorable aspect of a person's profile because physical attractiveness, as a nonverbal cue influences impression formation of others. One final element that effects the decision-making process is the high number of match results, which has the propensity to redirect one's focus to less relevant aspects of a dating profile, making the attempt at online dating less satisfactory because of the accelerated process of sorting through matches.

## References

- Andrews, D., Nonnecke, B., & Preece, J. (2003). Electronic survey methodology: A case study in reaching hard-to-involve internet users. *International Journal of Human-Computer Interaction, 16*(2), 185.
- Baker, C., & Carreño, P. (2016). Understanding the role of technology in adolescent dating and dating violence. *Journal of Child & Family Studies, 25*(1), 308-320.
- Bargh, J. A., & McKenna, K. A. (2004). The internet and social life. *Annual Review of Psychology, 55*(1), 573-590.
- Bargh, J. A., McKenna, K. A., & Fitzsimons, G. M. (2002). Can you see the real me? Activation and expression of the "true Self" on the internet. *Journal of Social Issues, 58*(1), 33.

- Bosnjak, M., & Tuten, T. L. (2001). Classifying response behaviors in web-based surveys. *Journal of Computer-Mediated Communication*, 6(3), 180-186. <https://doi.org/10.1111/j.1083-6101.2001.tb00124.x>
- Boucher, H. C. (2014). The relational-interdependent self-construal and positive illusions in friendship. *Self & Identity*, 13(4), 460-476.
- Brand, R. J., Bonatsos, A., D'Orazio, R., & DeShong, H. (2012). What is beautiful is good, even online: Correlations between photo attractiveness and text attractiveness in men's online dating profiles. *Computers in Human Behavior*, 28(1), 166-170.
- Carter, D. M. (2004). Living in virtual communities: Making friends online. *Journal of Urban Technology*, 11(3), 109-125.
- Carter, K. A. (2003). Type me how you feel: Quasi-nonverbal cues in computer-mediated communication. etc. *A Review of General Semantics*, 60(1), 29.
- Chandra, A. (2016). Social networking sites and digital identity: The utility of provider-adolescent communication. *Brown University Child & Adolescent Behavior Letter*, 32(3), 1-7.
- De Groot, T., & Gooty, J. (2009). Can nonverbal cues be used to make meaningful personality attributions in employment interviews?. *Journal of Business and Psychology*, 24(2), 179-192.
- Derlega, V. L., & Chaikin, A. L. (1977). Privacy and self-disclosure in social relationships. *Journal of Social Issues*, 33(3), 102-115.
- Donn, J. E., & Sherman, R. C. (2002). Attitudes and Practices Regarding the Formation of Romantic Relationships on the Internet. *Cyberpsychology*, 5(2), 107-123.
- Fiore, A. T., Taylor, L. S., Mendelsohn, G. A., & Hearst, M. (2008). Proceedings of the SIGCHI Conference on Human Factors in Computing Systems 2008, Assessing attractiveness in online dating profiles. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 797-806). ACM.
- Fox, J., & Tokunaga, R. S. (2015). Romantic partner monitoring after breakups: attachment, dependence, distress, and post-dissolution online surveillance via social networking sites. *Cyberpsychology, Behavior & Social Networking*, 18(9), 491-498.
- Fullwood, C., Quinn, S., Chen-Wilson, J., Chadwick, D., & Reynolds, K. (2015). Put on a smiley face: textspeak and personality perceptions. *Cyberpsychology, Behavior & Social Networking*, 18(3), 147-151.
- Gera, M., & Kaur, K. (2014). A correlational study of peer relationships and internet usage of adolescents. *International Journal of Multidisciplinary Approach & Studies*, 1(5), 48-58.
- Gibbs, J. L., Ellison, N. B., & Lai, C. H. (2010). First comes love, then comes Google: An investigation of uncertainty reduction strategies and self-disclosure in online dating. *Communication Research*, 0093650210377091.
- Glüer, M., & Lohaus, A. (2016). Participation in social network sites: Associations with the quality of offline and online friendships in German preadolescents and adolescents. *Cyberpsychology*, 10(2), 21-36.
- Goldsborough, R. (2015). Putting your emotions on screen. *Teacher Librarian*, 43(1), 64.
- Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my facebook wall: Effects of exposure to facebook on self-esteem. *Cyberpsychology, Behavior & Social Networking*, 14(1/2), 79-83.

- Gross, E. F., Juvonen, J., & Gable, S. L. (2002). Internet use and well-being in adolescence. *Journal of Social Issues, 58*(1), 75.
- Haines, R., Hough, J., Cao, L., & Haines, D. (2014). Anonymity in computer-mediated communication: More contrarian ideas with less influence. *Group Decision & Negotiation, 23*(4), 765-786.
- Havrilesky, H. (2002 May 15). In the competitive world of online dating, singles brand themselves as sexy commodities. But what happens when the wrapping comes off? Retrieved from [http://www.salon.com/2002/05/15/online\\_dating/](http://www.salon.com/2002/05/15/online_dating/)
- Heino, R. D., Ellison, N. B., & Gibbs, J. L. (2010). Relationshopping: Investigating the market metaphor in online dating. *Journal of Social and Personal Relationships, 27*(4), 427-447.
- Henry-Waring, M., & Barraket, J. (2008). Dating & intimacy in the 21st century: The use of online dating sites in Australia. *International Journal of Emerging Technologies & Society, 6*(1), 14-33.
- Jin, S., & Martin, C. (2015). A match made online?: The effects of user-generated online dater profile types (free-spirited versus uptight) on other users' perception of trustworthiness, interpersonal attraction, and personality. *Cyberpsychology, Behavior, and Social Networking, 18*(6), 320-327.
- Kralj Novak, P., Smailović, J., Sluban, B., & Mozetič, I. (2015). Sentiment of Emojis. *Plos ONE, 10*(12), 1-22.
- Lewis, S. P., Rosenrot, S. A., & Messner, M. A. (2012). Seeking validation in unlikely places: The nature of online questions about non-suicidal self-injury. *Archives of Suicide Research, 16*(3), 263-272.
- Madsen, S. D., & Collins, W. A. (2011). The salience of adolescent romantic experiences for romantic relationship qualities in young adulthood. *Journal of Research On Adolescence (Wiley-Blackwell), 21*(4), 789-801.
- McKenna, K. A., Green, A. S., & Gleason, M. J. (2002). Relationship formation on the internet: What's the big attraction? *Journal of Social Issues, 58*(1), 9.
- Merton, R. K. (1948). The self-fulfilling prophecy. *The Antioch Review, 8*(2), 193-210.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (2003). Reflections on the self-fulfilling Effects of positive illusions. *Psychological Inquiry, 14*(3/4), 289-294.
- Neuman, S. P. (2003). Maximum likelihood Bayesian averaging of uncertain model predictions. *Stochastic Environmental Research and Risk Assessment, 17*(5), 291-305.
- Oksman, V., & Turtiainen, J. (2004). Mobile communication as a social stage: Meanings of mobile communication in everyday life among teenagers in Finland. *New media & society, 6*(3), 319-339.
- Paul, A. (2014). Is online better than offline for meeting partners? Depends: are you looking to marry or to date?. *Cyberpsychology, Behavior & Social Networking, 17*(10), 664-667.
- Pujazon-Zazik, M., & Park, M. J. (2010). Adolescents to tweet, or not to tweet: Gender differences and potential positive and negative health outcomes of ' social internet use. *American Journal of Men's Health, 4*(1), 77-85.
- Rambaree, K. (2008). Internet-mediated dating/romance of Mauritian early adolescents: A grounded theory analysis. *International Journal of Emerging Technologies & Society, 6*(1), 34-59.

- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 367–389). Chichester, UK: Wiley.
- Roth, M., & Gillis, J. (2015). Convenience with the Click of a Mouse: A survey of adults with autism spectrum disorder on online dating. *Sexuality & Disability, 33*(1), 133-150.
- Sayar, K., & Senkal, Z. (2014). Facebook loves: depression, psychosis and online romance, report of three cases. *Journal of Mood Disorders, 4*(1), 26-33.
- Shin-Young, P., & Harada, A. (2006). *A study of Non-verbal Expressions in a computer-Mediated communication context (CMC)*. Retrieved from [https://scholar.google.com/scholar?hl=en&q=A+study+of+Non-verbal+Expressions+in+a+computer-Mediated+communication+context&btnG=&as\\_sdt=1%2C44&as\\_sctp=](https://scholar.google.com/scholar?hl=en&q=A+study+of+Non-verbal+Expressions+in+a+computer-Mediated+communication+context&btnG=&as_sdt=1%2C44&as_sctp=)
- Smith, A., & Duggan, M. (2013 October 21). Online dating and relationships. Retrieved from <http://www.pewinternet.org/2013/10/21/online-dating-relationships/>
- Subrahmanyam, K., & Lin, G. (2007). Adolescents on the net: internet use and well-being. *Adolescence, 42*(168), 659-667.
- Tu, C. H. (2002). The impacts of text-based CMC on online social presence. *The journal of interactive online learning, 1*(2), 1-24.
- Valkenburg, P. M., & Peter, J. (2007). Who visits online dating sites? Exploring some characteristics of online daters. *Cyberpsychology & Behavior, 10*(6), 849-852.
- Van Der Heide, B., D'Angelo, J. D., & Schumaker, E. M. (2012). The effects of verbal versus photographic self-presentation on impression formation in Facebook. *Journal of Communication, 62*(1), 98-116.
- Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C. (2009). Self-generated versus other-generated statements and impressions in computer-mediated communication a test of warranting theory using Facebook. *Communication research, 36*(2), 229-253.
- Weidman, A. C., Cheng, J. T., Chisholm, C., & Tracy, J. L. (2015). Is she the one? Personality judgments from online personal advertisements. *Personal Relationships, 22*(4), 591-603.
- Wiederhold, B. K. (2015). Twenty years of online dating: Current psychology and future prospects. *Cyberpsychology, Behavior & Social Networking, 18*(12), 695-696.
- Wilhelm, A. G. (2002). Wireless Youth: Rejuvenating the Net. *National Civic Review, 91*(3), 293.
- Wright, K. B. (2005). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal of Computer-Mediated Communication, 10*(3), 16-20.
- Yang, M. L., & Chiou, W. B. (2010). Looking online for the best romantic partner reduces decision quality: The moderating role of choice-making strategies. *Cyberpsychology, Behavior, and Social Networking, 13*(2), 207-210.

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