

Social Influence Online: The Six Principles in Action

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I have always been an early adopter of technology. I wrote my first webpage in 1994. I had my first email address in 1992. I made my first amazon.com order in 1996. I joined eBay in 1997. I started playing Massively Multi-player Online Role Playing games (MMORPGs) in 1999. I met my husband online in 2000. Unlike the early days of the Internet, I was late to join Facebook in 2009 (owing to privacy concerns) and have thoroughly enjoyed the social interactions with friends and family that live far from my family and me. As I have traversed the virtual landscape known as the Internet, I have often been curious about how people influence others across this virtual space (accessed in these days by a computer, cell phone, iPad, iPod, etc.). Specifically, I wondered if social influence attempts worked the same online as they did in person. Social influence, also called influence, is a change in a person's attitudes, behavior, or beliefs as a result of external pressure that may be real or imagined (Cialdini, 2009). In this chapter, I review the literature on Social Influence online. It turns out that the answer to my question of online influence is that it depends. Specifically, the effectiveness of an online influence attempt depends on factors such as the gender of the interactants and whether the specific process behind the influence tactic employed is effective more due to internal or interpersonal factors. In general, women are more resistant to online social influence than men, and influence tactics that function owing to factors internal to the person receiving the influence attempt are more successful online. In this chapter, I review Cialdini's six principles of influence and review the existing literature on their effectiveness in online interactions. I conclude with a case study that describes an attempt to influence a good friend of mine in an online dating context.

Cialdini (2009) argues that all influence attempts fall into one of six categories: scarcity, reciprocity, consistency/commitment, authority, social validation, and friendship/liking. For instance, anything that is limited in quantity or available length of time is scarce. Back when the Mazda Miata was introduced, they were released in such limited quantity that they tended to sell at prices far above the sticker price. Thus, scarcity increased the value of the car. Reciprocity is influential when targets of influence get a free gift from the requestor prior to the request. It is common for people to receive a \$1 bill along with a request to fill out a survey. This tactic works because the \$1 bill makes the typical person feel as if they owe the request and this increases response rates to the survey. Once an individual commits to a course of action, they are unlikely to change their mind, especially if he or she made this commitment publically known. The weight loss system Weight Watchers uses commitment and consistency in requiring its clients to attend weekly meetings in person. The authority principle works when people act in accordance with the actions or advice of a real (e.g., doctor) or imagined (e.g., an actor who plays a doctor on tv) authority figure. Television commercials often utilize this principle to sell products. When social validation occurs, people are influenced by information that people like them act similarly. A visit to most hotels will include a sign indicating that guests at the hotel typically reuse the towels. Finally, the friendship/liking principle can be illustrated by the typical celebrity endorsement. Michael Jordan endorsing Nike brand shoes increases the likelihood that people will buy Nikes because a likeable celebrity wears them.

The six principles serve as rules of thumb or decision heuristics (e.g., “rare = valuable”) that assist in decision making. Influence agents often use decision heuristics to obtain compliance from their targets (e.g., an influence appeal involving a limited opportunity capitalizes on the “rare = valuable” decision heuristic). These influence principles have been showing to broadly influence people’s behavior (Cialdini, 2009). Social influence researchers refer to a change in behavior due to an influence attempt as compliance. For instance, if a person is asked to sign an online petition advocating marriage equality agrees to this request, social influence researchers would describe the act of signing the petition as complying with the request. When a person changes their attitudes or beliefs as a result of an influence appeal, social influence researchers refer to this as persuasion (Cialdini, 2009). As an example, if a person read a blog or Facebook post that attempts to convince people that the film *Star Wars* is the best science fiction ever made and her or her opinion about *Star Wars* changes as a result of reading the arguments, this person has been persuaded. Cialdini’s influence tactics have been shown to be effective in obtaining compliance and in persuasion attempts (Cialdini, 2009). However, most of the research conducted this far has focused on compliance online. As a result, this chapter will also focus on compliance online.

Additional terms that social influence researchers use describe the individuals involved in an influence attempt. The influence practitioner, communicator, or agent of influence is describe the person who attempting to influence others (Guadagno & Cialdini, 2005). For instance, in the example above, the person who made the request to sign the petition is the influence practitioner. Also, the target, influence target, or target of influence refers to a person who experiences an influence attempt (Guadagno & Cialdini, 2005). I this chapter, I will use the terms Internet, online, and cyberspace interchangeably. In all cases, we intend these terms to signify computer-mediated communication (CMC) involving networked technology.

How Does CMC Differ from Face-to-Face (FTF) Communication?

While people use the Internet for a variety of activities such as shopping, banking, obtaining information and news, downloading images and computer programs, gaming, it is primarily a tool for communication through communication technologies such as email, Twitter, and Social Networking (Kraut, Mukhopadhyay, Szczypula, Kiesler, & Scherlis, 1998; Muscanell & Guadagno, 2012; Okdie & Guadagno, 2008). McKenna and Bargh (2000); Bargh and McKenna (2004) proposed four aspects of online interactions that differentiate CMC from other methods of communication: anonymity, a reduced impact of physical appearance, control over the timing of interactions, and a reduced impact of physical proximity on relationship formation.

First, the Internet provides people with relative anonymity if they want it (McKenna & Bargh, 2000). Online people can connect with friends, family, and make new friends or find potential dates. However, online readily visible characteristics, such as one's sex, approximate age, level of attractiveness, taste in clothing, are not the most salient features during an online interchange. People can selectively present what they want others to know about them (Bargh & McKenna, 2004). For instance, a person's name, age, appearance, sex, and many other personal details can be concealed or revealed as desired by the individual. The level of veracity of a person's online persona is also controllable (see Guadagno, Okdie, & Kruse, 2012 for a review). For instance, if a person named Jessica chooses to call herself "Reginald" in her online interactions, and she reveals nothing else about herself, she can be fairly anonymous. On the other hand, academics such as myself as well as other professionals typically have email addresses that provide people's full names and workplace. Furthermore, if a person sends emails with a signature (typically listing rank in the organization, work address, website(s), phone and fax numbers, Facebook/Twitter ID, etc.), he or she provides recipients with quite a bit of knowledge, thus making him or her possibly even less anonymous than over a telephone

conversation. This ability to present oneself anonymously while online has been related to a decrease in self-focus on internal standards for behavior (Matheson & Zanna, 1989). This may explain why people are likely to engage in non-normative behavior, such as cyberbullying or making rude or derogatory statements to others in an online interaction (Siegel, Dubrovsky, Kiesler, & McGuire, 1986; Wingate, Minney, & Guadagno, 2013).

In addition to anonymity, McKenna and Bargh (2000) reviewed three other factors that make Internet-based interaction different from other communication mediums. As I mentioned above, owing to the text-based nature of most online interactions, physical appearance is much less salient compared to FTF interactions (Bargh & McKenna, 2004). This aspect of communication online alters the way in which people get to know each other and form impressions of the people they chat with (Okdie, Guadagno, Bernieri, Geers, & McLaren-Vesotski, 2011). People can meet others from the comfort of their own home or office without feeling concerned that they will receive differential treatment owing to their physical appearance (McKenna & Bargh, 1998). In addition to physical appearance, online, physical distance is not a barrier for meeting or interacting with others (McKenna & Bargh, 2000). For instance, my husband was living in Sydney, Australia and I was living in Seattle, Washington when we first met online. Thus, people's opportunities to make new friends and get to know their colleagues are far greater than before the advent of the Internet. With the addition of social networking sites (SNS) such as Facebook and Myspace, these opportunities are even further expanded (Guadagno, Muscanell, & Pollio, 2013; Muscanell & Guadagno, 2012). Through the Internet, people can find others with similar interests with great ease. All a person has to do is find an online community or Facebook group that best fits to his or her interests to find similar others. Furthermore, the variety of online communities is so vast that online communities range widely from classic car collectors, to Star Trek the original series fans, to people seeking social support after the death of a loved one, to people looking for relationship advice, to people seeking others to exercise with. The list of online niche communities could go on and on and on. Furthermore, depending on the mission of the online community, the location of its members may not matter. Thus, the Internet has vastly expanded the opportunities to connect with others (Ginsberg, 2008).

The fourth and final aspect of online interaction that differs from FTF pertains to the time and pace of their interactions with others. Provided the online interaction is asynchronous, people can choose when to respond to communications from others. The ability to control the pace of an interaction is empowering for Internet users, but also has a negative aspect to it (Jones, 2010). For instance, the ability to be online 24×7 provided by smart phones and other technology also sets the expectation that people are always "on". This may blur the line between work and home life due to the ubiquity of the

Internet. For instance, college students who email their professors at 3 am on a Sunday morning may feel ignored if they do not get an immediate response. This expectation that a professor ought to be always available may affect student evaluations (see Kowai-Bell, Guadagno, Little, Hensley, & Preiss, 2011 for a detailed discussion of these issues).

Finally, another aspect of online interactions that differs from other communication modalities is the absence of a full range of social cues. For instance, depending on the specific type of online interaction, eye contact may be completely lacking or misaligned, non-verbal cues such as gestures may not be available, and the tone of voice may also be absent or altered (Guadagno & Cialdini, 2002). For example, Dubrovsky, Kiesler, and Sethna (1991) reported that expertise and status cues were less salient in an online discussion. This resulted in less attention paid to an expert in an online discussion relative to an analogous FTF discussion. Other researchers have found liking for a communicator to be linked to social influence in FTF interactions but not in comparable online discussions (Guadagno & Cialdini, 2002; Matheson & Zanna, 1989). Thus, the decreased salience of social cues that accompany certain types of online communication results in less impactful communicator cues, such as authority and likeability (see Guadagno & Cialdini, 2005 for a more detailed discussion of this issue). I will expand upon the implications of this decreased salience of communicator cues on social influence attempts later on in this chapter.

Influence Online: When Do People Comply?

As indicated above, Cialdini suggested that many tendencies to comply with another's request can be explained in terms of six fundamental principles of influence: scarcity, reciprocity, consistency/commitment, authority, social validation, and friendship/liking (Cialdini, 2009). Although these principles have been examined across a variety of contexts, the area of social influence in online contexts is a relatively new area of research with many questions still left unanswered. Important to examining compliance in online interactions is that, while social cues are not always available, social category cues (i.e., a person's sex, age, ethnicity, occupation) may be available (Guadagno & Cialdini, 2005). As indicated by research conducted by Postmes and colleagues, people may respond to social influence appeals based on available social category cues (Postmes, Spears, Sakhel, & de Groot, 2001). Thus, if the only information a person has an online acquaintance is that she is a medical doctor, a person is more likely to be influenced by her medical advice than the advice of another online acquaintance who is not a doctor.

Guégen and Jacob (2002) conducted a study that examined this question of communicator salience its impact on compliance. To examine this, participants were

received a request via email to complete a questionnaire on their eating habits. For half the participants, the request included a photograph of the communicator, while half the participants did not receive a photograph. Including a photograph increased compliance with the request. They also found that men were more compliant than were women. Furthermore, all participants were more compliant with a female requestor. The inclusion of a photograph of the requestor increased communicator salience, which then produced an increase in compliance. However, this effect was also affected by the gender composition on the influence agent and influence target. Thus, this research demonstrates the importance of the salience of an influence agent in online social influence attempts. Furthermore, these results indicate that, when influence attempts in online settings, gender of the target are the influence agent both affect the success of an influence attempt more than has been found in research in FTF settings (Cialdini). As a reflection of the importance of communicator salience, these two findings replicate in other studies on online social influence that I will review below.

Authority online. It is generally accepted that people want to make the right choice and in doing so, people often make selections based on the advice of a domain relevant authority (Cialdini, 2009). Authority figures influence people's decisions because they are seen as experts on a topic (Sagarin, Cialdini, Rice, & Serna, 2002). This perception invokes the "if an expert says it, it must be true" decision heuristic. As reviewed above, while some research on online behavior shows a decrease in the transmission of social cues (Guégen & Jacob, 2002; Postmes et al., 2001), will people comply with the request of an authority figure when it arrives via the Internet? I could argue that an expert or an authority is a social category that is readily made salient with an email signature address. If this were the case, I would predict that people targeted by an online influence appeal from an authority to respond similarly to a context with a more salient authority figure (e.g., FTF, television). Thus, can authority be salient enough in an online appeal to gain compliance from the target?

The first study to examine the whether an authority on a topic can influence interactants online relative to FTF, Dubrovsky, et al. (1991) asked people in small groups composed of a graduate student (expert) and three college freshmen (non-experts) to discuss the career choices available to college graduates. This topic established the graduate student as the obvious authority on the subject. The groups also discussed a second topic in which the freshman were the experts. Their results revealed that the in the FTF groups, the graduate student maintained authority in the group as reflected by talking more and having more influence over the group's decision. This was only the case when the topic of discussion was one in which the graduate student had greater obvious expertise (i.e., careers after college). In the CMC groups, the authority did not

have the same influence over the group's decision on either topic. Instead, each member of the group participated equally in the discussions and had comparable input on the final decision. Overall, the results were consistent with the "restricted cues" perspective on CMC by demonstrating that authority did not serve as a decision heuristic in the CMC groups. Thus, overall, these results indicate that in a synchronous group setting, the influence of authority is not effective online, likely owing to the reduced salience of the authority figure in the CMC discussion.

Guégen and Jacob (2002) examined the effectiveness of authority via an email request. Participants received a request to complete a short survey on dietary habits from an influence agent who was either an authority – a professor – or not an authority – a college student. In vs. outgroup status was also manipulated by collecting data from university students (ingroup) and from members of the surrounding community (outgroup). The authors predicted that the high status requestor would be more influential, especially among members of the ingroup since people generally show a preference for people from their group over those from outside their groups (Brewer, 1979; Tajfel, 1982). Their results indicated that within the ingroup, 97.5% of participants complied with the request from the professor, while only 65% complied with the request when it came from a college student. Furthermore, ingroup participants returned the questionnaire faster to the professor than to the college student. In the outgroup sample, overall compliance was lower but the results mirrored that found in the ingroup condition. These results indicate that an authority figure can successfully obtain compliance with a request made online, particularly when the participants are from the same group as the authority. Thus, in a text-based asynchronous interaction, the communicator's authority cues remained salient, and therefore influential. When the request was targeted at members of the authority's own group, s/he was more influential than when the request was targeted at a group the authority is not a member of. Thus, these results provide additional information on when an authority will be influential and what aspects of the situation will enhance or diminish the effectiveness of an authority.

In a study on communication mode and compliance, Okdie, Guadagno, Petrova, and Shreves (in press) asked participants to interact with another person to decide which of two charities the Psychology Department would donate money to. The two charities had been pre-tested to be equal in appeal. The researchers also made ensured that men and women did not differ in their evaluations of the charities in the pre-test. The discussion took place over email or FTF and the other person was really a same-sex confederate who was introduced either as an authority (a graduate student) or not an authority (another introductory psychology student). Results indicated that men in the CMC authority condition were more likely to comply with the recommendation of the

confederate than were men in the CMC no authority control condition. For women, while the authority of the female confederate was recognized as indicated by the manipulation check, there was no difference by condition in their compliance rates. Thus, these results indicate that authority can be effective online but only for men. Thus, while this is the only study that examined social influence in an interpersonal influence context, these results suggest that authority is only effective online when the target is male, possibly owing to men's greater focus on status cues (Guadagno & Cialdini, 2005).

Overall, the existing literature on the influence of authority online is mixed. Authority is successful in increasing compliance in online groups when it is used as a decision heuristic, but is not influential in an interactive discussion. Furthermore, gender and group membership affects the influence of authority in online interactions. Perhaps the synchronous nature of an online interaction will predict the likelihood of authority being an effective method of social influence. Additional research needs to be conducted on authority online before definitive conclusions can be drawn.

Commitment and consistency online. Another influence principle that has been examined online is commitment and consistency: a person who has made a prior commitment is likely to be consistent with his or her prior actions. Consistency with prior actions has been demonstrated to be a successful influence technique because it alters one's self-perception (Bem, 1972). According to Bem's self-perception theory, people look to their own prior behavior to infer their opinions and beliefs. However, the outcome of the self-perception process varies based on the level of internal consistency desired by the specific person as well as the way a request is presented. That is, people who score low on the Preference for Consistency (PFC) scale (Cialdini, Trost, & Newsom, 1995) are less compliant with the FITD owing to their lack of consistency between their previous actions and behavior. Individuals high in PFC are more compliant with the FITD because they are consistent with their internal values (i.e., pro consistency) and their prior behavior (Burger, 1999; Guadagno, Asher, Demaine, & Cialdini, 2001; Guadagno & Cialdini, 2010).

Although research has revealed many different commitment and consistency-based influence tactics, only one has been examined in online: the foot-in-the-door technique (FITD; Freedman & Fraser, 1966). The foot-in-the-door works as follows: an influence agent asks the influence target for something small. Usually this small, first request is a minor commitment, such as signing a petition or answering a few questions. The first request is so minor that every person asked will comply with the request. Next, the influence agent builds upon the initial compliance to obtain compliance with a second, usually related larger request, such as spending five hours volunteering with an organization advocated in the petition or filling out a much longer 50-item survey. This

second larger request is the “target” request; the request the influence agent is really interested influencing a person to comply with (Freedman & Fraser, 1966). Compared to people who are only asked the second, target request, people generally comply more if they first complied with an initial request (Burger, 1999). Freedman and Fraser (1966) initially demonstrated the FITD and named this tactic the foot-in-the-door because the small request is conceptually the initial foot that allows a salesperson to get through the door of a potential customer. An important implication of the mechanism behind the FITD is that, as a commitment and consistency tactic, it functions largely owing to a person’s desire to be consistent with their internal thoughts and behaviors. Thus, it is likely that the FITD will be effective online because the influence agent is less important to the effectiveness of the tactic, than a person’s interpersonal processes

Given the mechanism behind the foot-in-the-door effect – it is a function of a person’s need for consistency between his or her past and present actions – I expect that commitment and consistency-based social influence appeals will be successful online as indicated above. As a result of this, the presence or salience of the influence agent is likely to be less important in gaining compliance relative to other influence tactics. In line with this reasoning, the FITD has been shown to be an effective social influence tactic in a variety of multiple computer-mediated contexts. Guégen (2002) examined the foot-in-the-door via an emailed influence appeal. A (fictitious) university student initially asked half the participants, other university students, for assistance with saving a document as a rich text file format. The request for instructions served as the first, initial request. For the second, target request, all participants received an email from the same fictitious student asking them to complete a 40-item survey on their eating habits. The results revealed a significant foot-in-the door effect: 76% of the college students in the FITD condition (i.e., had complied with the first request) agreed to fill out the survey. In the target request only control group, 44% of the college students complied with the target request. Additionally, Guégen and Jacob (2001) demonstrated a foot-in-the-door effect with web pages as the online medium. Participants were first asked to sign a petition on a website as the initial request. This petition advocated a humanitarian cause. Those participants who signed the petition read more pages on the website and clicked more links to other sites relative to participants in the control condition. Overall, these first two studies on the FITD in an online context supported predictions that, since consistency is an internal process and the presence of the communicator is less important.

In an online chat room, Markey, Wells, and Markey (2001, study 3) reported a successful FITD effect. As the initial request, a fictitious novice Internet user entered the chat room and requested help with the chat room features. As the target request, the fictitious novice Internet user asked the participant to send an email to ensure his email

was working. Compliance rates were low, but the results still revealed a foot-in-the-door effect: 16% of participants who complied with the initial request sent the email, relative to only 2% of participants in the control condition. Thus, in a synchronous interaction, a commitment/consistency-based social influence tactic was also effective. This supports the contention above that commitment and consistency based influence tactics will be effective online.

In another FITD study, Petrova, Cialdini, and Sills (2003) examined the online FITD cross-culturally. Participants were American-born and Asian international students. Those in the FITD condition were initially requested to complete a brief questionnaire online. One month after the initial request, participants were next asked to complete a longer similar questionnaire. Results revealed that, while American-born participants were more compliant with the small initial request, participants who did comply with the first request complied with the target request at higher rates than the Asian participants. The researchers viewed these findings through the lens of cultural differences: Americans are more individualistic, thus internal commitments are centrally important to them, while Asians are more collectivistic and thus internal commitments are less influential on behavior because Asians perceive themselves within the framework of group membership instead of their individual past behavior. Thus, these results provide a limitation to the FITD online: it works well online provided the targets of influence are Westerners (i.e., individualistic). People from Eastern (i.e., collectivistic) cultures are less likely to be influenced by influence tactics whose mechanism is an internal and individualistic one.

Finally, Eastwick and Gardner (2009) examined the effectiveness of the FITD in a virtual world, *There.com*, which was described as similar to the more popular virtual world, *Second Life*. In addition to the FITD manipulation, they also created two requesters, one Caucasian and the other African American. In the FITD condition, the virtual influence agent walked up to the participant and asked him or her if he could take a screen shot of the participant. Once the participant complied, the virtual influence agent then asked participants if they would teleport to another part of the virtual world and allow the requester to take another screenshot once they arrived. Participants in the control condition only received the request to teleport and take a screenshot. Results revealed that the initial request was successful in increasing compliance with the target request relative to the control condition. Furthermore, the ethnicity of the virtual influence agent did not affect compliance rates. Thus, these results again demonstrate the wide variety of online contexts in which the FITD is effective.

Overall, the data indicate that the foot-in-the door effect is effective in a variety of online contexts, presumably because it functions through a person's internal consistency motivation rather than the salience of the influence agent (Guadagno & Cialdini, 2005).

Liking online. The social influence principle of liking indicates that people are more influenced by those that likeable and/or attractive (Cialdini, 2009). The liking principle is based on the heuristic indicating that likeable individuals are good sources of information. Thus, the liking heuristic states that when a person who is likeable endorses a topic, product, or idea, it must be good. This effect is enhanced if the likeable person is also similar to the target of influence or is a friend of theirs.

Across three studies, Guadagno and Cialdini (2002, 2007) examined social influence via email and found that gender of the dyad and communication mode (e-mail vs. face-to-face interactions) impacted the degree to which participants were influenced. Their results also indicated the liking played a role in the social influence process but that it varied between men and women. These studies were interpreted within the framework of Social Role Theory (Eagly, 1987). Social role theory states that men and women behave differently because of differential gender role expectations. Women are expected to be more communal in their interpersonal interactions and are therefore more likely to focus on liking, interpersonal cooperation, and the formation and maintenance of relationships. Thus, for women, forming bonds is an important component in the influence process. Text-based communication, such as email and other forms of Internet interaction, serve as a barrier for women in the formation of communal bonds as a result of restricted social cues. Thus, Guadagno and Cialdini found that women were generally less open to influence attempts presented through the Internet. Men are expected to be more independent, agentic, and task-focused. As a result, Guadagno and Cialdini found that, generally, for men the communication mode mattered less in the interpersonal influence process because they were less affected by the changes in salience of the influence agent across communication mode. In general, unless the men felt competitive or adversarial towards the communicator, they demonstrated no differences in social influence across conditions and studies. The implications will be further explained down below.

In the first study Guadagno and Cialdini (2002) conducted, participants interacted with another participant who was in reality a member of the research team. They were told the purpose of the study was to discuss the possibility that the University may implement a comprehensive exam prior to graduation. Participants were “randomly assigned” to take the role of the interviewer in a structured discussion. This role required participants to ask the same-sex confederate a series of questions relating to the comprehensive exam proposal. Participants interacted with the confederate via FTF or an email interaction. After the discussion, in which the confederate emitted a series of arguments in favor of the exam proposal, attitudes towards the comprehensive exams were assessed. Women were more persuaded in the face-to-face

condition relative to women in the email condition. Consistent with Social Role Theory (Eagly, 1987), these results were interpreted to indicate that women in the email interactions may have been less able to form a communal bond with the interaction partner due to the restriction of important nonverbal cues. Consequently, they were less persuaded. This interpretation was supported by additional findings indicating that liking predicted persuasion for women but only in the FTF condition. Furthermore, an analysis of the content of the off topic discussion revealed women's attempts to form communal bonds via trying to find commonalities between them. Men, reflective of their greater task focus, were persuaded similarly in either communication mode and the content of their off topic discussion was oriented toward status seeking. Thus, the off topic conversation differed by gender in a manner consistent with social role theory, thereby supporting the results on the persuasion measure and the logic presented in the predictions.

A second, follow up study replicated the gender differences described above and shed further light on the gender differences in interaction styles (Guadagno & Cialdini, 2002, Study 2). In Study 2, participants participated in two separate studies, one related to examining the way individuals put numbers together, and the second was a replication of Study 1. In the first part of the study, participants were paired FTF in dyads to play a numbers matching game that varied in instruction depending on the prior interaction condition the participant was randomly assigned to. Because research indicates that men perceive interactions more in terms of competition, while females perceive interactions more in terms of cooperation, the researchers expected that prior competition would most negatively affect social influence in men who interacted with the confederate in the FTF condition where communicator cues are most salient (Tannen, 1990). The researchers expected that women would be least influenceable when there is little prior interaction. To test this, there were three versions of the number matching game: one competitive, one cooperative, and one that required the dyads to play solo. After the game was over, the experimenter transitioned to the replication of Study 1. Results supported their predictions: women demonstrated the least message agreement in email interactions without a prior interaction, and men showed the least message agreement in a face-to-face interaction when there was prior competition. Thus, for women, any prior interaction attenuated the impact of restricted social cues inherent in the email interaction and fulfilled women's need to form a communal bond. However, women who did not have any prior interaction with their discussion partner and subsequently interacted via email were the least persuaded and liked their partners the least. Men who experienced a competitive prior interaction were more persuaded in the email condition relative to the face-to-face condition. Thus, men felt competitive

with the interaction partner, and were most persuaded in email interactions where the competitor cues were less salient. Consistent with predictions, women were most influenced when they had an opportunity to form a bond with the communicator. Men, on the other hand, showed no difference in communication mode unless the communicator was perceived as a competitor. In that case, they were resistant to influence when faced with their communicator. The email interaction decreased the salience of the competitor allowing male participants to focus on the content of the arguments rather than get distracted by their feelings toward the communicator.

Finally, a third study replicated the previous findings and examined similarity with the confederate (Guadagno & Cialdini, 2007). To manipulate similarity, participants were told that the purpose of the experiment was to examine personality differences and differences in the way in which people view the world. Participants were also told that they would complete a second study, which was a replication of Study 1. Participants initially filled out a personality questionnaire. To manipulate high similarity, some participants were told that they had an extremely similar personality profile as the confederate and that the chances of having such a similar profile were 1%. To manipulate low similarity, participants were told that they were only 12% similar to the confederate and this dissimilarity was exceptionally rare. After this false feedback, participants engaged in the same interview discussion as in the two previous studies (Guadagno & Cialdini, 2002). Overall, when given the feedback that their similarity with the confederate was low, men were more open to persuasion via email relative to FTF. Thus, when men perceived themselves to be dissimilar to the confederate, email reduced the cues of the dissimilar other and allowed men to be more focused on the task at hand resulting in more openness to influence. Furthermore, women who perceived low similarity (and no bond with their interaction partner) with the confederate showed less message agreement in email interactions. Thus, similarity attenuated the impact of communication mode for women. Men showed no difference in communication mode in their influenceability. An unlikeable communicator produced less persuasion for women in the email conditions but more persuasion for men in the email communications. Viewed through the lens of social role theory (Eagly, 1987), women rejected a woman they had nothing in common with and no opportunity to find such commonality, while men were more open to influence when they were focused on the text of the message rather than the face of the dissimilar other. Thus, these results suggest that the relationship (if any) between the target and the influence agent be considered prior to making an attempt to influence an individual as the outcome will vary as a function of the gender of the interactants as well as the communication mode.

Finally, Muscanell and Guadagno (2013) (presented at the annual Society for Personality and Social Psychology conference, New Orleans, LA) replicated and expanded upon Guadagno and Cialdini's (2002, 2007) previous findings by examining both same- and mixed-sex dyads. In the prior three studies, the researchers used only same-sex dyads. Muscanell and Guadagno sought to examine whether the results would replicate with mixed sex dyads. Other than the addition of mixed-sex dyads, this study replicated Guadagno and Cialdini (2002, Study 1). Their results replicated the previous gender differences in persuasion for same-sex dyads: women were less persuaded in the email condition, while men showed no difference in persuasion across communication mode. Furthermore, results indicated that these relationships were mediated by likability and friendliness. Women found other women to be more likeable and friendly in face-to-face interactions as compared to email, increasing persuasion. In mixed-sex interactions, men were more persuaded by women via email than face-to-face interactions. This relationship was mediated by credibility and competence. Thus, men found women to be more credible and competent over email relative to face-to-face, and this increased persuasion. These results indicate that when the target and influence agent are different sexes, email may be more effective, especially when the influence target is male. For women, these results mirror those reported above by Guadagno and Cialdini (2002, 2007) in that influence attempts are more effective for women in FTF contexts, regardless of the gender of the influence agent.

Overall, the literature reviewed on the impact of liking online indicates that it is more important for women than for men (Guadagno & Cialdini, 2002, 2005, 2007; Muscanell & Guadagno, 2013 in review). Thus, in order to be effective at influencing women online, these results suggest that, when trying to influence women, to be most influential online finding commonalities between the influence agent and the influence target is essential. For men, social influence online may be an effective means to attenuate the effect of an adversarial relationship owing to the decreased salience of the communicator. Thus, these results suggest that if a man wants to influence another man and they already have a mutual dislike for one another or are placed in adversarial roles within or across organizations, email is the better communication mode to attempt to influence the target. This is because the characteristics of and email focus its recipients on the words rather than the characteristic of the influence agent.

Social validation online. Social validation, also referred to as *social proof*, refers to the people's tendency to look at the actions of others to determine the appropriate attitudes or behavior in a given situation (Cialdini, 2009). Across cultures and contexts, people follow social norms or "rules" for behavior. In following social norms, people will change their behavior to match the actions of others (Cialdini, 2009). The impact of social validation is greater in situations where a person is unsure of the appropriate response. On

the Internet, there are many such situations in which people do not know how respond as social norms online are still developing. Guadagno, Muscanell, Rice, and Roberts (2013) examined social validation and likeability online. Specifically, Guadagno and Cialdini (2005) contend that the effectiveness of social influence attempts have yet to be thoroughly investigated online. To test Guadagno and Cialdini's perspective, Guadagno et al. (2013) examined whether social validation and likeability validation affected individuals' willingness to comply with an online request. To examine this, participants were asked to reveal a fictitious student blog that varied in likeability and social validation. The student blog author asked participants to volunteer for a canned food drive. There were three likeability conditions: high likeability (in which the student made a pro university football statement), no likeability information (the statement was omitted from the blog), and low likeability (in which the student made an anti university football statement). There were also three social validation conditions: positive social validation information (in which fictitious students posted comments indicating their willingness to volunteer for the canned food drive), negative social validation information (in which fictitious students posted comments indicating their unwillingness to volunteer for the canned food drive), and no social validation information (in which there were no comments in response to the request). Results revealed that social validation affected compliance, but communicator likeability did not. Specifically, as predicted, participants complied more when the other students indicated their willingness to volunteer, complied less when the other students indicated their unwillingness to volunteer, and the no social validation information condition participants were more willing to comply with the negative social validation condition and less willing to comply than participants in the positive social validation condition. Furthermore, while the manipulation check data indicated that the likeability manipulation was successful in manipulating liking, this had no impact on compliance. Thus, the results indicated that while social validation is effective online, there are limitations to the effectiveness of likeability online. As a result, as long as individuals can see the responses of others, they will be influenced by social validation in online settings. Liking online is less influential, potential because of the factors discussed above in the section on liking. Since gender and communication mode interact to limit the extent to which liking works online, these results would have been more informative about liking if the authors had varied the gender of the influence agent. This is something that future research should address.

Another study examined the impact of social validation in the spread of Internet memes (Guadagno, Rempala, Murphy, & Okdie, in press). Specifically, these researchers sought to examine what leads some Internet videos to reach millions of viewers, while others do not spread. This is a research question that has largely been empirically

unexamined. The researchers examined the role of emotional response and source of the video (ingroup or outgroup) on the likelihood of spreading an Internet video. The results revealed that people who reported experiencing strong affective responses to a video were more likely to intend to spread the video. Furthermore, videos that evoked the strongest positive (e.g., cute and funny) and negative (i.e., anger producing, disgusting) emotions were the most likely to be spread. With regard to the role of the video source, videos that produced anger were more likely to be forwarded, only when the video came from an outgroup member. Thus, while overall, social validation impacts video spread when the video evokes a strong positive or negative emotion, only videos that evoke negative emotions are spread when it was sent by someone outside an individual's group. It may be that the experience of receiving something anger provoking from an outgroup member enhances the level of anger experienced, which in turn influences the target to share their anger with others. Further research on this topic needs to be conducted before definitive conclusions can be drawn.

In another demonstration of social validation online, Guadagno, Blascovich, Bailenson, and McCall (2007) examined virtual humans as agents of influence. Across two studies, male and female participants heard a persuasive communication from either a male or female virtual human. Results demonstrated that people are more influenced by virtual humans that were similar to them. Thus, women were more influenced by the female virtual human and liked her more than the male. Conversely, men were more influenced by the male virtual humans. Thus, overall, the emerging research on social validation online indicates that it is an effective influence principle in a variety of online contexts. As a result, social validation is an effective influence principle across communication modes.

Reciprocity online. The rule of reciprocity, often referred to as the “golden rule”, indicates that people are obliged to give to others who have given to them (Gouldner, 1960). Research indicates that people will be influenced when they feel they owe the influence agent a favor (Cialdini, 2009). For example, all those “free” address labels people receive in the mail accompanying a request for charitable donations are not so free after all. The inclusion of a small token such as free address labels has been shown to double donation rates (Cialdini, 2009). While reciprocity has been largely uninvestigated online, there is one study that has examined this question (Eastwick & Gardner, 2009). Specifically, Eastwick and Gardner conducted an online study of a reciprocity-based social influence tactic called the door-in-the-face.

The door-in-the-face (DITF) begins with a large initial request; one so large that everyone asked will reject it (Cialdini, Cacioppo, Bassett, & Miller, 1975). When the influence target rejects the exceedingly large request, the influence agent concedes and

asks the person they are targeting, a more reasonable request – the target request they really want the person to comply with. Because the follow up request is perceived as a concession, the influence target feels normative pressure to reciprocate and agree with the second, target request. Compared to being presented with just the target request alone, the DITF has been showing repeatedly to be successful at gaining compliance with a request. Thus, to utilize the reciprocity norm to gain compliance, people will ask an influence target to comply with a request that is too large, virtually everyone will refuse. This creates an obligation on the part of the influence target to agree with a follow up request. Social influence practitioners know this and take advantage of the reciprocity norm and follow up with a more reasonable request, one in which they actually want the influence target to comply with. As indicated by the reciprocity norm, the target typically feels this obligation to comply with the second, target request (Cialdini, 2009).

Cialdini, et al. (1975) conducted the initial demonstration of the DITF. In this study, college students were approached on campus and asked to volunteer to chaperone juvenile delinquents on a daylong trip to the zoo on an upcoming Saturday. This was the target request. Participants in the DITF condition were initially asked to commit to counsel juvenile delinquents for two hours a week for two years. Once participants refused this ridiculously large initial request, they were then asked to volunteer for the trip to the zoo. Results indicated that 50% of participants in the DITF condition agreed to chaperone the zoo trip, while only 17% of participants in the target request only control condition complied. Thus, when obligated to reciprocate the concession of the influence agent, half of the participants agreed to the request. In the absence of the pressure to reciprocate, only a small number of participants agreed. These results demonstrated clearly the influence that reciprocity has on compliance with requests.

As indicated above, the DITF has been examined in an online virtual world. As the second influence tactic examined in Eastwick and Gardner's (2009) replication of classic influence tactics online described above in the section on the FITD, the authors conducted a DITF study using the same target request and in the same virtual world (There.com). As in the FITD study described above, they also varied the ethnicity of the virtual human requestor. In the case of the DITF study, the target request was the same as that of the FITD: to teleport with the requestor and allow them to take a screen shot at the new location. However, in the DITF, the initial request was excessively large. Specifically, participants in the DITF condition were first asked to teleport to 50 different locations with the virtual requestor and let him take a screenshot at each location. Results revealed a significant DITF but only when the virtual requestor appeared to be Caucasian. When the virtual requestor appeared to be African American, no DITF effect emerged. As a result, the authors were only able to replicate the DITF online when the

requester appeared to be a Caucasian male. It is an open question as to why the DITF was unsuccessful when the virtual human requestor appeared to be African American, as there is a dearth of research examining the influence of race on social influence attempts. It may simply be that the majority of the There.com users are Caucasian and therefore more likely to comply with members of their own ethnic group. This also illustrates the importance of the communicator in the reciprocity process. While the FITD is an internal phenomenon (as discussed above), the DITF works as a function of the interactants. Thus, although there is a paucity of research on reciprocity online, the existing research suggests that there are limitations to its effectiveness.

Scarcity online. The final influence principle is scarcity. According to the scarcity heuristic, if an item is rare, it must be good (Cialdini, 2009). Thus, anything that is not widely available, it is perceived as valuable. This explains limited editions and inflated values of items such as Beanie Babies, which cost less than 25 cents to make but may sell for hundreds of dollars. Cialdini (2009) describes one of my favorite scarcity studies. A student of his was the son of a meat distributor. As a result, he knew of an upcoming shortage of Australian beef. To examine the effectiveness of scarcity, Cialdini and his student developed and conducted a field study within the meat distributor. Customers at the meat distributor were contacted using one of three different scripts: scarcity, scarcity + exclusivity, and no scarcity control. Customers in the scarcity condition were told that they knew of an upcoming shortage of Australian beef. Customers in the scarcity + exclusivity condition were told about the upcoming shortage and also told that this information was being shared exclusively to the customer. Finally, customers in the control condition only received the regular call for their monthly order. Results reflected the success of the scarcity manipulation. In the control condition, an average of 10 loads of beef were ordered. In the scarcity condition, an average of 24 loads of beef were ordered. In the scarcity + exclusivity condition, an average of 61 loads of beef were ordered. Thus, the results of this study illustrate the effectiveness of scarcity as an influence tactic and also demonstrate that information or items that are both scarce and the information pertaining to the scarce resource is not well known, the desirability of the scarce item is amplified.

To date, I am unaware of any studies on scarcity in any type of CMC. Based on the social influence literature reviewed above, I would predict that scarcity would be effective in online contexts, provided the reactions of others are apparent. For instance, spreading the news that a popular product such as Diet Coke was about to be taken off the market may lead people to start hoarding Diet Coke if such news were credible and spread on Twitter or Facebook. Individual emails with this news would likely be less effective unless the information was both credible and presented as exclusive news targeted expressly for the email recipient. However, until this influence principle is studied in an online context,

I am merely presenting predictions based on my knowledge of the literature. I encourage any reader interested in online social influence to investigate this issue empirically.

Casing Cameela: An Observation of Online Social Influence in Action

I have spent quite a bit of time online and enjoy getting to know people. I also enjoy people watching. The case study that illustrates online social influence concerns the experience of a friend of mine, David¹, who was targeted and nearly victimized by a variation of the Nigerian Prince scam (Muscanell, Murphy, & Guadagno, in press). About 7 years ago, David was seeking a woman for a long-term romantic relationship using online dating. I helped him build his profile; edit the content he suggested, select the photographs he posted, and also helped him select credible online dating websites.

Shortly after David's profile appeared online, Cameela², a beautiful Nigerian woman, contacted David. He was very excited to hear from her and shared many of their interactions with me. She appeared bright, articulate, and very interested in him. They initially spent hours chatting online, thereby increasing their commitment to each other. Cameela complimented him regularly, on his skills, interests, and appearance, and made it very clear to David that she was seeking a husband and hoped to leave Nigeria. As they chatted, she learned quite a bit about David yet he learned very little about her. This lack of reciprocity in self-disclosure was disconcerting to David. I encouraged him to be patient and to try to draw her out. Within a few weeks, Cameela was telling David that she loved him and that she wanted to come to the United States to meet him. David felt that she was pushing their burgeoning relationship too far too fast. Furthermore, David did not feel like he knew Cameela well enough to fall in love with her, so he was incredulous that she should feel more than liking for him.

However, Cameela kept consistently complementing him and demonstrating interest in him. Despite his misgivings, David began to like Cameela. Once liking developed he disregarded his misgivings and started making plans to meet Cameela. Then came the catch: Cameela could not afford to buy her plane ticket to the United States. She asked David to send her money so that she could buy a plane ticket.

At this point, David got back in touch with me, and asked me what to do. I reviewed their interactions through the lens of a social influence researcher and saw several influence principles in action: commitment and consistency, liking,

¹Not his real name.

²Not her real name.

attractiveness, yet a failure to properly establish reciprocity. I also thought about the idea that the free address labels and how they really are not free. As much as I wanted this woman to be in love with my friend and interested in marrying him, my gut told me something was not right. So, I googled “Nigeria,” “Scam,” and “Online dating.” Much to my surprise, I found many news stories about people, mostly westerners like David, bilked out of money by Nigerians pretending to be in love with them. Unbeknownst to me and to David, Nigeria has very lax laws pertaining to online fraud. Thus, it had become a hot bed of online scams. With a heavy heart and a sad face, I sent the links to David. He immediately broke off communication with Cameela. She responded by escalating her pledges of love and devotion. However, as time passed, she stopped trying to communicate with him. David took down his online dating profiles and remains single to this day.

Conclusion

How does this case study illustrate the 6 principles of influence? First, Cameela attempted to develop commitment and reciprocity within their relationship through frequent and reciprocal online conversations. Next, she developed liking in two ways. First, she in her photographs, she was very attractive. Second, she used compliments and flattery to develop liking. She may have gone too far by pledging love too soon. This was the first red flag. Furthermore, her unwillingness to self-disclose in reciprocation to David's self-disclosure was the second red flag. Nonetheless, I will always wonder if Cameela was really a woman; if she was the woman depicted in the photos; if she would have gotten better at deceptive influence over time; and mostly alarmingly, if she would have succeeded in bilking my friend out of his hard-earned money had I not been his confidant. Irrespective of these questions is the sad fact that this one bad experience taught my friend an important lesson about online behavior: people lie more than do in offline settings, especially when it comes to online dating (Guadagno et. al., 2012). This is yet another understudied aspect of online behavior and one that has implications for anyone who goes online to meet people. There is nothing wrong with taking time to get to know people. I also recommend that Internet users view new connections through the lens of the six social influence principles reviewed above. If you notice a person directing them at you, be wary of that person and make sure that relationship development is slow and reciprocal. I always say that the Internet is like the Wild West with limited rules for appropriate behavior and many opportunities for exploitation. Be careful out there my friends.

Questions to Ponder

1. How might the outcome of David's ill fated courtship differed if Cameela had been a better social influence agent?
2. Do you think Cameela's behavior would have been perceived differently if she were from a country other than Nigeria?
3. Would the situation have turned out differently if Cameela had been the man from Nigeria and David the woman from the United States?
4. Could cultural differences explain Cameela's interest in learning all she could about David without engaging in reciprocal self-disclosure?
5. What did you think of Cameela's behavior? How might you have responded in a similar situation?
6. Once a person has been exploited by unethical social influence, it becomes hard for them to trust others. How could David use social influence to recover from this experience and continue his search for a life partner?

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