

## Do Me a Solid? Information Asymmetry, Liking, and Compliance Gaining Online

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### Abstract

*As the popularity of interactive social media grows, it is increasingly normal for individuals to reveal significant amounts of personal information online. Although this information is intended to support social networks, it can potentially be misused. We hypothesize that access to routine network site profile information can enable individuals to foster feelings of interpersonal attraction in their communication partner, which should increase the likelihood that their partner complies with requests for help. This study reports on an experiment conducted to assess these relationships. Results show participants who had access to personal information about their conversation partner in zero history dyads were more likely to gain their partner's compliance. Surprisingly, participants who benefited from the information asymmetry incurred a cost as well, as their partners reported liking them less compared to the control condition. Further, those who rated the information as valuable for getting their partner to like them were the least successful at gaining compliance.*

### 1. Introduction

Actual or perceived similarity is a fundamental element of human relationships [7] and many interpersonal behaviors are predicated on perceptions of similarity. Whether in forming relationships [33, 27], learning from others [25, 4] or even simply agreeing with group members [27], much of the opportunity and motivation for social interaction is tied to perceptions of similarity.

In part because of its pervasiveness, perceived similarity is also frequently used as the foundation for persuasive strategies. Early research by Evans [16] demonstrated that insurance buyers were more likely to conduct business with salespeople perceived as being similar to themselves. Aune and Kikuchi [3] found that similarity in language use was positively related to perceptions of credibility and competence.

More importantly, Garner [19] conducted a series of studies in which perceived similarity was related to both willingness to perform and actual performance of small favors.

Although the relationship between similarity and compliance gaining has been well-explored (e.g., [5]), the advent of new technologies has altered the dynamic of those traditional mechanisms.

In traditional face-to-face communication, similarity is established through a variety of visual, verbal and non-verbal factors. Elements such as manner of dress [36], tone of voice [11] and hand gestures [31] all play a role in establishing the perception of similarity.

Computer-mediated communication (CMC) changes the nature of information (or, cues) used to evaluate the level of similarity between two people. Specifically, CMC may allow individuals access to information about the characteristics and behavior of others without being directly observed themselves. Armed with knowledge about these characteristics and behaviors, someone could “fake” greater levels of similarity with targeted others than they would otherwise be able to achieve.

For example, if I was properly motivated and knew your birthday was January 1, I may benefit from deceiving you by stating that my birthday was the same day. In such cases, incidental “similarities” like a shared birthday would appear coincidental [5], result in perceived similarity, and ultimately translate into a greater probability of getting you to comply with a request made by me. Using personal information in this way is a strategic approach to creating perceived similarity, which in turn is associated with liking and correlates with compliance to requests.

The advent of interactive communication platforms including social network sites like Facebook.com has increased the potential for the types of asymmetric information exchanges described above. Many Web2.0 sites are specifically designed in the tradition of cultures of celebrity and transparency to facilitate personal information sharing with broad audiences [40]. The widespread

availability and low social costs associated with this behavior can be attributed to the relaxing boundaries of privacy [34] among frequent users.

Our goal is to explore the link between access to generally public information about others, the resulting information asymmetries, and whether people motivated to use this information in CMC-based conversations can increase their communication partners' perceptions of similarity and liking. We propose that heightened interpersonal attraction derived from information asymmetries will translate into more successful instances of compliance gaining. We report on an experiment designed to test these relationships.

In order to better understand the use of online information for persuasive purposes, the following section reviews research associated with information asymmetries, personal information sharing online, and compliance gaining.

## 2. Information asymmetry

The combination of the widespread use and asynchronous nature of most CMC creates a significant potential for the development of social information asymmetries between users. Information asymmetry is a condition in which one participant in an exchange possesses more or better information than the other [1]. The implications of informational asymmetries are well documented in the economic and sociological literature.

For example, Vohs, Baumeister and Chin [42] discuss the use of information asymmetries to engender feelings of unwarranted trust. The authors suggest that *cheaters* rely on the presupposition of their *target* that an exchange is fair when, in fact, the cheater possesses information that the target lacks. That difference in information can be leveraged by the cheater to cause the target to accept an exchange and the consequences of unfavorable outcomes.

Clarkson, Jacobsen and Batcheller [10] argue that information asymmetries can be classed as either horizontal or vertical. Horizontal asymmetries result in cases where valuable information is scattered among a variety of similar individuals. Consequently, even though the individuals may, in aggregate, possess substantial knowledge, they have no enacted process for sharing that information and thus cannot effectively employ it either against one another or against an outside individual.

Vertical asymmetries arise in situations where one individual holds significantly greater quantities of information than another. In the case of vertical asymmetries, the information-disadvantaged

individual may be vulnerable to exploitation by the information-rich individual. The focus of the present research is related to the creation and exploitation of these vertical asymmetries in CMC. As discussed above, one of the most active strategic uses of information asymmetry is in generating artificial perceptions of similarity, which in turn can be used to gain compliance.

### 2.1 Liking and compliance gaining

Previous research has demonstrated that even minor and incidental similarities such as sharing a birthday [18] or being dressed similarly [15] are sufficient for creating a sense of liking. The liking engendered by these similarities is posited to result from the triggering of basic heuristic patterns. These patterns are mental models that allow for easier and faster processing of incoming information. However, they may also lead to a greater likelihood of compliance if they are artificially triggered due to perceived similarity [6].

Kelman [26] describes identification as the process by which an individual changes their attitudes or behaviors as a result of the influence of a liked other. That is, once an individual begins to like another, they will be more willing to alter their actions to meet the expectations and request of that other. For example, a restaurant server introducing himself by name will receive higher tips than the server that does not introduce himself [20]. This difference can be attributed, at least in part, to the argument that even very short conversations produce identification, which in turn leads to liking and compliance gaining [2].

Heider's [23] attribution theory suggests that individuals tend to generate explanatory ideas about the behavior of others on the basis of the most salient information available about those others. Others that evidence similarity to the self become targets for identification: we tend to like them more. In many cases, it is not until a violation of expectation occurs that active attention is paid toward those others and differences become more readily apparent [44].

In short, similarity seems to bypass the normal process for relationship building, at least for short term associations. Santos, Leve and Pratkanis [37] note, however, that patterns of behavior that do not fit into previous heuristic models are likely to attract directed attention. This finding suggests that superficial similarity will only generate liking so long as the target is unsuspecting of the motives of the other.

Many of the examples in the preceding paragraphs are based on typical exchanges in which

neither of the participants knows much about the other prior to their initial interaction. On these occasions, coincidental similarity may afford some advantages to a party seeking a favor through the mechanisms described above. However, increased information sharing in online contexts has afforded individuals the opportunity to leverage personal information about others to increase perceived similarity. The following section provides a brief overview of the types of information sharing behaviors commonly observed online today.

### 3. Online information sharing

The Internet provides alternatives to a variety of formerly face-to-face (F2F), interpersonal ventures including commerce, education and routine social interactions [45]. The development of Web2.0 standards allows for personal information sharing through mediated communication with much wider audiences than traditional F2F interactions. For example, Facebook's own statistics show that user's online networks average about 130 people [17], while research on college-aged samples shows that the average size is closer to 450 [41]. Rather than sharing amusing anecdotes with one friend at a time, individuals can leverage the interconnected nature of the Internet to share information with hundreds or even thousands of others simultaneously.

Web-based journals ("blogs") and social networking sites (SNS) provide virtual space in which individuals disclose a wide array of personal information ranging from relationship status to academic interests and from favorite books and movies to hobbies [9]. The purpose of these wide ranging disclosures seems to be related to the reinforcement of social ties [39]. Posting pictures, thoughts and stories, along with their attendant response commentary, reduces the costs associated with maintaining expansive online networks.

#### 3.1 Social network sites

Although a plethora of outlets exist for social exchange online, social networking sites enjoy substantial popularity as hubs of computer-mediated interpersonal exchange. In addition to providing legitimate outlets for social interaction, these sites are also massive repositories for personal information. However, the widespread availability of that personal information may at times function as a liability for some users.

Social networking sites provide readily accessible channels for both initiating and

maintaining contact with others. Facebook.com is the most popular site with hundreds of millions of active users who spend an average of about 23 hours per month on the site [17]. Although the majority of user's online friends tend to be others they have met face-to-face, research suggests that approximately 14% of people's online networks are comprised of individuals never actually met offline [40]. Thus, a 500 person Facebook network may include about 70 people never met F2F. The implication is that users are increasingly unaware of the intentions of this weak tie subset of their networks.

Not only are individuals disclosing personal information online, but research has shown that the nature of CMC may contribute to greater rates of disclosure online, opposed to offline. Joinson [24] demonstrated that spontaneous self-disclosures occurred more frequently during CMC than during comparable F2F interactions. Dietz-Uhler, Bishop-Clark and Howard [13] also demonstrated that normative social structures arise in computer-mediated contexts which encourage and reinforce self-disclosure.

Some research has suggested that individuals may also be using SNS to actively shape the perceptions of others in the hope that those perceptions may be reflected in subsequent offline interactions [30, 43]. These self-disclosures may be intended to control impressions and maintain social ties but may still leave individuals vulnerable to potential misuse of their personal information [12, 29].

In the context of social exchange, much of contemporary online communication can be characterized by relatively non-directed self-disclosure [39] whereby people broadcast personal information about themselves to expansive and increasingly anonymous online social networks. Often these mediated relationships lack traditional social exchange characteristics like equity and reciprocity, and present the opportunity for people to strategically take advantage of such unequal information conditions.

As a result, relatively unknown others are granted access to a range of personal information available on people's profiles including their home town, birthday, and entertainment preferences. Any one of these categories of information *could* be used to stimulate heuristic processing in response to an interpersonal request. As Burger et al. [5] demonstrate, when a requestor and a target share an "incidental similarity, such as the same birthday or being born in the same state," this promotes heuristic processing because of the sense of association fostered in the target [23]. This is consistent with our

proposition that asymmetric information conditions could benefit motivated individuals to deceptively present themselves as similar to their conversation partner, thus creating a sense of association and liking, which should lead to a greater likelihood of successful compliance gaining.

As an illustration, imagine Elaine wants to convince Jerry—whom she just met—to do a favor for her. Once they become Facebook friends, she explores Jerry’s online profile and discovers that he enjoys Stephen King novels. Elaine has never read a King novel before, but gathers enough background information to make conversation. Jerry, unaware that Elaine retrieved information about him from his online profile (thus, she benefits from the information asymmetry), is likely to assume that they both enjoy a similar love of horror stories. Such an incidental association between Jerry and Elaine would be enough to produce—in Jerry’s mind—a feeling of attraction between them. If Elaine made a request of Jerry, he is likely to negotiate the request via heuristic processing, and respond as if he was responding to a friend [48].

Naturally, the interaction between Jerry and Elaine is mediated by an array of other interpersonal factors as well. Some of these factors may include communicative adaptability [14], perceived homophily [21] and interaction involvement [8]. It would be outside the scope of the present research to account for all of these potential interpersonal influences, Scott, McCroskey and Sheahan’s [35] communication apprehension measure provides a good approximation for several of these elements under a rubric of communicator competence. Although discussed in greater detail in the measures section, it is important to note that these elements were considered and accounted for in the current study.

Considering this evidence, we propose that online information available via social network sites can be used to intentionally foster perceptions of similarity between otherwise unacquainted communication partners. To test this general proposition, we designed an experiment wherein dyads communicating via online chat were assigned to one of two conditions: in the control condition, neither partner had any information about the other; in the experimental condition, one partner was given a set of information about their communication partner consistent with the categories of information typically available on Facebook profiles—the information asymmetry condition. The experiment was designed to see if participants with information about their partners would be more successful at getting their partner to comply with a personal

request. Based on the above literature review, the following set of specific hypotheses is proposed:

**H1:** Participants who *benefit* from information asymmetry should be more likely to get their communication partners to like them, opposed to the control condition.

We hypothesize that this interpersonal attraction should result in a stronger likelihood of success in gaining compliance from communication partners:

**H2:** Participants who *benefit* from information asymmetry should be more successful at getting their communication partners to comply with requests for help, opposed to the control condition.

We further propose that because some people are better communicators than others, people who are more competent in their communication skills should also be at an advantage when communicating in situations like this. Thus,

**H3:** Participants with higher communication competence will be more successful at getting their partners to comply with requests *regardless* of experimental condition.

Considering that some people benefit from an informational asymmetry, there are questions about how the provision of such information affects the nature of the conversation in general. That is, giving one communication partner a strategic advantage raises questions about how this advantage may affect the nature of social exchange. Thus,

**RQ1:** Are there differences in the subjective evaluation of communication partner’s conversation style based on experimental conditions?

Lastly, this design affords us the opportunity to evaluate participants’ perceptions about the value of the information given to them about their partners. Thus, we present the following research question:

**RQ2:** How useful did participants feel the information about their partner was while trying to gain their compliance?

## 4. Method

### 4.1 Participants

Data collection proceeded in two phases. In the first phase, 327 undergraduate students completed an online survey. This survey was designed primarily to record the set of typical profile information participants post on social networking site profiles and included information like hometown, birthday, etc. This data was used in the experimental phase of the current study. Participants were incentivized to

participate by offering required research credit for participation, and all procedures were approved by the Institutional Review Board.

The average age of the participants was 21 ( $SD = 1.78$ ). The majority of the participants were Caucasian (about 61.5%) followed by Asian/Pacific Islander (about 26.9%). One hundred percent of participants reported belonging to a social networking site, of which the most prominent was Facebook (94%). Participants reported an average of 550 friends ( $SD = 334.4$ ) and 81% reported visiting the site at least once per day.

In the second phase, participants were recruited from the initial pool of 327 participants to participate in an experiment. A total of 76 individuals (37 were male) participated in the experimental phase of this research. Participants were not told that the studies were related, and recruitment for the experiment was delayed for 7 weeks after the survey so that participants would not associate the survey with the experiment. Individuals participating in the experiment were assigned to one of two separate computer labs (designated “A” and “B”).

## 4.2 Procedure

Upon arriving at the specified lab space, participants were told they would be participating in a study about online communication. Participants were guided through the consent process and then told that they would be chatting online with someone they had never met before via an instant messaging application. All participants were explicitly instructed to avoid sharing any identifiable contact information with their conversation partner. Examples of identifiable information were stated to include last names, phone numbers and e-mail addresses.

Half of the participants were randomly assigned to the control condition. In both the control and experimental groups, participants were randomly assigned to one of two roles: either making a request of their partner, or receiving a request. All “A” participants were instructed that they needed to actively try to *get their communication partner to like them* because they were going to ask their partner for a favor at the end of their conversation.

The request was scripted and involved asking the participant for their email address so that participant A could email them a URL which linked to a short online survey related to a class project. The request explicitly stated that assisting with the class project would take no more than 5 minutes.

All participants were instructed that they had to chat with their partner for 10 minutes. To instill motivation, A participants were also told that if they

were successful at getting their partner to comply with their request, they would be entered into a drawing for a \$250 Visa gift card in addition to getting research credit.

In reality, after about 8 minutes of conversation, a researcher was instructed to notify the A participants that they should steer the conversation so that they could naturally ask the following scripted question: “Hey, I know we aren’t supposed to do this, but can I ask you a favor?”

At this point, the researcher took the place of participant A and followed up on the initial scripted request for assistance. The researcher asked B participants for a personal favor which required B participants to share their email address. Recall that sharing personal information like email addresses is in direct violation of the rules that were verbally explained to all participants. The researchers were instructed to make the request only once, and record whether or not B participants complied.

While A participants were instructed to get their partner to like them, B participants were instructed to *get to know their conversation partner*. Note that this goal is different from A participants goal. The experiment was specifically designed this way so that A participants had all the advantages that are normally associated with information asymmetries. That is, in such a situation, people in the role of participant B would be unaware that their communication partner was trying to get them to like them.

Further, B participants were told that they would be asked some questions about their partner after the conversation and so needed to actively participate. No further instructions were given. After eight minutes of conversation, these participants received the request for assistance which required they share their e-mail address. A refusal or compliance to the request marked the end of the experiment.

The structure of the experimental condition was exactly the same as the control condition except for one difference: participants in lab A were each given a standard set of information about their counterpart in lab B. This information was given to participants in lab A to foster the information asymmetry between communication partners (recall that this information was collected during the initial phase of data collection 7 weeks prior to the experiment). The information consisted of typical data on networking site profiles and included items such as favorite books, movies and music, hometown and year in school.

Lab A participants were given instructions stating 1) they could use the personal information about their partner however they liked, 2) their partner

didn't know that they had this information, and 3) if they were successful in getting their partner to comply with a request, they would be entered in a drawing for a chance to win a \$250 Visa gift card.

Following the request, all participants were asked to complete a survey with a series of measures including interpersonal attraction, communication competence, and their perception of their partner's communication skills. Each of these measures are described in detail in the measures section. Upon completion of these post-conversation measures, participants were debriefed and the true purpose of the experiment was revealed.

### 4.3 Measures

The initial data gathering phase was conducted with a questionnaire designed to record ten categories of information typically available on social network profiles. These categories included the year and month the participant was born, when they began attending their university, their gender, the name of their hometown, the name of their high school, their favorite books, movies and music, and religious views. The rest of the measures were collected during the experimental phase of the project, as described below.

*Partner Attraction Survey.* In the experimental condition, A participants were given information about their partners. They were given about 3 minutes to review the information so that they could get familiar with it. Then, they were administered McCroskey and McCain's [29] 8-item social attraction measure to establish a baseline attraction for the experimental condition. Each item was measured using a 7-point Likert-type scale ranging from 1 = Strongly Disagree to 7 = Strongly Agree. The mean response was 4.26 ( $SD = 0.77$ ; Cronbach's  $\alpha = 0.77$ ).

Following the experiment, participants were asked to evaluate their communication partner. Again, the social attraction measure [29] was used. The mean response was 4.34 ( $SD = 0.98$ ; Cronbach's  $\alpha = 0.80$ ).

*Self-reported Communication Competence.* Participants were asked to rate their own communication competence. Scott, McCroskey and Sheahan's [35] communication apprehension scale is comprised of 12 items scored on the same Likert-type scale described above. Mean response for the measure was 4.46 ( $SD = 0.98$ ; Cronbach's  $\alpha = 0.97$ ).

*Partner Communication Style.* Participants were asked to evaluate their conversation partner's communication style. The Relational Model of Communication Competence scale [46] is comprised

of 32 items scored on the same Likert-type scale described above. Mean response for the measure was 5.01 ( $SD = 0.60$ ) and Cronbach's  $\alpha = 0.93$ .

*Information Usefulness Measure.* In the experimental condition, A participants were asked two additional questions to evaluate their perceptions regarding the usefulness of the information they were given about their communication partner: "The information provided to me was helpful in getting my communication partner to like me" and "I would have been successful at getting my partner to like me without the information about them." The items were scored on the same Likert-type scale described above and the second item was reverse coded. Mean response for the measure was 4.75 ( $SD = 1.90$ ) and the two items were strongly, positively correlated (Cronbach's  $\alpha = 0.93$ ).

### 5. Results

At the end of the debriefing phase of the experiment, all participants were asked whether they thought the request was suspicious. None of these participants suspected that the request was part of the experimental design, or that a confederate actually sent the request for assistance.

The experiment was designed so that we could evaluate 1) whether people benefiting from information asymmetries were more successful at getting their conversation partners to like them, and 2) whether they would be more successful at getting their partner to comply with a personal request for help. All analyses were conducted using PASW Statistics v.17.

We begin by addressing Hypothesis 1 which states that participants who benefit from information asymmetry should be more likely to get their communication partners to like them, opposed to the zero-information condition. First, an ANOVA revealed there was a significant difference between the control and experimental groups overall,  $F(1) = 16.27, p < .0001$ . Surprisingly, results show that upon completion of the experiment, participants in the control condition reported liking their communication partners significantly more so than those in the experimental condition.

With regard to Hypothesis 1, the results show that participants who had the benefit of an information asymmetry were *less* successful at getting their communication partners to like them,  $F(1) = 7.75, p = .009$ . The average post-liking response for B participants (who received the request) in the control condition was 4.77 ( $SD = 1.19$ ), while post-liking for the experimental

condition was 3.84 ( $SD = .52$ ). These results are summarized in Table 1. It is interesting to note that the SD for the control condition was more than twice that of the experimental condition. Hypothesis 1 was not supported.

A chi-square test was conducted to examine the differences in compliance (providing an email address when asked) for control compared to experimental conditions. The chi-square was significant,  $\chi^2(1) = 5.11$ ,  $p = .024$ , supporting Hypothesis 2. Participants in the experimental condition succeeded at getting their partners to comply with their request 70% of the time, while those in the control condition were successful only 33% of the time.

In terms of self-reported communication competence, analyses revealed that there were no systematic differences in terms of competence and compliance among participants in this study (successful:  $M = 4.25$ ,  $SD = .93$ ; unsuccessful:  $M = 4.23$ ,  $SD = .95$ ;  $ns$ ). Hypothesis 3 was not supported.

Next, post-partner communication evaluations were analyzed to address Research Question 1. Results show no difference in A participants partner evaluation between conditions, nor any differences in B participants partner evaluation between conditions. Our data suggest that there were no differences in partner communication evaluations regardless of condition or participant's role (i.e., making or receiving requests).

Lastly, Research Question 2 was proposed to explore how useful participants felt the personal information about their partners was when trying to get their partners to comply with a request. As shown in Table 1, on average participants reported usefulness of information at 4.75 ( $SD = 1.90$ ) on a 7-point scale. An ANOVA revealed a significant difference for evaluations between successful and unsuccessful participants,  $F(1) = 15.21$ ,  $p < .001$ . For those who were successful in getting their partners to comply,  $M = 3.93$ ,  $SD = 1.65$  and those were unsuccessful,  $M = 6.67$ ,  $SD = 0.61$ .

Surprisingly, there was an inverse relationship between success and evaluations of the usefulness of personal information. Because of the unexpected relationship between the usefulness of partners' information and their success, we decided to explore whether there was a relationship between evaluations of usefulness of personal information and communicator competence. It seems likely that those who have lower communication competence would place greater value on personal information about others. However, results suggest there was no relationship ( $r = .12$ ,  $ns$ ), although it was in the positive direction expected.

**Table 1. Descriptive statistics.**

| Condition    |    | Pre-like | Post-like | Comm. Comp. | Partner Eval | Usefulness |
|--------------|----|----------|-----------|-------------|--------------|------------|
| Control      | M  | -        | 4.77      | 5.01        | 4.93         | -          |
|              | SD | -        | 1.19      | 1.11        | 0.61         | -          |
|              | N  | -        | 36        | 36          | 36           | -          |
| Experimental | M  | 4.30     | 3.95      | 3.84        | 5.09         | 4.75       |
|              | SD | 0.80     | 0.49      | 0.52        | 0.59         | 1.90       |
|              | N  | 20       | 40        | 40          | 40           | 20         |
| Total        | M  | -        | 4.30      | 4.50        | 5.00         | -          |
|              | SD | -        | 1.01      | 1.00        | 0.60         | -          |
|              | N  | -        | 76        | 76          | 76           | -          |

## 6. Conclusions

The results of the study suggest an interesting violation of expected outcomes associated with having access to someone else's personal information with the goal to generate liking and compliance. Surprisingly, the mechanism for that compliance, namely increased liking due to perceived similarity (hypothesis 1), was not evidenced. In fact, requestors with access to personal information were liked *significantly less* compared to those in the control condition. However, hypothesis 2 which stated that individuals with access to personal information about others would be more successful at gaining compliance was supported as expected.

There are a number of possible theoretical arguments for this disparity. As communication occurred through a heavily filtered medium (text-based CMC), the only likely vectors for differences between experimental and control requestees would be the personal information (or lack thereof) and contextual elements such as word choice, sentence structure and pacing.

It is likely that differences between experimental and control requestors are related to increased cognition about the exchange. That is, in order to successfully utilize the information about their partner, whilst simultaneously not revealing their possession of it, the experimental requestors would have to walk a delicate rhetorical tightrope. Simultaneously, the possession of knowledge about a partner may lead to less focus on the content of the other's message.

For example, when two individuals meet for the first time, they have a near infinite range of potential topics available for discussion. In order to make use

of the information available to them, the requestor would necessarily have to focus that discussion onto the topic areas covered by the information. Rather than following the natural order of reciprocation in exchange, it may appear that the requestor is engaging in “one-sided” disclosure.

The requestee, as a consequence, may feel normative pressure to reciprocate in some way in order to balance the exchange and therefore complies with the request as a means of achieving that balance. Naturally, the violation of normal social conventions for first meetings on the part of the requestor leads to some degree of discomfort and may account for the lower levels of liking.

The disconnect between liking and compliance has been previously demonstrated in research by Regan [35] who demonstrated that compliance is driven more by pressure to reciprocate on the part of the requestee than by liking for the requestor. In that research, Regan used actual physical favors to manipulate reciprocity. The present research may suggest that generating imbalance in simple communication exchanges may lead to the same motivation to restore reciprocity, irrespective of liking.

The idea that reciprocity can serve as an independent motivator for compliance, outside of liking may have profound implications for our understanding of online behavior. For example, some research has shown that individuals will join small player-groups in online games in order to partially fulfill their social needs. These same individuals will also tend to seek out larger, less socially oriented groups for the purpose of helping them accomplish game-oriented objectives [47].

The authors report that the majority of the small, socially-oriented gaming groups were founded around a core of real-life acquaintances and tended to evidence fluid and egalitarian interactions. Larger groups, on the other hand, tended to rely on normative social rules to guide behavior and developed more rigid, hierarchical relationships. Generally, the principle seems to be that individual behaviors in unacquainted groups are dominated by reciprocal rather than social structures both in directed (game) and undirected (conversation) environments.

The consistency of reverting to reciprocity in novel social encounters and the plethora of personal information available online could be combined to generate legitimate potential vulnerability. Individual disclosure online offers the distinct possibility of being leveraged into compliance through the mechanism of reciprocity.

It is clear that these effects exist. It is equally clear, however, that increasing individual disclosure online has not led to corresponding increases in instances of one-sided compliance gaining, such as a massive rise in used car sales. Therefore, the next steps in researching this phenomenon should be focused on the factors that might limit, control or counteract the use of personal information.

*Transience.* It is clear from our results that there is at least some marginal advantage to having access to information about another person. However, it is unclear whether or not A participants in the present study believed that they would have any further interaction with B participants. The potential for future interaction leads to two important and related questions.

The first deals with the issue from the perspective of A participants. Assuming that the individual anticipated a long term future interaction with their counterpart, would they still be willing to utilize an information asymmetry to gain initial compliance?

The second approaches the issue from the vantage of the B participants. Assuming that an individual claimed to have certain elements in common with you that they in fact did not, how long would it take to recognize the deception? What additional reactions would there be?

*Personal vs. Impersonal.* Compliance gaining seems to be linked to disclosure through the mechanism of reciprocity. Assuming that reciprocity is truly the driving mechanism, it may be the case that A participants didn't even need personal information about their counterpart. The availability of information about the other may have contributed to an increase in their rate of disclosure. It may be that increased compliance would also be evidenced in any case of increased disclosure, not just of information designed to evoke similarity.

It may be that personal information is a moderator of those exchanges and should be explored. That is, if an individual is party to exchanges about information that are more salient to them, will they feel increased pressure to reciprocate than in cases where they are presented with low-salience information?

*Inverse Reciprocity.* One final alternative area of exploration might be found in the idea of inverse reciprocity. That is, individuals with access to personal information about others might feel more inclined to disclose information about themselves to those others. In essence, the pre-existing information creates a need to reciprocate in A participants. They subsequently disclose more than they otherwise would in order to satisfy that need. The B



participants, unaware that the As have seen their information, felt pressure to reciprocate for what *they* then perceived as an information imbalance.

No analyses were performed on the content of these conversations, so the possibilities described above remain areas for future research.

The present research has explored the potential misuse of social information posted online for the purposes of generating liking and compliance gaining. There may be significant differences in the development of liking and compliance-gaining through the use of that information. Results suggest that directed disclosures of relevant social information may induce compliance due to feelings of reciprocity whilst simultaneously reducing liking due to violation of social norms of exchange.

<sup>1</sup>Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the Transportation Security Administration, the Department of Homeland Security, or the United States of America.

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