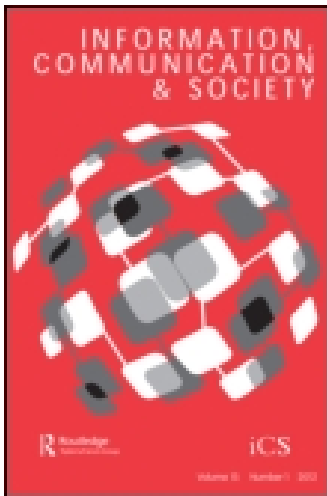


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Michael A. Stefanone<sup>a</sup>, Carolyn M. Hurley<sup>b</sup>, Michael J. Egnoto<sup>a</sup> & Jessica M. Covert<sup>a</sup>

<sup>a</sup> Communication, University at Buffalo, The State University of New York, 359 Baldy Hall, Buffalo, NY 14260, USA

<sup>b</sup> Communication, University at Buffalo, 461 Clementi Rd, Singapore 599491, Singapore

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## Information asymmetry and social exchange: exploring compliance gaining online

Michael A. Stefanone<sup>a</sup>, Carolyn M. Hurley<sup>b\*</sup>, Michael J. Egnoto<sup>a</sup> and Jessica M. Covert<sup>a</sup>

<sup>a</sup>Communication, University at Buffalo, The State University of New York, 359 Baldy Hall, Buffalo, NY 14260, USA; <sup>b</sup>Communication, University at Buffalo, 461 Clementi Rd, Singapore 599491, Singapore

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Proliferation of social media has increased the amount of personal information available about users online, and this information is increasingly available to anyone including advertisers and other (unknown) users. Having knowledge about others creates information asymmetries that can be used strategically in compliance gaining scenarios. In an online text-based interaction, 66 (31 male and 35 female) same-sex dyads engaged in conversation with one partner tasked in gaining his partner's compliance. When the persuading partner benefited from information asymmetry, he was more successful at getting his conversation partner to comply with requests (42% success rate vs. 9% in the control condition). Text analysis using *Linguistic Inquiry and Word Count* indicates that while asymmetry affected conversational topics, compliance was linked to linguistic style – not content – as well as individual differences such as sex and behavioral sensitivity. This study demonstrates how individuals might utilize publicly available information about others in conversation to achieve self-serving goals. Implications for information sharing online are discussed.

**Keywords:** information asymmetry; computer-mediated communication; social media; compliance gaining

Traditional mass media – like television and radio – connect individuals globally through information sharing about news and events. Technological innovation in the form of new and social media platforms has shifted the direction of information flow such that our roles have shifted from content *consumers* to *producers*. Web blogs and social network sites (SNSs) are prime examples of platforms that enable users to self-disclose high levels of personal information and push this content to large and often anonymous audiences (Stefanone, Lackaff, & Rosen, 2010), which raises questions about possible information asymmetric situations.

Facebook strategically leverages a host of information about users, as its business model allows advertisers pay premiums for the ability to direct targeted ads to Facebook (2013) users based on data gathered from their profiles and from patterns of information found on those users' 'friends' profiles. Users accept the terms of this relationship because it is perceived as an equal exchange as users are allowed free access to the social media platform. In reality, sites like Facebook are providing standardized and publicly accessible databases of user preferences and behavior – including where they live, favorite hobbies, relationship status, etc. – that

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\*Corresponding author. Email: [churley5@buffalo.edu](mailto:churley5@buffalo.edu)

could enable anyone (advertisers or *other users*) to covertly learn a lot about an individual user. In this manuscript, we argue that this readily accessible information could be used without users' awareness to manipulate the source of that information.

For example, if I was motivated and saw from your Facebook profile that you were from Los Angeles, California, it would be fairly easy to strategically deceive you by stating that I was *also* from Los Angeles. In this example, incidental similarities like a shared hometown could appear coincidental (Burger, Messian, Patel, del Prado, & Anderson, 2004) and lead to benefits such as perceived similarity and liking within a communication target. Ultimately I could leverage the information asymmetry created by surveilling your online profile so that you perceive that we are similar, which leads to interpersonal attraction and ultimately increases the odds that you will comply with a request from me.

However, explicit use of others' information also poses challenges. Imagine the difficulty of engaging in a real-time conversation with a new acquaintance while balancing access to his personal information, and trying not to arousing suspicion in the conversation. In this case, increasingly subtle strategies would become apparent in conversations, observable by systematic differences in linguistic *style*. Alternatively, having access to profile information may function as a primer that makes conversation topics about one's home and recreational activity more salient. Thus systematic differences in language *content* would be observed. Recent research has revealed potential for a variety of explanations pertaining to the link between information asymmetry given that asymmetric information can be leveraged to produce interpersonal attraction (Hancock, Toma, & Fenner, 2008) and compliance (Claes, Hurley, & Stefanone, 2012).

Our goal is to further explore these relationships to improve understanding of actual communication processes under conditions of information asymmetry with compliance gaining goals during synchronous computer-mediated conversations. Thus, we examine the effect information asymmetries have on a range of linguistic characteristics as predictors of successful compliance gaining. Below, we review literature related to such asymmetries, compliance-oriented behavior and the growing body of research exploring automated linguistic analyses of conversations. Then, we derive, propose and test a series of hypotheses based on this literature.

## Background

Web-based communication is fertile ground for information sharing. With the proliferation of resources designed for sharing information such as Google documents, 'like' buttons, and the unification of online personalities across websites, it is common practice to broadcast self-generated content that propagates across our online networks. Communicating about what and who we like, and observing similar content from others, gives us opportunities to demonstrate to our network why we belong and for our network to in turn validate why they belong with us. This sense of belonging is important as it facilitates access to benefits like social support resources (Hoffman, Richmond, Morrow, & Salomone, 2002; McLaren & Challis, 2009).

Our online self-disclosures contain a wide range of personal and often intimate information (Charnigo & Barnett-Ellis, 2007), which is justified through social exchange among others involved in meaningful relationships (Barker, 2009). However, today our online networks are vast in size and comprise many others we do not actually know. In fact, recent research shows that about 12% of our online networks are relative strangers (Stefanone, Lackaff, & Rosen, 2011).

As argued above, the combination of the widespread use of (and generally uninhibited self-disclosure on) social media platforms creates the potential for asymmetric information conditions between conversation partners. Information asymmetry is a condition in which one participant in an exchange possesses more or better information than the other (Ackerloff, 1970). Although

initial interactions between strangers may be awkward and include inquiries about the weather or one's career, today we have the option of reducing these initial uncertainties by gathering information about potential conversation partners online. In the tradition of uncertainty reduction theory (Berger & Calabrese, 1975), research shows that individuals use the Internet to gather information about new and existing relationships for exactly this purpose (Stefanone, Hurley, & Yang, 2013).

The consequences of information asymmetries are numerous in the economic and sociological literature. For example, Vohs, Baumeister, and Chin (2007) found 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. Asymmetries like these are leveraged by cheaters to enhance the favorability of their outcomes after an exchange.

Uneven information conditions like these are known as vertical asymmetries (Clarkson, Jacobson, & Batcheller, 2007) which are characterized as situations where one individual holds more information than another. The information-disadvantaged individual is then vulnerable to exploitation by the information-rich individual.

The focus of the current research is precisely on such vertical information asymmetries that result from access to personal information online. Today, hundreds of millions of people around the world use SNSs. Given the propensity for accepting friend requests from people not met face to face (Rosen, Stefanone, & Lackaff, 2010), it is getting easier to gain access to personal information about others and create asymmetric information situations.

Based on the literature reviewed above, we propose the following hypothesis to address the main effect of information asymmetry. Specifically, we propose that when individuals are motivated to gain compliance from their conversation partner,

*H1:* Information asymmetry increases the likelihood of compliance, compared to equitable information conditions.

The indirect links between information asymmetry and compliance gaining raise questions about the cognitive processes involved in social exchanges like these. On the one hand, beneficiaries of asymmetries could opt to explicitly use the information in ways that enhance the perception of similarity and liking in their conversation partners. On the other hand, they may select more subtle linguistic approaches to mitigate the risks of getting caught deceiving their partner. We review evidence supporting the similarity – attraction explanation next.

### ***Interpersonal attraction and compliance***

Humans have a wide range of strategies available to them when they decide to influence others to comply with personal requests. One obvious and direct strategy related to compliance gaining in vertical information asymmetric conditions is to instill a sense of liking in one's communication partner. Previous research has demonstrated that even minor, incidental similarities like sharing birthdays (Finch & Cialdini, 1989) or sharing taste in fashion (Emswiller, Deaux, & Willis, 1971) are sufficient for creating a sense of liking between individuals. It is well known that the liking engendered by these similarities is posited to result from the triggering of basic heuristic patterns – mental models that allow for easier and faster processing of information – and lead to a greater likelihood of compliance even if they are artificially triggered (Burger, Soroka, Gonzago, Murphy, & Somervell, 2001; Byrne, 1971).

The link between liking and compliance gaining is based on identification (Kelman, 1958) which is the process by which individuals change their attitudes or behaviors as a result of the influence of liked others. For example, restaurant servers who introduce themselves by name

receive higher tips than servers who do not (Garrity & Degelman, 2006). In the context of the current research, it is critical to note that even very short conversations (e.g. conversations with wait staff, or brief online conversations with unknown others) can produce identification, which in turn leads to liking and compliance gaining (Aune & Basil, 1994). Others who evidence similarity to the self become targets for identification: we tend to like them more (Heider, 1958). Perceived similarity bypasses the normal process of relationship building, at least for short-term associations. Santos, Leve, and Pratkanis (1994) note, however, that patterns of behavior that do not fit into previous heuristic models are likely to attract directed attention, suggesting that superficial similarity will only generate liking so long as the target is unsuspecting of the motives of the other.

Considering this evidence, we propose that information available online via SNSs afford opportunities to capitalize on information asymmetric conditions between conversation partners such that beneficiaries of vertical asymmetries should be better equipped to get their communication partners to like them. Thus, we propose that the consequence of this is the following:

*H2:* Explicit use of partner information is associated with interpersonal attraction, which is associated with increased compliance gaining, opposed to liking and compliance gaining in the control condition.

## Linguistic characteristics

### *Linguistic content*

This raises an interesting research question, as there are several ways individuals might use information about another in synchronous conversations. As discussed above, individuals may choose to explicitly use the information about their partner. For example, lying about my hometown so that you think we grew up in the same area creates perceived similarity, which leads to liking. In the short term, this may be an effective strategy. On the other hand, it may be difficult for people to explicitly incorporate lies like these into synchronous conversations with their partners.

It is plausible that beneficiaries *do not* explicitly use the information about their partners in conversation. Studying information about a conversation partner with the objective of getting the partner to like them, and then engaging in a deceptive conversation with that communication partner, is cognitively demanding. A less risky approach would be to employ more subtle use of the information (Hancock et al., 2008) in which beneficiaries guide the conversation around the topics/knowledge they have already gathered. The topics of conversation may seem more genuine with this approach.

With either approach, we may expect to see differences in language *content*. Given the nature of the personal information available on SNS profiles (e.g. hometown, entertainment, leisure preferences, etc.), we expect that beneficiaries should be more likely to use those categories of information in conversations based on the availability heuristic (Tversky & Kahneman, 1974). Tversky and Kahneman (1974) first suggested that people make judgments or decisions based on information that is easily recalled. Extended to initial interactions, this suggests that we are likely to introduce topics that are salient, current and easy to recall. Information provided through asymmetric conditions can provide more than power or an entry for manipulation in an interaction; it can serve to more simply reduce initial uncertainties (Berger & Calabrese, 1975) by providing a more natural entryway for conversation. Information accessed prior to an interaction should be salient and easy to recall. Thus, we hypothesize that beneficiaries who are provided standard SNS profile information about their conversation partners should be more likely to focus on those topics:

*H3:* Beneficiaries of information asymmetry discuss entertainment, leisure and home-related topics more so than those in the control condition.

### *Linguistic style*

There is one more process-related outcome which needs to be addressed. The availability and use of asymmetric information may not result in increasing compliance if the speaker does not appear genuine, natural and friendly. This type of relationship may be communicated through a speaker's conversational *style*, such as the use of inclusive words, and pronouns that either separate ('you') or include ('we') the receiver. Research addressing the impact of language on persuasion has demonstrated the positive effects of using inclusive words (Olson, Ouyang, Poe, Trantham, & Waterman, 2012). Previous research has found that language characteristics including *inclusive language*, as well as first- and second-person pronoun usage are related to dominance, leadership, follower and friend status, and humor, respectively (González-Ibáñez, Muresan, & Wacholder, 2011; Nguyen, Phung, Adams, & Venkatesh, 2011; Sanchez-Cortes, Motlicek, & Gatica-Perez, 2012). Research in assignment completion via mediated communication found linguistic characteristics predicted group dynamics and project success (Storbeck, Robinson, & McCourt, 2006).

In addition, Holtgraves (2011) found that relational closeness was positively related to personal pronoun use in text messages with friends and significant others. Further, research by Pennebaker, Mehl, and Niederhoffer (2003) found that in times of stress, people often bond via plural first-person pronoun usage. Therefore, it is likely that when a person needs resources, requests that include 'we' language will likely be more successful. Thus, increases in these behaviors mimics communication generally reserved for more intimate and personal relationships. This faux intimacy likely encourages bonds to form more quickly, thereby increasing interpersonal attraction. Further, the use of second-person pronouns is negatively associated with relationship quality, as it is seen as a sign of distance and even hostility (Simmons, Chambless, & Gordon, 2008). Therefore, it is likely that use of specific linguistic style words is important in compliance gaining efforts. Thus, *regardless of condition*,

*H4a*: The use of inclusive language is positively related to compliance.

*H4b*: First-person pronoun usage is positively related to compliance.

*H4c*: Second-person pronoun usage is negatively related to compliance.

### **Individual differences and compliance gaining**

While we are primarily concerned with the effect of information asymmetry on compliance, we should not discount the role of potential individual differences in managing that information and gaining compliance.

When meeting others for the first time, individuals are often concerned with making good impressions. As such, individuals may prepare for the interaction by gathering information on their partner, grooming or managing their appearance, or adapting their conversational style to fit their partners. Individuals who are 'particularly sensitive to the expression and self-presentation of others in social situations and use these cues as guidelines for monitoring their own self-presentation' (Snyder, 1974, p. 528) are known as self-monitors and may have an even greater advantage in asymmetric information situations. High self-monitors are more practiced adapting behavior than low self-monitors, suggesting that high self-monitors may find greater use for information available online about their potential communication partners, and adapt their communication strategy based on that information. Low self-monitors, on the other hand, should be less likely to do so.

Currently, the most frequently used scale to assess self-monitoring is Lennox and Wolfe's (1984) Revised Self-Monitoring Scale (RSMS). The RSMS assesses two dimensions of self-monitoring: (1) ability to manage one's own self-presentation and (2) sensitivity to the behavior



of others. While both of these dimensions could potentially impact compliance gaining, we suggest that *behavior sensitivity* is particularly important because it reflects the ability to empathize with others and employ receiver-oriented approaches to conversation.

The current study examines the ability of individuals to get their partners to like them, and the effect of liking, individual differences and conversational factors on compliance gaining. A number of studies have noted positive relationships between self-monitoring and similar communication outcomes, such as ingratiation (Burger & Caldwell, 1997; Hogue, Levashina, & Hang, 2013), persuasiveness (Burger & Caldwell, 1997) and sales performance (Deeter-Schmelz & Ramsey, 2010). This suggests that high self-monitors are interpersonally sensitive and this sensitivity should extend to the tasks required in the current research.

The review above shows that individuals who make persuasive attempts (or *senders*) benefit from self-monitoring. However, in dyadic exchange, the degree of *receiver* self-monitoring should also affect compliance rates, given that high self-monitors may be more in tune to deceptive or manipulative social cues emitted from the sender. Since high self-monitors are more skilled persuaders, it is likely that they are also more cognizant of persuasive attempts against them. For example, Key, Edlund, Sagarin, and Bizer (2009) found that high self-monitors were *less* likely to comply with requests to cut in line. Interestingly, deception detection has also been linked to self-monitoring. Research shows that high self-monitors were better at detecting deception regardless of familiarity with the target (Brandt, Miller, & Hocking, 1980).

Together this research suggests that high self-monitors, especially those sensitive to the behavior of others, are better persuaders, deceivers and ingratiators *and* are more aware of attempts against them. Thus, we propose the following hypotheses wherein *senders* initiate requests, and *receivers* are the targets of those requests:

*H5a: Sender behavior sensitivity is positively related to compliance, whereas (H5b) receiver behavior sensitivity is negatively related to compliance.*

## Method

### Participants

Data collection proceeded in two phases. First, students were recruited from undergraduate communication classes and provided research credit for their participation. In the first phase, 420 undergraduate students completed an online survey designed primarily to record the set of typical profile information participants post on SNSs and included information like hometown, relationship status, the name of the high school they attended, as well as entertainment (e.g. music, books and movies) and leisure preferences. These data were used in the second phase of the current study where an experiment was designed to explore the effects of information asymmetries.

Undergraduates were randomly selected from phase 1 to participate in an experiment regarding communication online (phase 2). One hundred and thirty-two (53% female) students participated in the experiment (age = 21.5, SD = 3.19). Participants reported a variety of ethnicities including Caucasian (62.2%), Asian (22.8%), African or Caribbean (7.9%), Hispanic (3.1%) and 'Other' (3.9%).

To understand the role of asymmetry in producing liking, compliance and linguistic differences, next we designed an experiment wherein same-sex dyads (31 male and 35 female) communicating via online chat were assigned to either the control or experimental condition. Participants were randomly assigned to each condition, described in detail next.



### 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 which was stated to include last names, phone numbers and email 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 the two roles: they would either make a request of their partner (the *senders*) or receive that request (the *receivers*). All senders 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. In addition to these instructions, senders in the experimental condition were given a set of personal information pertaining to their partners. This information was given to senders to foster the information asymmetry between communication partners (recall that this information was collected during the initial phase of data collection). The information consisted of typical data on SNS profile pages and included items such as favorite books, movies and music, hometown and year in school.

Senders in the experimental condition were instructed: (1) they could use the personal information about their partner, however, they liked, (2) their partner did not 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. The gift card raffle functioned to motivate participants. Senders were given approximately five minutes to study the data about their conversation partner.

The request was scripted and involved the sender asking the receiver for his email address so that the sender could email him 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 five minutes.

They were instructed that they had to chat with their partner for 10 minutes. In reality, after about eight minutes of conversation, a researcher was instructed to notify the senders that they should 'steer' the conversation so that they could more 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 the sender and followed up on the initial scripted request for assistance. The researcher then asked for a personal favor which required receivers 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 the receivers complied.

While the senders were instructed to get their partner to like them, the receivers were instructed to *get to know their conversation partner*. The experiment was specifically designed this way so that the senders had all the advantages normally associated with information asymmetric communication conditions. That is, in situations like this *in the wild*, individuals in the role of receivers would not know that their communication partner was trying to manipulate them.

Further, receivers 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 email address. Refusal or compliance to the request marked the end of the experiment.

### Measures

*Behavior sensitivity* was evaluated using six items from the Self-Monitoring Scale (Lennox & Wolfe, 1984) that represent sensitivity to the expressive behavior of others. Items associated with each scale were evaluated on a 1 (strongly disagree) through 7 (strongly agree) response scale, with some items reverse coded and scores summed to indicate a higher amount of behavior sensitivity (range = 15–42,  $M = 30.72$ ,  $SD = 5.14$ ). Reliability was acceptable with Cronbach's  $\alpha = .78$ .

### Social attraction

In the experimental condition, senders were given information about their partners (the receivers). They were given about five minutes to review the information so that they could become familiar with it. Then, they were administered McCroskey and McCain's (1974) eight-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  $\alpha = .77$ ).

Following the experiment, all participants were asked to evaluate their communication partner. Again, McCroskey and McCain's (1974) eight-item social attraction measure was used. The mean response was 4.67 ( $SD = 0.91$ ). Reliability of the liking measure was acceptable with Cronbach's  $\alpha = .89$ .

## Results

### Descriptives

One hundred and thirty-two participants were randomly assigned to 66 same-sex dyads under conditions of information asymmetry (male  $n = 15$  and female  $n = 16$ ) or zero information (male  $n = 16$  and female  $n = 19$ ). Linguistic variables were analyzed using Linguistic Inquiry and Word Count (LIWC; Pennebaker, Booth, & Francis, 2007). Participants produced a total of 21,869 utterances for analysis. A three-way analysis of variance examining the effect of sex, role and asymmetry revealed that on average, each participant produced 167 words ( $SD = 46$ ) during the 10-minute conversation, with females ( $M = 177$ ,  $SD = 45$ ) speaking more than males ( $M = 155$ ,  $SD = 45$ ,  $F(1, 123) = 9.036$ ,  $p = .003$ ,  $\eta^2 = .068$ ) and an interaction revealed receivers in the control condition ( $M = 139$  and  $SD = 52$ ) spoke the least ( $F(1, 123) = 5.388$ ,  $p = .022$ ,  $\eta^2 = .042$ ).

### Compliance

We predicted that information asymmetry would predict compliance to a request for information (HI). A significant chi-square analysis revealed support for this prediction,  $\chi^2(1) = 9.964$ ,  $p = .002$ , as 41.9% of partners in the asymmetry conditions complied, compared to only 8.6% of partners in the control condition.

Each of the dyads comprised same-sex pairs in an effort to control for the effect of sex (if any) on compliance gaining. Examining male vs. female pairs separately revealed that the main effect was only significant for male pairs,  $\chi^2(1) = 9.964$ ,  $p = .002$ . In the male pairs, zero partners chose to comply with the request in the control condition, whereas 47% of partners complied when information asymmetry was present. Some female partners in both the control (16%) and experimental conditions (38%) chose to comply with the request.

**Information use and interpersonal attraction**

Our second hypothesis predicted a positive relationship between explicit use of partner information and interpersonal attraction. A univariate analysis of variance (ANOVA) explored the effect of information asymmetry and sex on the receivers’ post-interaction ratings of their partner. No significant differences were uncovered. *H2* which stated that information asymmetry fostered interpersonal attraction was not supported.

**Conversational content**

We predicted that individuals provided with partner profile information would use that information to guide their interactions. In post-interaction questionnaires, 87.1% of senders reported using the profile information, with 71% describing its use to either guide or manipulate the conversation. Based on these responses, two researchers were tasked with scanning transcripts of the conversations to look for explicit use of the information provided to senders during the conversations. These analyses revealed that senders did not explicitly use the information about their partners during the online conversations. Next, we conducted direct analysis of the conversations using LIWC to explore topical and stylistic differences.

Given the different rates of compliance based on sex, we conducted univariate ANOVAs including sex as an independent variable to uncover differences in content based on sex and experimental condition. ANOVAs revealed significant main effects for condition, such that senders in the asymmetric condition discussed leisure more ( $F(1, 60) = 7.469, p = .008$ ), as well as more home-related topics ( $F(1, 60) = 35.162, p < .001$ ), and controls discussed more work topics ( $F(1, 60) = 6.150, p = .016$ ; Table 1). ANOVAs also revealed significant main effects for sex, such that males discussed leisure more than females ( $F(1, 60) = 6.341, p = .014$ ). This reveals support for *H3*, as benefitting senders were provided with hometown and leisure preferences, but not job-related information.

**Predictors of compliance**

Our remaining hypotheses predicted significant relationships between linguistic style (*H4*) and behavior sensitivity (*H5*), and compliance with requests. Logistic regression was conducted to assess whether sender linguistic factors (use of singular and plural first-person pronouns, second-person pronouns and inclusive language) and sender and receiver behavioral sensitivity predicted whether receivers complied with requests. We also included experimental condition

Table 1. Conversational differences based on information asymmetry.

LIWC variable	Informational asymmetry			Control			Total		
	Males: <i>M</i> (SD)	Females: <i>M</i> (SD)	Total: <i>M</i> (SD)	Males: <i>M</i> (SD)	Females: <i>M</i> (SD)	Total: <i>M</i> (SD)	Males: <i>M</i> (SD)	Females: <i>M</i> (SD)	Total: <i>M</i> (SD)
<i>Content differences</i>									
Work <sup>a</sup>	4.7 (2.6)	5.0 (1.6)	<b>4.9 (2.2)</b>	5.5 (1.8)	7.1 (2.6)	<b>6.3 (2.4)</b>	5.1 (2.2)	6.2 (2.5)	5.7 (2.4)
Leisure <sup>a,b,c</sup>	3.1 (2.4)	1.9 (1.7)	<b>2.5 (2.2)</b>	1.9 (2.2)	0.9 (1.3)	<b>1.3 (1.8)</b>	<b>2.5 (2.3)</b>	<b>1.3 (1.6)</b>	1.9 (2.0)
Home <sup>a</sup>	0.6 (0.3)	0.5 (0.4)	<b>0.6 (0.4)</b>	0.2 (0.3)	0.1 (0.2)	<b>0.1 (0.2)</b>	0.4 (0.4)	0.2 (0.4)	0.3 (0.4)

<sup>a</sup>Main effect for condition.

<sup>b</sup>Initial variable skewed, log transformed for ANOVA.

<sup>c</sup>Main effect for sex.

Note: The bold values indicate significance at  $p < .05$ .

Table 2. Logistic regression predicting compliance.

Variable	<i>B</i>	SE	Odds ratio	95% CI	<i>p</i>
Information asymmetry <sup>a</sup>	2.33	1.29	10.27	0.825, 127.806	.070
Sex <sup>b</sup>	2.96	1.28	19.35	1.570, 238.532	.021
Sender inclusive language	-0.18	0.44	0.84	0.352, 2.002	.694
Sender first-person pronoun singular	-0.23	0.22	0.80	0.522, 1.219	.297
Sender first-person pronoun plural	0.19	1.26	1.21	0.102, 14.366	.880
Sender second-person pronoun	-1.27	0.50	0.28	0.104, 0.753	.012
Sender behavior sensitivity	0.18	0.09	1.20	1.004, 1.439	.045
Receiver behavior sensitivity	-0.34	0.15	0.71	0.531, 0.947	.020

<sup>a</sup>0 = control, 1 = asymmetry.

<sup>b</sup>1 = male, 2 = female.

Note: SE, Standard Error; CI, Confidence Interval.

and sex in the model as controls. When all eight predictors were considered together, the model was significant and predicted compliance,  $\chi^2(8) = 31.451$ ,  $p < .001$ . Table 2 presents the odds ratios, which suggest that the odds of compliance were 19 times greater for female receivers. Results also show a positive relationship between sender's *behavior sensitivity* and compliance, a negative relationship between receiver's *behavior sensitivity* and compliance. Finally, there was a negative relationship between sender second-person pronoun use and compliance. This supports *H4c* and *H5*.

## Discussion

This study examined the effect of informational asymmetry on compliance to unauthorized requests for personal information during computer-mediated conversations. This research is timely considering the proliferation of publicly accessible information about ourselves available online via social media. This study examines the main effect of information asymmetry on compliance gaining, as well as examines the role of communication in the asymmetric interaction and compliance gaining process. This improves our understanding of how individuals might utilize publicly available information about others in conversation to achieve self-serving goals.

First, the results offer support for the main effect of information asymmetry on compliance gaining. Participants in the information asymmetric condition were significantly more likely to gain the compliance of their communication partners after a 10-minute online conversation. However, this effect was only significant with male participants; female participants tended to comply in both the experimental and control conditions. Further examination of message factors and individual differences revealed other predictors of compliance in both the control and asymmetric initial interactions, which are discussed below.

Recall that the 'direct route' to compliance gaining involved explicit use of information about conversation partners to create the perception of incidental similarities, which were hypothesized to result in increased interpersonal attraction between conversation partners. It was hypothesized that the liking effect then would predict compliance gaining, because individuals are more likely to comply with requests from others whom they are attracted to. While the majority of the senders reported using asymmetric information to claim common ground, the evidence shows that they *did not* explicitly use the information to manipulate or deceive their partner during their conversations. Rather, the results suggest that the categories of information about their partner – which were provided to foster the asymmetry – actually functioned as a heuristic framework to guide the

online conversations. Perhaps this is not surprising considering the increased cognitive load associated with engaging in deceptive real-time communication.

Not only did participants avoid explicit use of the information about their partners, the existence of information asymmetry did not serve to increase interpersonal attraction. These results are in part consistent with a recent work by Sprecher (2014) who explored the role manipulated similarities have on liking. She found that manufactured similarities were less effective than the perceptions of similarity that resulted as a product of the conversation itself. The results presented herein do not support the hypotheses presented linking interpersonal attraction and compliance gaining. These findings suggest that obvious and direct strategies like this are not functional. Analyzing these processes from a social exchange perspective may begin to reveal explanations for why.

Consider that senders were given the freedom and flexibility to construct their own strategies for getting their partners to like them. However, there may be unintended effects from providing one participant information about the other. Having access to information about their partner may have instilled the perception of *inequity* in the minds of the beneficiaries. Those in the information asymmetric condition may have been increasingly motivated to be more engaged because of equity and balance issues, and this may have affected the general tone of conversations. In other words, beneficiaries perceive they are overly 'benefited' because of their unfair access to their partner's profile information, and equity theory (Adams, 1965) suggests that the beneficiaries of asymmetric information would be motivated then to share *more* information about themselves to restore equity to the relationship. The oversharing in this context may be perceived as abnormal or inappropriate in the eyes of the receivers, which would mitigate perceptions of interpersonal attraction.

Alternatively, the effects of information asymmetry can also be interpreted in terms of uncertainty reduction theory (Berger & Calabrese, 1975) which was originally proposed to explain how people manage uncertainty in initial interactions. It may be the case that having access to information about a new conversation partner functions to reduce uncertainty and anxiety about that conversation partner. As a consequence, conversations may be characterized by a more relaxed, inclusive linguistic style. From this perspective, information asymmetric conditions enable individuals to be more effective communicators, which results in greater levels of compliance. Additional research from the perspectives of social exchange and uncertainty reduction theories is needed.

While the results of this experiment raise questions about the specific communication processes manifest in conversations, the results do support the notion that *stylistic* language differences were predictive of compliance. Although the information provided in the asymmetry condition does provide topical information on which to base conversations, it appears that *what* the sender says is less important than *how* the sender actually says it. Regardless of whether or not senders have information about their partners, the results show that when they used specific language to make their conversation partner feel included, they were more successful at gaining compliance.

In sum, our findings suggest that access to typical social network profile information provides an easy entrance into conversation by providing topics to discuss. Individuals benefitting from asymmetric conditions spent more time discussing hometowns and leisure activities than participants in the control condition. However, these conversation topics did not seem to affect compliance gaining; rather, the conversational style significantly impacted compliance to the request. Successful persuaders used fewer distancing second-person pronouns reducing the psychological distance of the participants.

In addition to addressing hypotheses about the use of information provided during asymmetric communication conditions, the experiment was also designed to explore individual differences in

behavioral sensitivity. Results show that individuals' behavior sensitivity played a key factor in deeming someone a better persuader or more susceptible to the request. The ability to attend carefully to another person's communication – even in an online forum – allows a person to tailor messages that are more warm, interesting and persuasive. Conversely, participants who lack this sensitivity were more vulnerable to manipulation.

One interesting finding was that request senders reported liking their partners more than request receivers. This is curious given the senders' task was to get their partner to like *them*. Is it possible that these instructions motivated senders to try harder to make a connection than the receivers? It may be the case that receivers rated their partners as less desirable because those partners put the receivers in unfavorable positions by asking them to provide personal information. Recall that the provision of personal information was explicitly stated as being against the rules of the experiment. Here, receiver evaluations of liking may be lower post-experiment because they just invested resources in their new relationship by complying but realize that their conversation partner will not be able to reciprocate, thus creating the perception of inequity. After all, from the perspective of social exchange, reciprocity is the mechanism through which we restore equity in our relationships. This is a promising area for future research.

Our results are limited in several ways. First, the intention to evaluate the effects of information asymmetries 'in the wild' with actual computer-mediated conversations between participants introduces additional variance. One source of variance is the nature of information used to create the information asymmetries. Recall that this was self-report data collected during phase 1 and consistent with the kinds of information typically found on SNS profiles. To better understand conversational content and compliance gaining strategies employed by senders, an alternate strategy would be to simply standardize this information and employ the use of a confederate in the receiver position in the experimental design.

Second, the dynamics of the individual conversations also introduce additional variance. Perhaps a more effective approach to evaluating the effect of information asymmetries would be to systematically and comprehensively evaluate the sender's attitudes and intentions *before* they engage in conversation with their partners. For example, senders may report heightened levels of communication competence after receiving information about their partner, opposed to baseline measures of competence recorded prior to the experiment.

Additional research is called for which addresses the nuances of the asymmetry effects along a range of state-based variables while controlling the content and structure of the provided information.

### Notes on contributors

Michael A. Stefanone is an Associate Professor at the University at Buffalo. His research centers on computer-mediated communication and social media and situates technology use in evolving social contexts. Currently, his work explores the effects these technologies have on people's relationships and access to resources like social capital.

Carolyn M. Hurley is an Instructor at the University at Buffalo Undergraduate Degree Programs in Singapore. Her research examines key interpersonal issues such as self-disclosure and compliance gaining, emotional communication, and deceptive behavior.

Michael J. Egnoto is a Ph.D. student at the University at Buffalo. His research examines how technology utilization and communication structures the interpretation of individuals on dynamic social topics related to a variety of risk scenarios.

Jessica M. Covert is a Ph.D. student at the University at Buffalo. She is broadly interested in how use of new communication technologies impact people's relationships. Currently, her research examines how people use social media as platforms for social comparison and relationship equity assessments.

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