# More or Less: Amount of Personal Information Displayed in Social Network Site Profiles and Its Impact on Viewers' Intentions to Socialize with the Profile Owner

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#### Abstract

This paper presents the results of an experiment that employed a 2 (low vs. high information) by 2 (male vs. female profile) design to investigate the relationship between amount of information displayed in a Social Network Site (SNS) profile and profile viewers' intentions to engage in further social interactions (communicate online, add to SNS profile, and meet face-to-face) with the profile owner. The results indicate that more information increases the likelihood of relationship initiation for male profiles but decreases it for female profiles. Also, viewers are inclined to initiate an interaction when less information is presented in an SNS profile of a person from the opposite sex; but require more information from their own sex.

## Introduction

Social Networking Sites (SNS), defined as web-based services that individuals utilize to create profiles, share connections and view other users in their network (Boyd and Ellison 2007) have become the latest arena for social activity (e.g., Gosling, Gaddis, and Vazire 2007; Utz 2010). The ease of communicating through SNS enables the maintenance of existing relationships that would have otherwise withered away. Growing evidence suggests that SNS also are increasingly used in the establishment of social ties with people one has never met in person (e.g., Barkhuus and Tashiro 2010). However, despite a large body of SNS related research (Antheunis, Valkenburg, and Peter 2010; Sheldon 2009), little attention has been paid to how selfgenerated textual information in an SNS profile, and particularly quantity of information disclosed, may influence SNS-based relationship building. This study aims to fill this void by exploring the impact of information displayed

in an SNS profile and gender of the profile owner on profile viewers' intentions to socialize with the profile owner.

# **SNS Profiles and Social Interaction**

Social interactions are in essence information transactions in which the parties assess one another. Despite novel means of self-presentation and information gathering offered by SNS, individuals getting acquainted via SNS are still faced with types of uncertainties that the Uncertainty Reduction Theory (URT) (Berger and Calabrese 1975) associates with early phases interpersonal relationships. Accordingly, higher uncertainty will induce information, and higher entropy may increase social attraction and dyads' intention to seek further interactions with each other.

A number of factors may be related to the type of information that individuals share in their SNS profiles and how viewers of SNS profiles will evaluate and respond to the information presented in the profile. First, SNS profiles have different components (e.g., profile pictures) that may be utilized for self-presentation on the one hand and evaluation of others on the other. By allowing people to create their own profiles SNS have created what Walther (1996) has termed a hyperperson, a person able to selectively optimize the ways in which he presents himself. Conversely, by adding system generated information to profiles such as the number of "friends" an individual has and allowing "friends" to post content on an individual's profile, SNS provide additional layers of information that may influence profile viewer's perceptions regarding the profile owner (Tong et al. 2008; Shouten 2011; Utz 2010).

Extant literature on the role that information plays in increasing certainty during early phases of relationships suggests that because of lack of other sources of information, interactants may often rely on the sex of their dyad and stereotypes regarding sex roles to reduce uncertainty (Borisoff and Merill 1992). This may particularly be the case in the context of Computer Mediated Communication

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(CMC), within which the lack of individuating information may lead to a heightened reliance on information provided by category cues such as sex (Lee 2004). Sex differences and biases in information sharing are well documented in the literature. A number of studies indicate that conventional sex schema associates proclivity to intimacy with women (e.g., Lease et al. 2010). Hence, men who share "too much" may be considered as less well-adjusted and consequently less viable as a potential dyad. On the other hand, in early stages of relationships, men are expected to assume an agentic role by initiating relationships, which, within the context of SNS, can mostly be achieved by sharing information via a profile.

The nature of the relationships being established over SNS is also a factor that may influence the information expectations of interactants. For example, dyad gender structure (same sex vs. opposite sex) have been found to be a factor that influences information seeking and sharing behavior in early phases of face-to-face relationships (McKinney and Donaghy, 1993). However, to our knowledge, dyadic gender structure has received hardly any attention within the context of SNS.

## **Research Questions**

**RQ1:** How does amount of information shared in an SNS profile, gender of the profile and dyadic gender structure (same vs. opposite) influence viewers' intentions to a) communicate online with the profile owner; b) add the profile owner to the SNS friends' list; c) arrange face-to-face meeting with the profile owner.

**RQ2:** How does profile gender moderate the relationship between amount of information shared in a profile and viewers' intentions to a) communicate online with the profile owner; b) add the profile owner to the SNS friends' list; c) arrange face-to-face meeting with the profile owner.

**RQ3:** How does dyad gender structure moderate the relationship between amount of information shared in a profile and viewers' intentions to a) communicate online with the profile owner; b) add the profile owner to the SNS friends' list; c) arrange face-to-face meeting with the profile owner.

#### Method

This study was carried out as part of the Time-sharing Experiments for the Social Sciences (TESS) project. Participants were sampled randomly from a list of active panel members of the Knowledge Networks, Inc., which recruits a random sample of the general U.S. population to administer online studies. The current study had a response rate of 69% (n = 1059). After data collection, a post-stratification weighting procedure, which utilized demographic distributions from the U.S. Current Population Survey (CPS) as the benchmark, was applied. The respondents' mean age was 47 (SD = 16.76) and slightly more than half were female (52%).

To test the relationship between amount of information in an SNS profile and viewers' intention to engage in further social interactions with the profile owner, the study employed a 2 (low info. amount vs. high info. amount) X 2 (male vs. female profile) replicated design: for each condition (e.g. male-high information, male-low information), four different profile versions were created, resulting in 16 profiles. Such replicated designs help address validity threats such as case-category confounding (Jackson, 1992).

In order to create the amount of information (low vs. high) condition, first a list of information items were compiled from actual SNS profiles. Then, the "low amount of information" condition was created by randomly selecting 20 information items from the list. The "high amount of information condition" was created by adding 10 randomly selected items to the "low amount of information" condition. Profile gender was manipulated by varying the gender of the avatar and the content of gender specific information items (e.g. name of spouse).

During the experiment, the respondents were first presented with one SNS profile randomly selected from the 16 profiles and then were directed to a questionnaire regarding the SNS profile they had just viewed. Intention to engage in further social interactions with the profile owner were measured by asking the respondents to rate on a sevenpoint scale (1 = very unlikely to 7 = very likely), the likelihood that they would "communicate online" (M = 2.19; SD = 1.57), "add this person as a friend in your social network profile" (M = 2.17; SD = 1.59), and "arrange a faceto-face meeting" (M = 1.72; SD = 1.29).

Using the profile sex (male vs. female) and respondents' self-reported sex (male vs. female), the dyad gender structure was computed as same sex (e.g., male profile-male viewer) vs. opposite sex (e.g., male profile-female viewer).

# Results

Prior to the hypothesis tests, a manipulation check, performed using a five-point scale asking the respondents to rate the amount of information profile owner revealed (1 = "far too little" to 5 = "far too much"), confirmed that when compared to participants in the low information condition (M = 3.43, SD = 1.05) participants in the high information condition (M = 3.73, SD = 1.02) reported seeing more information (F (1, 1035) = 22.140, p <0.001)).

The hypotheses were tested using a MANOVA with the linear combination of the three intention variables ("communicate online", "add to SNS friends' list", and "meet face-to-face") as the dependent variable. This was followed by ANOVA tests for each dependent variable (with Bonferroni adjustment for multiple comparisons).

The first research question (RQ1) focused on the impact of amount of information, profile sex, and dyad gender structure on intentions for further social interaction with profile owner. In the MANOVA analysis, there was no significant omnibus effect for amount of information disclosed (Wilks'  $\Lambda = .998$ , F (3, 1007) = .798, p = .495 with partial  $\eta 2 = .002$ ). or for dyad gender structure (Wilks'  $\Lambda =$ 1.000, F (3, 1007) = .147, p = .932 with partial  $\eta 2 = .000$ ).

On the other hand, there was a significant omnibus ef-

fect for profile gender (Wilks'  $\Lambda = .982$ , F (3, 1007) = 6.318, p < .001 with partial  $\eta 2 = .018$ ). Accordingly, respondents were more likely to want to communicate online (F (1, 1009) = 5.229, p < .05) and meet face-to-face (F (1, 1009) = 10.448, p < .001) with female profile owners.

The second research question (RQ2) pertains to the interaction between amount of information shared in an SNS profile and profile owner's sex as a predictor of intention to engage in further social interactions with the profile owner. The MANOVA analysis shows an omnibus effect of the interaction between amount of information and profile gender (Wilks'  $\Lambda$  = .986, F (3, 1007) = 4.598, p < .01 with partial  $\eta 2 = .014$ ). Separate ANOVA tests showed that the interaction between information amount and profile gender approached significance for intentions to communicate online (F (1, 1009) = 3.065, p = .08) and to add profile owner to SNS friends' list (F (1, 1009) = 3.655, p = .056) and was significant for intentions to meet face-toface with profile owner (F (1, 1009) = 12.02, p < .001). Whereas for male profiles, higher amount of information led to higher reported intentions to pursue further social interactions with the profile owner, for female profiles, more information led to lower intentions to engage in social further interactions with the profile owner (Figure 1).



The third research question (RQ3) focused on the interaction between information amount and the dyad gender structure as a potential predictor of viewers' intention to engage in additional social interactions with the profile owners (Figure 2). There was a significant omnibus effect for the two-way interaction between amount of information and dyad gender structure, Wilks  $\Lambda = .989$ , F (3, 1007) = 3.655, p < .05 with partial  $\eta 2 = .011$ .

Subsequent ANOVA tests showed the interaction was significant for all three of the dependent variables—communicate online (F (1, 1009) = 8.261, p < .01), add to SNS friends' list (F (1, 1009) = 10.25, p < .001), and meet face-to-face (F (1, 1009) = 8.14, p < .01). For same-sex profiles, more information increased respondents' intention to communicate online, add profile owner to SNS friends' list, and arrange to meet face-to-face. On the other hand, for opposite-sex profiles, more information decreased respondents' intention to engage in further social interactions with the profile owner.



Figure 2: Info. Amount by Gender Structure Interaction

## **Discussion and Conclusion**

Overall the results point to a complex set of interactions at play fuelled by stereotypical gender expectations and emerging patterns of SNS use. The MANOVA analyses revealed two significant two-way interactions.

The first of these was between amount of information on an SNS profile and gender of the profile owner. The results suggest that for female profiles, which elicited higher overall intentions for further interactions, more information led to lower intentions to pursue further social interactions. However, for male profiles, more information led to higher intentions. These results may sound counterintuitive at first because existing literature on relationship formation states that people often associate proclivity to self-disclosure with women (Consedine, Sabag-Cohen, and Krivoshekova 2007). Consequently, too much sharing of information by men may be considered as a violation of gendered expectations about intimacy and may adversely affect the prospects of further socialization. However, the findings from this study are in line with previous research indicating that men may be expected to take charge to initiate relationships (Derlega, Winstead, and Greene 2008), which, in the context of SNS, can be done by sharing information. Also, the finding that viewers are more likely to interact with female profiles that contain less information is in line with reseach suggesting that in early stages of relationships women who tell rather than ask are considered to be promiscuous (Lindsey and Zakahi 1996).

The second key interaction was between amount of information in a profile and dyad gender structure (same-sex vs. opposite sex). Accordingly, more information in a profile led to higher intention to engage in further social interactions with profile owner for same-sex profile but lower intentions for opposite-sex profiles. This finding is congruent with research suggesting that in the case of oppositesex profiles the interest in the profile may be fuelled by curiosity or romantic intent (Bryant, Marmo, and Ramirez 2010). As such, less information in the profile of individuals from opposite sex may peak curiosity and instigate a desire for further socialization (Norton, Frost, and Ariely 2007). On the other hand, for same-sex profile viewing, social browsing (i.e., searching for profiles simply to learn more about them) (Lampe, Ellison, and Steinfeld 2006) and uncertainty reduction may override other considerations and thus higher entropy may lead to a greater "liking" and a stronger intent to socialize.

Researchers (e.g., Boyd and Ellison 2007; Burke, Kraut, and Marlow 2011) have frequently stressed the need for a differentiation between types of users, types of SNS platforms (e.g. SNS for professional connections) and types of uses of SNS. Hence, further research is needed to test the interpretation provided above by investigating the influence of "more information" on intent to socialize in different SNS contexts, including gaming environments (Cheung and Huang 2011) and perhaps more significantly SNS sites for romantic relationship building, and for different SNS use motivations. Also, further attention needs to be paid to interactions between amount of information, presence of other profile elements (e.g., photos), and the type of information shared. Finally, similar studies that investigate real world reactions (e.g., whether users actually add profiles to their network in reaction to more or less information) would make crucial contribution to the study of SNS use and behavior.

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