

# Solicitation by E-Mail and Solicitor's Status: A Field Study of Social Influence on the Web

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## ABSTRACT

Personal information is scarce in computer-mediated communication. So when information about the sender is attached with his or her e-mail, this could induce a powerful effect toward the receptor. Two experiments were carried out where males and females were solicited by e-mail to respond to a survey on their foods habits. In the first experiment, students were solicited whereas, in the second experiment, people taken at random in various e-mails lists were solicited. The questionnaire was an HTML form attached with the e-mail. The signature of the solicitor was presented as of a high status (a scientist) or of a mid status (an undergraduate student). Results show that, in both experiments, subjects agreed more favorably to the request when the solicitor was of high status. The importance of social information on computer-mediated communication is used to explain such results.

## INTRODUCTION

ACCORDING TO Goodman and Gareis,<sup>1</sup> the impressions a person has of others are often influenced by schemas of social categories. Such schemas about members of these social categories may affect judgments, behavior, expectation, and evaluation about a person who belong to one of these categories. The social status of someone is one of these schemas that affect considerably behavior of people toward the members of each status category. Research show that this schema about social status can be activated by few information about the target. Clothing, education level, incomes, and profession, are sufficient to activate a schema that, in return, affect evaluation and behavior of a subject toward the target. This schema about social status also affects helping behavior and reaction about transgressions committed by people.

It had been found in numerous studies that high status people have a positive impact on compliance when they solicited help from people of lower status. In most of this research, the status was manipulated by apparel appearance of the solicitor or by formerly given information on the status. A low-status individual will more readily comply with the group pressure if this group is composed of high-status people.<sup>2</sup> Kleinke<sup>3</sup> showed that people are more readily to give a coin to a stranger in the street if the individual is neatly dressed (80%) rather than to someone whose appearance is slovenly (32%). These results were more recently confirmed by an experiment conducted by McElroy and Morrow<sup>4</sup> even when the solicitation was for the profit of a charitable organization. Feinman<sup>5</sup> found that neatly dressed strangers were more often admitted into a subject's home to make a telephone call than were sloppily dressed strangers. Status is also linked with

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the individual's integrity. Thus, Bickman<sup>6</sup> has demonstrated that subjects would more readily give back the money they had found in a telephone booth to a high-status individual when this person argued that it was his or hers rather than when it was an individual of the same status as the subjects. These studies highlight an effect of the status on compliance to requests emanating from high-status individuals. Nevertheless, the same effect has been observed when compliance to implicit requests was tested. Solomon and Herman<sup>7</sup> have found that passersby were more ready to help a high-status woman than a mid-status woman who had dropped her groceries while loading them in the trunk of her car.

Positive effects of high status on helping behavior seem undeniable. Furthermore, in the studies cited above, the status was manipulated by the physical appearance of the solicitor. This could lead to increase his/her physical attractiveness that, in return, increased compliance to his/her request of help. Numerous studies found that high physical attractiveness led to increased positive perception of a solicitor or increased helping behavior toward this person.<sup>8-11</sup> Numerous studies also showed that apparel appearance affected perception of physical attractiveness.<sup>8,12</sup> In one study, the effect of the solicitor's status on helping behavior was tested by phone. Goodman and Gareis<sup>1</sup> used the "wrong number" technique to examine the effect of social status. A solicitor called the subjects and pretended to have reached a wrong number while using his or her last dime in a pay phone. Subjects were asked to phone the caller's workplace, which was described as either a law office (high status) or a gas station (low status). Results show that both high- or low-status subjects (measured with high or low median neighborhood income) more frequently helped the high-status caller. So, it seems that status affected subjects' behavior when no face-to-face interaction was used.

Furthermore, in this experiment the communication with the subject was synchronous, which implied an interaction between the caller and the receptor. Perhaps when communication is synchronous, it's difficult for some-

one to refuse the request of a high-status person because some inhibiting factors have some effect on the subject's behavior. In Milgram's<sup>13</sup> classical experiments on the effect of authority, we found that, when the authority was present in the same room as the subject, more obedience was observed than when instructions were communicated by the authority by the way of a phone contact. Furthermore, when instructions were provided by tape recording, the number of obedient subjects decreased compared to the situation where the authority gave the order by phone. So if status effects seem to be affected by the physical presence of high-status, synchronous communication without face-to-face contact does not lead to decrease obedience as when asynchronous communication is used to provide orders.

Communication by e-mail is a typical situation of asynchronous communication between two or more individuals. It is interesting to test the effect of social status in e-mail interaction because it's easier for the subject to refuse something to a solicitor, especially when the solicitor is a stranger. Such experiments could permit testing the real power of social status in our life because nonverbal factors accompanying synchronous communication are not present with this form of communication. Status information about the e-mail sender can be introduced easily by way of information on the occupational status of the sender placed at the end of the e-mail. It is well known that requests by questionnaires of all sorts are being developed thanks to the Internet and that numerous Internet users show saturation for these requests.<sup>14</sup> It became, therefore, interesting to study the impact of status with the computer as a medium. The two experiments presented here test the effect of status on a request of help made by a stranger who had addressed an e-mail survey request to various subjects on the Web.

Taking into account the convincing efficacy of high status demonstrated in the studies mentioned before, it could be expected that when the solicitor had a high status, this leads the receptor to agree more favorably to his or her request of help than when his or her status was median.

## EXPERIMENT 1

*Materials and methods*

*Subjects.* The sample consisted of 84 students (43 females and 41 males) in their first year of management at the University of Bretagne-Sud in France. These subjects were recruited at the moment of their Internet connection on a free-to-use workstation at the university. The experiment took place after 5.30 p.m. to be sure that the subjects were not in class. Four subjects (three females and one male) were eliminated from the experiment because they logged out during the time assigned to the experiment.

*Procedure.* Different electronic addresses have been created for the occasion (one of a male sender and one of a female sender), containing the name of a server of another part of the university in the same town. The e-mails sent to the subjects contained a signature showing that the sender of the mail was an undergraduate student in statistics at the same university (same status) or from a professor of statistics at the same university (high status). The Christian name was held constant in all the experimental conditions whereas two given names (one for a male and one for a female) were used. Of course, the Christian name employed was different from all the Christian names of the Faculty. The subjects were randomly allocated to the high-status condition or to the same-status condition. Two investigators were used in this experiment. One of them was situated in the same building as the subject and was able to check if the subject was connected and if he or she had the corresponding profile. He then transferred the

subject's address to his collaborator, who consulted a random allocation list. According to the order of the subject allocation to the high or to the same status, the collaborator then took care of sending the message. In the two conditions, an e-mail was sent to the subject asking: "Hello, I don't want to take advantage but could you help me. Well, with 3 of my study friends (same status condition) or with 3 colleagues (high status) we have to perform a statistical analysis of the diet habits of students. For this we have to analyze a questionnaire. Would you accept answering it? Just in case, I attached an HTML form that was given to you and that you will have to send back by clicking on the send button at the end of the form. Thanks in advance and have a nice day." This request was chosen for the sufficient effort it required; a preliminary test showed that 15–20 min were needed to fill out the questionnaire containing 40 questions of the type "How many times of week do you eat fresh vegetables? What type of drink do you normally take with your lunch: beer, wine, soda, fizzy or flat water?." Besides, such a request seemed in accordance with the training of the senders, who were supposed to be students or professors in statistics. At the end of the mail, information about the occupational status of the sender was placed. In high and the mid status conditions, we used the information presented in Table 1.

The return rate of the questionnaire was then measured, and a delay of a maximum of 7 days was allowed before declaring a no-response. The response time was also taken into account as a dependent variable.

*Results*

On all measures employed in this study, no differences were found between male and

TABLE 1. INFORMATION ABOUT THE STATUS OF THE E-MAIL SENDER PLACED AT THE END OF THE E-MAIL

<i>High status</i>	<i>Mid-status</i>
Dr. Given-name Christian-name	Given-name Christian-name
Faculty's Professor in statistic	Undergraduate student in management
Name of his/her laboratory	Institutional address
Institutional address	E-mail
Phone/fax number	
E-mail	

female scores and between males and females addresses used in this experiment. Therefore, the data for both sexes were collapsed. Concerning the compliance rate to the request (completing the questionnaire and sending it back) 97.5% (39 of 40) in the high status condition did sent back the filled out questionnaire against 65% (26 of 40) in the mid-status condition. The difference between these two rates was significant ( $X^2(1, N = 80) = 11.82, p < 0.001$ ; with Yate's correction). When the solicitor was of high status, this led the subjects to comply more easily with the request. The latency time for answering was initially calculated in minutes. Considering the fact that some subjects have been waiting 2 days before answering, a log transformation of these periods has been made. The mean value of the latency time of 0.81 (SD = 0.52) was found for the experimental condition against 1.63 (SD = 0.82) for the control situation. The difference between these two means was highly significant ( $t(63) = 4.92, p < 0.001$ , two-tailed). When the solicitor was of high status, this led the subjects to comply more rapidly with the request.

### *Discussion*

When subjects were solicited by the way of an e-mail by a high-status stranger to respond to a survey, they agreed more favorably and more rapidly to the request. This effect of status on request in computer-mediated communication confirms previous studies conducted in face-to-face interaction<sup>3-5</sup> or by telephone.<sup>1</sup> When the interaction is asynchronous, high status leads to influence positively people's behavior. Then, these findings seem to show that information about social status is sufficient to influence people's reaction toward the solicitor. The difference in the two groups seems not only explained by variations in the communication process but only by information about the status of the sender. Furthermore, the findings of the study should be interpreted cautiously given the preliminary nature of the study, the small number of subjects tested and the characteristics of the samples used in this experiment. Indeed, in the high-status

condition, the solicitor was a professor who was unknown for the subject-student but who had the possibility to become one of his or her professor in the future. So, this factor could lead the subject to accept the request. In order to be able to generalize results from the present research, other populations than a student population would be studied. Experiment 2, presented below, had replicated this experiment in a new context.

## EXPERIMENT 2

### *Materials and methods*

*Subjects.* A total of 613 men and women were randomly chosen from a list of mail addresses taken from the Internet. Because of the way these addresses were obtained, it is impossible to make a more complete description of the samples in terms of gender, age (family name or initials only, pseudonym . . .). These addresses were obtained by using various softwares for browsing the Internet and for procuring personal e-mail addresses according to different parameters. In our case, the only parameter was a limitation to the addresses on a French server (name@server.fr). Various directories have also been used to constitute our file of addresses. After the elimination of company addresses, a total of 800 addresses were available; 187 of these addresses were invalid at the moment of the experimentation (e.g., no server, unknown destination on the server).

*Procedure.* The same procedure employed in the first experiment was used in this new experiment. The e-mails sent to the subjects contained a signature showing that the sender of the mail was an undergraduate student in statistics at the university of "Bretagne-Sud" (median status) or from a professor of statistics at the same university (high status). The survey was presented as a survey on their diet habits (diets habits for students in the previous experiment). The subjects were randomly allocated to the high status condition or to the mid-status condition.

### Results

On the two measures employed in this study, no differences were found between males and females addresses. Therefore, the data for both sexes were collapsed. Concerning the response rate to the survey, 54.70% (163 of 298) in the high status condition did send back the filled out questionnaire against 6.98% (22 of 315) in the mid-status condition. The difference between these two rates appeared significant ( $X^2(1, N = 613) = 165.45, p < 0.001$ ). When the solicitor was of high status, this led the subjects to comply more easily with the survey-request. Like in the first experiment, the latency time for answering was calculated in hours. A mean value of the latency time of 3.38 (SD = 2.29) was found for the experimental condition against 8.23 (SD = 3.74) for the control situation. Again, the difference between these two means was clearly significant ( $t(83) = 8.54, p < 0.001$ , two-tailed). When the solicitor was of high status, this led the subjects to comply more rapidly with the request.

### Discussion

Again, our results show that people on the Web agreed more favorably to a survey request when the solicitor was of high status. These findings confirm the results of our first experiment and attest the robustness and the generalizing effect of status information in a computer-mediated communication context. These findings have some importance because the difference between the two conditions is important (the response rate in high status is seven times more important than in the mid status condition) and because the survey solicitation was addressed to various people on the Web. So the possible ambiguity with the relation between the high-status solicitor and the subject evoked the first experiment was largely attenuated with this new population. As it was evoked in the discussion section of our first experiment, it's not the fair of possible future interaction with the solicitor of high status (a professor) that leads the subject (a student) to agree with his/her request. Furthermore, the comparison between the rate of

compliance in the first and second experiment leads to think that when no geographical proximity and possible future interaction between the solicitor and the subject exist, that leads subjects to disagree more favorably to the request. When no future relation between the solicitor and the person solicited is probably the only issue of the interaction, that leads, however, the subject to accept more favorably the request of the high status solicitor. So it seems that qualities attributed to the solicitor by the way of his/her occupational status could explain our results.

## GENERAL DISCUSSION

The results of both experiments presented here showed that, when a stranger of high status addressed a request of help by way of an e-mail, this led to increased helping behavior toward the solicitor compared to a situation where the solicitor had an intermediate status. These results have some theoretical importance to the comprehension of the effect of status on compliance. First, our results show that the traditional effect of high status on compliance is obtained in a new situation of communication. Previous studies have tested the effect of status most of the time in face-to-face interaction<sup>3-5</sup> or in phone communication<sup>1</sup> or by postal letter.<sup>15</sup> The main reproach addressed to computer-mediated communication (CMC) systems is the scarcity and the poor level of social information transmitted by such systems. CMC's users are looking for such information and appreciate them. D'Ambra, Rice and O'Connor found that e-mail's users evaluated the communication richness of CMC's systems by their capacity to transmit social information traditionally transmitted by face to face or by phone communication. They found that voice-mail or Web-Cam is really appreciated because such systems have the capacity to transmit social information that is absent in classical e-mail communication. Kiesler et al.<sup>16</sup> estimate that because social information is scarce in CMC, each information transmitted has a powerful impact on the receptor than with other communication modes

where such information are transmitted more fully. So, in an e-mail communication between two strangers, social information such as information about the status of the sender could exert an influence on interaction and perception such as in face-to-face interaction.

The results of the second experiment show that the influence of status obtained when no geographical proximity and possible future interaction between the solicitor and the subject existed. No fair to refuse to respond to the high status solicitor could explain these results. So the effect of high status on subject behavior could be more favorably explained by qualities attributed to the solicitor rather than by self-management or ingratiating effects. Perhaps, the request of the high status solicitor is perceived as more legitimate. Research on sequential request strategies of compliance such as foot-in-the-door<sup>17</sup> or door-in-the-face<sup>18</sup> have shown that increasing legitimacy of the solicitor led to increase compliance to his request.<sup>19-21</sup> When a survey on foods habits are conducted with a scientist working in a university, the legitimacy of his or her research is perceived as more important than when the survey is conducted by an undergraduate student. Additional research is needed to determine this legitimacy hypothesis. It would be interesting to analyze the effect of various levels of request legitimacy on subject's behavior.

From a methodological perspective, our results suggest that CMC is a good setting to test the efficiency of compliance techniques on human behavior and the effect of social information on behavior. Experimental costs are relatively low, very large samples can be tested, and the experiment can be conducted rapidly. Our experiment shows that, despite the scarcity of social information in the CMC context, it is possible to introduce social information between two strangers in an e-mail interaction. It would be interesting for further research to test other social information, such as given names, photography of the sender, and information about the individual given by an hypertext link of the Web-site of a solicitor, and to test the efficiency of such information on compliance to a request of help and, possibly, on perception and evaluation of the solicitor.

In a practical perspective, our results show that manipulation of social information in a CMC context could enhance favorably the rate of compliance to a survey request. Zhang<sup>14</sup> found that Internet users showed certain saturation for these requests and that response rates was lower. In a previous study, we have found that an "electronic foot-in-the-door" was a good compliance technique on Internet.<sup>22</sup> It seems that the technique consisting of giving information about the social or the occupational status of the sender at the end of the e-mail he/she sends is a good new technique of compliance on the Web. This would be a good "psycho-technological" method to obtain higher response rates on Web surveys and then, to increase samples representativeness. This technique is easy to manipulate and does not significantly increase the cost of the survey.

Now, these results need to be replicated in different computer-mediated communication contexts such as news-groups, chats, Intranet and with various technologies such as voice-mail, Web-cam, and Web site. To test various theoretical explanations of the effect of status on behavior in a CMC context, further research could expand the study presented here by examining how e-mail survey response is affected by the status of the person solicited and by the legitimacy of his or her request.

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