

Nicolas Guéguen*,
Nathalie Pichot⁺,
& Gwénaëlle Le Dreff⁺⁺

* Groupe de REcherche
en Sciences de l'Information et de
la COgnition (GRESICO)
M@rsouin-Univ. de Bretagne Sud.
+ Université de Rennes 1
++ Université de Nantes

Nicolas.Gueguen@univ-ubs.fr

<http://www.marsouin.org>

Publié dans le Journal of Applied Social Psychology,
n°35(2), 423-429.

Similarity and Helping Behavior on the Web: The Impact of the Convergence of Surnames Between a Solicitor and a Subject in a Request Made by E-Mail.

RÉSUMÉ.

Traditionnellement, La similarité entre un demandeur et un sujet augmente les comportements d'aide. Une expérience a été conduite dans un contexte où cette médiation se fait via un ordinateur. Cinquante étudiants ont reçu un courriel contenant un questionnaire de 40 questions sur leurs habitudes alimentaires, demandant de 15 à 20 min pour y répondre. Ce questionnaire venait d'un étudiant virtuel de la même université que celle où le sujet était inscrit. Dans la moitié des cas, le prénom du demandeur, qui apparaissait dans l'adresse électronique, était le même que celui de la cible. Les résultats montrent que le taux de réponse au questionnaire est significativement plus élevé en cas de prénom similaire. Le temps de réponse est aussi réduit.

MOTS CLEFS: SIMILARITÉ, CMC (RELATION MÉDIATISÉE PAR UN ORDINATEUR), RÉPONSE À UNE DEMANDE.

ABSTRACT.

Similarity between a solicitor and a subject traditionally enhances helping behavior. An experiment was carried out in a computer-mediated context. Fifty students received an e-mail containing a 40 questions survey on their food habits which required 15-20 minutes of their time to respond. This questionnaire came from a hypothetical student of the university in which the subjects were registered. In half of the cases, the surname of the solicitor, which appeared in his/her electronic address, was the same than the surname of the target. Results show that compliance to the request was significantly higher in the same surnames condition than in the different surnames condition. The response delay was significantly shorter in the same-surnames condition than in control condition.

KEY-WORDS: SIMILARITY, CMC, COMPLIANCE TO A REQUEST.

1. INTRODUCTION.

Research on helping behavior have showed that when a solicitor seemed to be familiar to the subject solicited, he/she agreed more favorably to help the solicitor. In these studies similarity was manipulated in various ways: congruence versus no congruence of race, status, apparel appearance, attitudes... between the solicitor and the person solicited. A solicitor was helped more favorably when he/she was of the same race than the subject (Bickman & Kamzam, 1973; Gaertner & Bickman, 1971; Wegner & Crano, 1975). The same effect was obtained when the solicitation of help was made by phone and when ethnicity was manipulated by the accent of the solicitor (Harris & Klingbeil, 1976). High status people help more favorably high status solicitor who need help than low status solicitor (Goodman & Gareis, 1993). Keasey and Keasey (1971) have found that same apparel appearance between helper and solicitor led to increase compliance to the solicitor request. This effect is also observed on spontaneous helping behavior (Suedfeld, Bochner & Matas, 1971). Attitude congruence toward capital punishment between a solicitor and a person solicited is a factor influencing helping behavior (Karabenick, Lerner & Beecher, 1975). In the same vein, Suedfeld, Bochner and Wnek (1972) found that similar political attitudes increased altruism.

Methodologically speaking, most of the studies on the effect of similarity on helping behavior used face-to-face or telephone interaction between the solicitor and the person solicited. Results show that the physical presence of the solicitor is not required to create this similarity. For this reason, it seemed useful to this test if this similarity effect could be obtained in a computer-mediated interaction where social information is scarce. Despite the appearances, an electronic mail sent by a stranger to an Internet user is a situation where similarity could be introduced by various information. The surname contained in the first part of an electronic address is one of these information that could have an impact on the receptor. Numerous studies shown that surname has some psychological effects on his/her bearer (Colman, Sluckin & Hargreaves, 1981). Intons-

Peterson and Crawford (1985) found that surname is an important part of the self-identity.

It is well known that requests by questionnaires of all sorts are being developed thanks to Internet and that numerous Internet users show certain saturation for these requests (Zhang, 2000). It became, therefore, interesting to study the impact of this technique of similarity as part of the communication with the computer as a medium. Taking into account the convincing efficacy of this technique clearly demonstrated in the studies mentioned before, it could be expected that when the solicitor had the same surname than the subject solicited by the way of an electronic mail, this similarity would predispose him/her to give his/her consent more easily to the solicitor request. .

2. METHOD.

Subjects.

The subjects consisted of 52 students (27 females and 25 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. Two subjects (2 females) 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, containing the name of a server of another part of the university in the same town. Moreover, the e-mails sent to the subjects contained a signature showing that the sender of the mail was a student in statistics at the same university. The subjects were randomly allocated to the experimental or to the control situation. 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 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 experimental or

to the control situation took place. The collaborator then took care of sending the message. The second investigator was located in a laboratory of another building. In the both condition an e-mail was sent to the subject asking: “Hi, I don't want to take advantage but could you help me. Well, with 3 of my study friends we have to perform a statistical analysis of the diet habits of students. For this we will have to analyze a questionnaire and we will be evaluated on the analysis of the collected data. 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 minutes 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 in statistics.

In the university where the experiment took place, electronic addresses of the students were made with the first letter of the given name followed by the complete surname and then followed by the academic department (i. e.: X.Surname@departement.server.fr). In the experimental condition the surname employed to create the electronic address of the solicitor was the same than the surname of the student-target. In control condition five French familiar surnames (“Martin”, “Durand”, “Rivière”, “Le Gal”, “Gautier”) were employed to create the electronic addresses but in each case, the surname employed was quite different than the surname of the target. In all the case the first letter of the electronic address corresponding to the first letter of the solicitor given name was different than the first letter of the given-name of the target.

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, measured in minutes, was also taken into account as a dependant variable.

3.RESULTS.

On all measures employed in this study, no differences were found between male and female scores. Therefore, the data for both sexes were collapsed. Concerning the compliance rate to the request (completing the questionnaire and sending it back) 96 % (24 out of 25) in the experimental situation did sent back the filled out questionnaire against 52 % (13 out of 25) in the control situation. The difference between these two rates was significant ($\chi^2(1, N = 50) = 10.40, p < .005$; with Yate's correction). When the helper and the solicitor have the same surname, 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 1 to 4 days before answering (1 day = 1440 minutes), a log transformation of these periods has been made. The mean value of the latency time of 1.51 (SD = 0.94) was found for the experimental condition against 2.29 (SD = 1.07) for the control situation. Again, the difference between these two means was statistically significant ($t(35) = 2.30, p < .03$, two-tailed). The experimental condition where helper and solicitor have the same surname led to a quicker response time for the subjects who have accepted to answer.

Discussion.

Our experience shows that the convergence of surnames between receptor and transmitter lead to increase compliance to the solicitor request and decrease the latency time of the subject response. Earlier studies have shown that the physical presence of the solicitor is not necessary to guarantee the compliance to the request. It appears now that this presence not even necessitates a synchronous communication between the applicant and the target of his/her request. This “electronic” similarity turns out as effective as in a situation where the interaction is synchronous (face-to-face or by phone). Again, these results confirm the efficacy of similarity between the helper and the solicitor on helping behavior and congruence of surname appear to be a good new technique to create similarity in a context where classical similarity techniques are difficult to manipulate. The findings of the study should be interpreted cautious-

ly given the preliminary nature of the study. Of course such results need replication with other subjects. In our experiments an hypothetical student asked a student to help him/her. Furthermore, the e-mail sent to the subject contained a signature showing that the sender of the mail was a student in statistics in the same university than the subject. That why, perhaps, the percentages of compliance in the two conditions were high (52 % in control condition). Solidarity between another student who need help could explain these high percentages. What would be happening if the solicitation was addressed to someone on the web who was not a student ? What would be happening if no information about the sender was contained in the mail ? Guéguen and Jacob (2002), by manipulating the status of the solicitor by the way of his/her electronic signature (a scientist for the high status or an undergraduate-student for the mid-status), have found that high status led to increase compliance to a request on help on the web. Furthermore, when the target of the solicitation was a student the rate of compliance was dramatically higher than when the target was someone the web (65 % in control condition with students-subjects versus 7 % in control condition with an other population). So, probably, the same effect could occurred if the technique of similarity employed in this experiment was used with an other population. These would be interesting questions for future research to address.

In the same way, the high rate of compliance in the experimental condition is perhaps explained by the importance of surname for the self (Intons-Peterson and Crawford, 1985) particularly in a situation when no other information of the solicitor was available and could interfered with the surname. Additional research is needed to assess the extent to which these preliminary findings with students as subjects generalize to other groups. So, given the particularity of the social interaction between the solicitor and the solicitee in this experiment, the findings can be generalized to other mundane situations.

Our experiment shows that despite the scarcity of social information in Computer-Mediated Context, it is possible to create similarity between two correspondents in an e-mail interaction. It would be interesting for further research

to test other factors of similarity such as given-names, information about the status, physical attractiveness (photography)... It would be interesting to test helping behavior with the surnames congruence technique in other contexts (e-mail interaction between two correspondents with the same surname but living in different countries). In a practical perspective, our results show that this form of similarity manipulated in a computer-mediated context could enhance favorably the rate of compliance to a survey request. Zhang (2000) found that Internet users showed a 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 (Guéguen, 2002). It seems than the technique of surname similarity is a new technique of compliance on the Web. This would be a good technological method to obtain higher response rates on Web surveys and then, to increase samples representativeness. Now, these results need to be replicated in different computer-mediated communication contexts.

Of course such results raise ethical questions because it's very easy to create, automatically, an address which contain the same surname than the surname of the target. Then, it would be easy for web-marketers to use this technique with theirs mailing list in order to increase the respond rate to a survey or to influence consumer behavior. Using this technique would be then assimilated to a business manipulation. In this experiment, subjects have been deceived by the method employed, in particular in condition of identical names. However, because of the new context in which this effect of familiarity was studied (here Internet), it was difficult to use a method of role-playing simulation as recommend by authors (Geller, 1978; O' Leary, Willis and Tomich, 1970). Perhaps, with Internet, using role playing could have some ethical advantages given the scarcity of social information in this context. Social psychologists will thus have to discuss the ethics of the experiments conduct in this new context.

4. REFERENCES.

- Bickman, L., & Kamzan, M. (1973). The effect of race and need on helping behavior. The Journal of Social Psychology, *89*, 73-77.
- Colman, A., Sluckin, W., & Hargreaves, D. (1981). The effects of familiarity on preferences for surnames. British Journal of Psychology, *72*, 363-369.
- Gaertner, S., & Bickman, L. (1971). Effects of race on the elicitation of helping behavior: The wrong number technique. Journal of Personality and Social Psychology, *20*, 218-222.
- Geller, D.(1978). **Involvement in role-playing simulations: A demonstration with studies on obedience.** Journal of Personality and Social Psychology, *36*, 219-235.
- Goodman, M., & Gareis, K. (1993). The influence of status on decision to help. The Journal of Social Psychology, *133*, 23-31.
- Guéguen, N. (2002). Foot-in-the-door and computer-mediated communication. Computers in Human Behavior, *18*, 11-15.
- Guéguen, N., & Jacob, C. (2002). **Solicitation by e-mail and solicitor's status: A field study of social influence on the Web.** CyberPsychology & Behavior, *5*, 377-383.
- Harris, M., & Klingbeil, D. (1976). The effects of ethnicity of subject and accent and dependancy of confederate on aggressiveness and altruism. The Journal of Social Psychology, *98*, 47-53.
- Intons-Peterson, M., & Crawford, J. (1985). The meanings of marital surnames. Sex Roles, *12*, 1163-1171.
- Karabenick, S., Lerner, R. & Beecher, M. (1975). Helping behavior and attitude congruence toward capital punishment. The Journal of Social Psychology, *96*, 295-296.
- Keasey, C., & Keasey, C. (1971). Straight and hip peace petitioners. Paper read at the Meeting of the Eastern Psychological Association.
- O'Leary, C., Willis, F., & Tomich, E. (1970). **Conformity under deceptive and non-deceptives techniques.** Sociological Quarterly, *11*, 87-93.
- Suedfeld, P., Bochner, S., & Matas, C. (1971). Petitioner's attire and petition signing by peace demonstrators: A Field experiment on reference group similarity. Journal of Applied Social Psychology, *1*, 278-283.
- Suedfeld, P., Bochner, S., & Wnek, D. (1972). Helper-sufferer similarity and a specific request for help: Bystander intervention during a peace demonstration. Journal of Applied Social Psychology, *2*, 17-23.
- Wegner, D., & Crano, W. (1975). Racial factors in helping behavior: An unobtrusive field experiment. Journal of Personality and Social Psychology, *32*, 901-905.
- Zhang, Y. (2000). Using the internet for survey research: A case study. Journal of the American Society for Information Service, *51*, 57-68.

LES BULLETINS RÉCENTS.

Année 2005.

- 3-2005. Guéguen N., Pichot N., Le Dreff G., Similarity and Helping Behavior on the Web: The Impact of the Convergence of Surnames Between a Solicitor and a Subject in a Request Made by E-Mail. Publié dans le Journal of Applied Social Psychology, n°35(2), 423-429.
- 2-2005. Farajallah M., LeGuel F., Penard T. Union Européenne élargie et nouveau voisinage : de la fracture numérique à la coopération numérique ?
- 1-2005. Granjon F., Champ de l'Internet, pratiques télématiques et classes populaires.

Année 2004.

- 1-2004. Cardon P., Trelu H., Les personnes vieillissantes et la télé-assistance: privilégier la dimension relationnelle.

Responsables de l'édition : Godefroy Dang Nguyen, Nicolas Jullien.

Contact : Nicolas Jullien
M@rsouin
GET - ENST Bretagne
Technopôle de Brest Iroise,
CS 83818,
29238 Brest CEDEX 3
Nicolas.Jullien@enst-bretagne.fr
Tél : (0)229 001 245