



Journal of Articles in Support of the Null Hypothesis

Vol. 8, No. 1

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Failure of Tactile Contact to Increase Request Compliance: The Case of Blood Donation Behavior

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Although the positive effect of touching on request compliance has been widely reported in the social psychology literature, a new evaluation has been made. University students were solicited to give blood during a special one-day drive. Solicitations were made through face-to-face interactions. During the donation solicitation some study participants were lightly touched on the forearm and others not. No difference was found between the two experimental groups in the number of participants who agreed to give blood. Such results show that tactile contact is not an effective technique for increasing compliance with blood donation requests, and confirm previous studies which found that other compliance-growth techniques are not effective at increasing such compliance rates. It is concluded that although tactile contact may indeed influence compliance with requests for minimal forms of aid, it is unlikely to significantly affect people's willingness to comply with more substantial requests involving behaviors that are psychologically costly to perform, such as blood donation requests.

Behavior

In many countries, health services depend on safe and readily available supplies of blood to help save lives. However, tighter screening of blood donors in recent years has led to a decrease in the volume of blood collected. Despite these drops in volume, the demand for whole blood and blood products is increasing at rates exceeding those of collection rates (Gillespie and Hillyer, 2002). Unfortunately there is a worldwide shortage of active blood donors to meet the increased demand for blood (Barkworth, Hibbert, Horne and Tagg, 2002). In light of these circumstances, researching methods to increase blood donations has become vital. For a number of years social psychologists have tested the effects of the tactile contact technique on increasing compliance with various requests. In this experiment, the same technique was used to increase the number of blood donors during a local university blood drive.

Touch and compliance

The positive effect of touch on request compliance has been widely demonstrated in the social psychological literature. Broadly speaking, when the slight tactile contact of a solicitor is associated with a request for help, it leads the “touchee” to agree more frequently to the solicitation. Kleinke (1977) has shown that touching people’s forearms for one or two seconds induces them to return money found in a phone booth, or to more frequently give money to others in the street. Similarly, touching increases observed response rates in street surveys about food habits (Hornik, 1987; Hornik & Ellis, 1988) and jewelry (Guéguen 2001b, 2002a). Slight touching also leads to greater persistence when executing difficult tasks, such as answering a long questionnaire about highly personal subjects (Nannberg & Hansen, 1994). Various consumer behaviors are also influenced by tactile contact. Several studies have found that the tactile contact of a patron by a server in a restaurant or bar increases tipping (Crusco & Wetzel, 1984; Stephen & Zweigenhaft, 1986; Hornik, 1992b; Lynn et al., 1998; Ebesu Hubbard et al., 2003; Guéguen & Jacob, 2005). Touching potential customers can also lead to an increase in product sales rates (Smith, Gier & Willis, 1982; Hornik, 1992a, 1992b; Guéguen, 2001a). Thus tactile contact clearly has a positive effect on compliance in a variety of contexts, as shown by a 13-study meta-analysis by Segrin (1993) which found that although the magnitude of the effect of touching was not large ($r = .21$), it remained fairly consistent across all studies analyzed.

Touching in the medical context

The effect of touch on individual health behavior has been reported in the social psychology literature in circumstances involving various health behaviors. Eaton et al. (1986) evaluated the effect of gentle touching during eating on the nutritional intake of institutionalized patients with chronic organic brain syndrome (COBS). Their findings

indicated that touch is associated with increased intakes of both calories (29%) and protein (36%). Tactile contact is also associated with a higher level of patient comfort. Pattison (1973) found that clients who were touched engaged in more self-exploration than clients who were not touched. Bacorn and Dixon (1984) showed that a counselor's touch in the initial client session was associated with greater acceptance for a second session. In the same way, Hollinger (1986) found that geriatric patients who were lightly touched by a nurse during a fifteen minute nurse-patient interaction expressed more verbal interaction than patients who were not touched. Some studies also suggest that in a counseling context, touching is associated with better perceptions of the counselor. Alagna et al. (1979), in an analogous study, demonstrated that clients who have been touched by counselors evaluate the counseling experience, and the counselor, more positively. Again this effect of touch on perceptions of counselors has been reported in several studies (Durana, 1998; Hubble, et al. 1981; Stockwell & Dye, 1980). However neither the latter cited studies nor that of Alagna et al. (1979) have examined the behavioral effects of touching. A recent study by Guéguen and Vion (2009) found that touch administered by physicians to their patients was associated with better adherence to medication regimes. In their experiment, four general practitioners were instructed to lightly touch (or not) their adult patients suffering from pharyngitis when asking them for a verbal promise to take a prescribed antibiotic. One week later, patients were surveyed at home to assess the number of tablets actually taken. Greater medication regime compliance was found in the touch group than in the non-touch control group.

Increasing blood donations

Thus given these several positive effects of touching on compliance with various sorts of requests, including those associated with medical and/or healthcare-related solicitations, we undertook to test the effects of the tactile contact technique on solicited blood donor behavior. Previous research using compliance-growth procedures failed to increase blood donations. The well-known "foot-in-the-door" technique (immediately following small upfront requests with more costly ones) failed, in three experiments, to increase the number of blood donors (Foos and Demsey, 1979). The authors explained this failure by arguing that although the "foot-in-the-door" technique was probably effective for minimal forms of aid, it is unlikely to significantly affect willingness to comply with more substantial requests involving behaviors that are psychologically costly to perform, such as blood donation requests. Similarly, use of the "door-in-the-face" technique (immediately following an initial extreme request with a less costly one) increased verbal compliance with blood donation requests but failed to increase behavioral compliance (Cialdini and Ascani, 1976). Applying the survey effect technique (Morwitz et al., 1993) on very large samples, Godin, Sheeran, Conner and Germain (2008) found that previous blood donors who were first asked to complete a mail-in questionnaire about donating blood more readily donated 6 months (+6.4%) and 12 months (+6.4%) later, versus previous blood donors who did not receive the questionnaire. Thus given the discrepancies in results obtained between these various compliance-growth procedures, and in light of the positive effect of the tactile contact technique on compliance with a broad spectrum of behaviors, we decided to test the hypothesis that the touching technique increases compliance with blood donation requests.

Method

Participants

Study participants were 281 Engineering undergraduate students (141 in the touch group and 140 in the non-touch control group) who were solicited to donate blood while entering a campus building at the University of Bretagne-Sud, in France. Most participants were males.

Procedure

Six graduate student assistants (2 men and 4 women) acted as solicitors in the experiment, which was conducted during a one-day blood drive. As in previous years, announcements about the blood drive were posted in several places inside and outside the building, in front of which arriving students were approached by a solicitor who would state:

“Hello, I have been sent by the “Etablissement Français du Sang” (blood bank of France) to make you aware of our blood drive, which is being conducted today in Room 8 of this building, from 1.30 p.m. to 5.30 p.m. Would you like to participate?” (Solicitor notes participant’s intent). “Please take this card with you (Experimenter offers a business card with information about the blood drive room and collection hours) and provide it as proof that we have spoken with you. Thanks very much and have a great day.”

On a random basis solicitors lightly touched some participants on the forearm for one second as they approached. In order to enable a later determination of which group (control versus experimental) participants were in, the business cards offered were slightly different: a vertical bar on the right for the touch group or the same vertical bar on the left for the no-touch control group.

To determine which group participants were in, a medical assistant who greeted potential donors as they entered the blood collection room was instructed to ask them if they had received cards and, if so, to collect them from them.

Results

The dependent variables used in this experiment were: number of verbal agreements to blood donation requests during experimenter/participant interactions (“verbal compliance”); and number of participants who actually presented at the blood drive room to offer a donation (“behavioral compliance”). As we found no difference between our 2 male and 4 female solicitors, data were collapsed. The results obtained per experimental group are depicted in Table 1.

A Chi-square test for independence of verbally compliant participants of 2 (experimental groups) \times 2 (compliance vs noncompliance) revealed no significant effect ($\chi^2(1, N = 291) = .17, p = .68, r = .02$). Therefore the tactile contact technique does not appear to have been statistically effective in increasing participant verbal compliance with blood donation requests. As for behavioral compliance, the same statistical test revealed no significant difference between the two experimental groups from the viewpoint of either the

Table 1: *Percent verbal and behavioral compliance per experimental group.*

| | Touch N = 141 | No touch N = 140 |
|----------------------------------------|------------------|---------------------|
| Verbal compliance | 45.4% (64/141) | 47.9% (67/140) |
| Behavioral compliance | | |
| Versus total sample | 11.3% (16/141) | 10.7% (15/140) |
| Versus verbally compliant participants | 25.0% (16/64) | 22.4% (15/67) |

total sample of participants solicited ($\chi^2(1, N = 291) = .03, p = .86, r = .01$) or from that of those who verbally complied ($\chi^2(1, N = 131) = .01, p = .92, r = .03$).

Discussion

In this study we failed to observe a statistical effect of slight touching on compliance with requests made by the touching party. Such results do not correspond with those found in previous studies exploring the effect of touching on compliance with prosocial behavioral requests such as to give change to someone on the street (Kleinke, 1977), to tip a server (Crusco & Wetzel, 1984; Stephen & Zweigenhaft, 1986; Hornik, 1992b; Lynn, Le & Sherwyn, 1998; Ebesu Hubbard et al., 2003; Guéguen & Jacob, 2005), or to participate in a survey (Hornik, 1987; Paulsell & Goldman, 1984). Thus, given the fact that donating blood is also a prosocial request our results mostly likely cannot be explained in these terms. Indeed it has been found that touching was also effective for non-prosocial behavioral requests such as to make product purchases (Hornik, 1992a; Smith, Gier & Willis, 1982; Guéguen, Jacob and Boulbry, 2007). This experiment was conducted in France, and it has been shown that different cultures use tactile contact more or less frequently in their relationships (Field, 1999; Jourard 1966). However several studies conducted in France have found that tactile contact led to increased compliance with various prosocial requests, such as responding to a survey (Guéguen, 2002a, 2002b), giving someone change (Guéguen, 2001a), and tipping servers (Guéguen & Jacob, 2005). Thus the effect of cultural variations associated with touching is unlikely to explain our results, in particular given it has been found that tactile contact is more frequently used in social interaction in France than in the United States, where most of the studies on the positive effect of touching on compliance have been carried out (Field, 1999; Jourard 1966). Furthermore sample sizes used in our experiment most likely do not explain this lacking effect of tactile contact on verbal and behavioral compliance. In the research cited above where a positive effect of tactile contact on verbal and behavioral compliance was found, the experiments were conducted with about 30 to 40 participants per experimental group (see the meta-analysis of Segrin (1993) and Guéguen & Joule, 2009), whereas in our experiment sample sizes were larger. Finally, this lack of effect is probably not explained by the social interaction used in this experiment

as a pretext for randomly touching participants. In our experiment, we found that the number of blood donations were higher than in previous blood drives conducted one, two and three years prior in the same building and month but without any face-to-face solicitation (announcements posted in several places inside and outside of the building only). We found a 113% increase in the number of blood donations compared with the average number achieved in the past three years. Therefore what this experiment has shown is that face-to-face interactions are effective versus advertising in increasing blood donations, but that tactile contact associated with such social interaction does not increase the number of participants who agree to give blood.

As a result, the failure of touching in our experiment is probably explained by the fact that touching is not sufficient to affect people's willingness to comply with a request involving behaviors that are psychologically costly to perform, such as donating blood. For requests with low psychological costs on the other hand, the tactile contact technique is sufficient to enhance compliance, and that is why it was found to be effective for multiple requests in the social psychological literature. Our failure to increase blood donations is not unique in comparison to previous such attempts using compliance-growth procedures. Foos and Demsey (1979), using the "foot-in-the door" technique, also failed to increase the number of blood donors. Cialdini and Ascani (1976) increased verbal compliance only with the help of a "door-in-the-face" technique, but similarly failed to increase behavioral compliance. These authors also explained the technique's lack of effect in light of the fact that blood donation is not an everyday request such as giving change or responding to a short survey. Indeed in France, Bazin and Malet (2006) found that for young people giving blood is associated with a fear of injection and/or with the sight of one's own blood, and thus light tactile contact during a short social interaction is probably not sufficient to alleviate this fear. Multiple and/or longer tactile contacts during social interaction are perhaps necessary to obtain a touching effect in instances of blood donation requests. It would accordingly be valuable to test this aspect in relation to future requests. It does however appear that, as was the case in numerous prior studies in the social psychological literature, usage of one-time, light tactile contact, is not sufficient to increase compliance with blood donation requests.

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Submitted: 1.19.2011

Revised: 3.28.2011

Accepted: 3.29.2011