

Effect of Insult Upon Personal Space Preferences

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ABSTRACT: After sixty male undergraduates individually were either insulted or not insulted by the experimenter, each was tested for body-buffer zone (the physical distance between themselves and an approaching person at which they first reported being uncomfortable) by either the experimenter or an assistant. The body-buffer zones of the insulted subjects were larger when tested by the experimenter than when tested by his assistant; but for those not insulted, there were no differences in body-buffer zone produced by the identity of the tester. The results are discussed in terms of the interaction between affect and interpersonal proxemics.

Do individuals with a high propensity for aggression prefer greater interpersonal distances between themselves and others than do persons less aggressively inclined? The results with male prisoners suggest that the answer to the question may be in the affirmative. Kinzel (1970) reported that the body-buffer zones* of eight prison inmates who had been convicted of violent crimes were larger than those of six prisoners whose records included no

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*The body-buffer zone has been defined as an area around a person within which anxiety is produced if another enters (Horowitz, Duff & Stratton, 1964, p. 4).

violence, findings subsequently replicated by Hildreth, Derogatis & McCusker (1971). In these studies the reported differences were due primarily to a much larger body-buffer area to the rear of the violent subjects, suggesting the possibility of strategies employed by prisoners who have reason to fear retaliative rear flank attacks.

Two recent studies represent attempts to test the generality of the aggressive propensity/body-buffer relationship in noninstitutional contexts. Roger & Schalekamp (1976) compared violent and nonviolent former prison inmates and obtained larger body-buffer zones for the men with records of violence, but found that the difference was as substantial for frontal zones as for rear. O'Neal, Brunault, Marquis & Carifio (1979) experimentally induced anger in an attempt to disentangle aggressive propensity from those proxemic strategies that violent men may learn in prisons. College men who had been angered by an experimental accomplice had larger body-buffer zones when tested by the experimenter than did nonangered men, but, unexpectedly, the discrepancy between the groups in *frontal* body-buffer area was significant but not that for the rear area.

The present study was designed to determine the reliability of the O'Neal, et al. (1979) findings, and to test for one possible interpretation of the greater frontal body-buffer area for angered college men. It could be that for angered college men, the face-to-face proximity of someone not their provocateur provided them with a behavioral conflict: the closeness of a stranger demands polite sociability and restraint, while their emotional state impels angry expressiveness. If this explanation is valid, then larger frontal areas of angered subjects should obtain when the body buffer area tester is not the provocateur; however, when the tester is the provocateur, the angered-not angered subjects body buffer zone differences should be either symmetrical or greater to the rear.

METHOD

Overview and Design

Sixty men from undergraduate psychology courses who volunteered to participate in a "social attitude and self disclosure" study were

randomly assigned to the four treatment conditions in a two (subject insulted or not insulted) by two (body-buffer zone tester is experimenter or experimental assistant) factorial design. Each subject was tested for body-buffer zone either by the experimenter or by an experimental assistant. Previously, half of the subjects had been verbally insulted by the experimenter. Finally the men each indicated the extent of his hostility toward the experimenter.

Insult Manipulation

The men in the Insult condition were first roundly scolded by the experimenter for being tardy to the experiment. None of the subjects were, in fact, late. He used these phrases in his attack:

"It said right on the sign-up sheet to be on time . . . what's the matter, can't you read?"

"Is this the way you usually handle your responsibilities"?

Then the experimenter declared to each of these men that "we might as well get on with it," and presented him with a "Self-Disclosure Form" containing three essay questions dealing with personal reactions to ethical dilemmas. The questionnaire served both to enhance the plausibility of the "social attitudes and self-disclosure study" cover-story and to provide opportunity for the experimenter to deliver further insults. The experimenter read the questionnaire responses in the subject's presence, and sternly accused him of being "dishonest" and "superficial" in his answers. This entire ruse is very similar to the anger induction employed by O'Neal, et al. (1979) who reported elevations in questionnaire aggression measures.

Those men in the No Insult condition were greeted in a matter-of-fact manner by the experimenter, who received their responses to the "Self-Disclosure Form" without comment. Throughout the study, the second and third authors alternated as experimenter, and as experimental assistant.

Body-Buffer Zone Measurement

At this point each subject was informed that a second phase of the study involved determination of the "body space preferences," and was asked to stand with toes on a tape placed on the floor near the center of a large room adjacent to the one in which he had filled out the questionnaire. For half the men, the experimenter administered this procedure, and for the others, the experimental assistant.

The technique of body-buffer zone measurement reported in detail by Kinzel (1970) was followed. Briefly, the subject was approached from four axes (front, each side, and back) in a random order and each time indicated when he first felt uncomfortable. The experimenter, or experimental assistant, advanced six inches, stopped and said, "Now?" And each time after asking this question, he advanced again and repeated the process until the subject answered in the affirmative. Then a mark was made on the floor to mark the body buffer boundary point. Here projections were made to each side of the buffer zone tester perpendicular to his line of approach and these were later to calculate for each subject three body-buffer areas: total body-buffer zone area, area of the rectangle to the front of the subject, and area of the rectangle to his rear.

Hostility Measure

Then, primarily as a check on the effectiveness of the insult manipulation, the subject was asked to fill out anonymously an "Experimenter Rating Scale" similar to the one used by Zillmann & Cantor (1976) to measure hostility. The 20-point Likert-type items included one which asked the subject the extent to which he approved of the experimenter's being allowed to continue his duties the following semester. The subject was instructed to deposit the completed questionnaire under the locked door of the faculty member supervising the research. Finally, each participant was thoroughly debriefed and asked not to discuss the experiment with other students.

RESULTS AND DISCUSSION

The hostility questionnaire responses leave little doubt that the anger manipulation had its intended effect. The subjects exposed to the anger induction (Insult conditions) were reliably ($F(1,56) = 11.42, p < .001$) less favorable in their recommendation in regard to the continued employment of the experimenter than were the other men.

Of the angered subjects, the total body-buffer area of those whose zone was tested by the experimenter was reliably ($p < .05$ by the Newman-Keuls procedure) greater than that of those tested by his assistant, yet there were no significant differences produced by who administered the body-buffer test for those in the No Insult

Table 1
Mean Hostility Score

	Tester	
	Experimenter	Assistant
Insult	15.73	11.13
No Insult	3.20	4.40

Note:--Higher scores indicate more negative recommendation regarding the experimenter's reappointment.

conditions. The men insulted and tested by the experimenter had body-buffer areas larger ($p < .05$) than those of subjects in any other condition, and, in addition, those in the insult condition who were tested by the assistant had higher ($p < .05$) mean body-buffer area than did subjects in either of the No Insult conditions. These

Table 2
Mean Total Body-Buffer Zone
Area in Square Feet

	Tester	
	Experimenter	Assistant
Insult	41.17a	23.23b
No Insult	9.77c	12.23c

Note.--Cell means with subscripts in common are not significantly different beyond the .05 level by the Newman-Keuls procedure.

results yielded a significant Insult x Tester interaction ($F(1,56) = 36.27, p < .001$) and reliable main effects for both Insult ($F(1,56) = 20.85, p < .001$) and Tester ($F(1,56) = 156.66, p < .001$).

So, it can be seen that whoever it was approaching them, angered men preferred larger interpersonal distances than did those not angered; moreover, among angered subjects, body buffer zones were greater when tested by their provocateur than by someone else. Contrary to expectation this identical pattern of findings obtained for both front areas and rear areas analyzed separately. It may be that the unexpected finding by O'Neal, et al. (1979) in regard to larger frontal zone effects is subtle or situation-specific and was overwhelmed by the strong influence of insult on the total body-buffer zone in the present findings.

It is interesting to note that there was a positive and significant relationship between hostility and total body-buffer area ($r = .61, df = 58, p < .05$). Among the cells the highest hostility/total body-buffer correlation was obtained for the insulted subjects whose body buffer area was tested by the experimenter ($r = .70, df = 14, p < .05$), and the next highest ($r = .63, df = 14, p < .05$), for the other insulted subjects. The correlation coefficient for the former group was reliably ($p < .05$ by conversion of r to z) higher than that obtained in either of the noninsulted conditions.

There is a suggestive parallel between this pattern of findings and those reported by Kinzel (1970), who tested his subjects repeatedly over a period of twelve weeks. He found that although all subjects decreased in body-buffer zone over the weeks of testing, at final testing the violent prisoners still had larger zones than did the other prisoners. Kinzel (1970, p. 103) offers anecdotal evidence that the violent prisoners had become adapted to the tester, but yet "... they maintained these larger zones despite the fact that the intruder had clearly come to be perceived more as friend than foe." It seems plausible to consider the situation of angered subjects in the present study who were tested by a person other than their provocateur similar to that of Kinzel's violent subject who had adapted to the benign presence of the tester. In both cases there was a larger magnitude of difference when the individual with a greater propensity for aggression was more likely to regard the personal space intruder as a possible foe; but, in both studies, such individuals still had larger body-buffer zones even when they had no reason to regard the person approaching them as enemy.

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