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ABSTRACT

Based on the theory that performance success will equate positively with a feeling of achieved status, this study investigated the effects of achieved status in relation to personal space. It was hypothesized that a person with high achieved status would, given the opportunity, place himself in a position of prominence, and maintain more personal space than would a person with low achieved status. Subjects received performance evaluations on a contrived project, thereby achieving either a high or low status. They were subsequently invited to seat themselves around an "art object" where personal space could be determined. The data supported the hypothesis that achieved status affects both the quality and quantity of space occupied in a group situation. These results suggest that success, or at least lack of failure, induces one to assume a position of importance. (Author/LAA)

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GROUP

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## Effects of Relative Status on Spacing in a Group

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Personal space is conceptualized as the area immediately surrounding an individual in which the majority of his or her interactions take place (Little, 1965). Personal space differs from territoriality in that it has no fixed geographic points, moves about with the individual, and expands and constricts under varying environmental and interpersonal conditions (Sommer, 1969). Much current research activity has focused on delineating what factors affect the expansion or constriction of personal space. For example, recent research has established that one's culture, age, sex, and status, all affect the amount of space among interacting persons. Further research has established that proximity between individuals decreases with increasing degrees of friendship (Willis, 1966), approval seeking (Rosenfeld, 1965), and extroversion (Leipold, 1963), while individuals whose social competence and sexual attractiveness are threatened, will allow greater spatial distance between themselves (Dosey and Meisels, 1969).

Lott and Sommer (1967) assert that just as the dominant members of a subhuman hierarchy will maintain a larger territory, so in humans there exists a relationship between status and the amount of space taken for oneself, or received from others. For example, fathers typically sit at the head of the table, and teachers whether liked or disliked, take an elevated position at the front of the classroom. In both cases, the high status individual possesses more personal space than the other group members.

Experimental research on the relationship between status and spacing has further supported this notion. Studies by Levinger and Gunner (1967) and Mehrabian and Friar (1969) have observed that subjects place themselves closer to, and on the same level as, peers, but further away from, and beneath, persons representing high status. Mehrabian suggests that the distance from a stimulus figure is a curvilinear function, with the smallest distances reserved for peers, and with the distance increasing as others' status increases or decreases.

Research to date has focused on ascribed status. Ascribed status may be defined as rank or social position assigned to an individual by a reference group in which he or she is a member. Examples of ascribed status positions are one's socioeconomic level within a neighborhood, occupation within an organization of employment, or rank within the military. The present study investigated the effects of achieved status, which is based on the success of performance of an individual in a particular situation. A recent study by Karabenick and Meisels (1972) suggests that performance feedback does indeed affect how closely a person will approach another; however, their study used imaginary stimulus persons which makes it difficult to generalize to more naturalistic situations.

We hypothesized that receiving positive performance evaluation or high status will lead a person to feel good about him - or herself and give him or her confidence about his or her ability in subsequent tasks. Thus, as with high ascribed status persons, we would expect a person with high achieved status to place him - or herself in a position of prominence, and to maintain somewhat more space with regard to others, than a low achieved status individual. The latter was expected to feel embarrassed about his

or her performance, to question his or her ability on subsequent tasks, and to prefer a less conspicuous position behind others in a group.

#### Method

The study consisted of two parts. In the first, subjects listened to samples of electronic music, made judgments, and received performance evaluations. This constituted the status manipulation. In the second part, subjects were requested to take a seat around an "art object" and the quantity and quality of space taken constituted the dependent measures.

#### Design and Subjects

Three levels of status, high, low, and control, and sex of the subject were the independent variables. Sex of the subject did not affect any dependent measure and no further mention of this variable will be made. All subjects were undergraduate volunteers from introductory psychology classes at Iowa State University. Forty-five subjects, 15 in each of the status conditions, took part in the experiment.

#### Procedure

One subject and three confederates, one male and two females, composed each experimental session. The experimenter greeted the four outside the experimental room and introduced herself. After ushering the four into the room and seating them around a rectangular table, she described the experiment as a "listening exercise" and requested that no discussion take place between the subjects. Each participant was given an identification letter, with the naive subject always assigned letter D. The experimenter explained that an audio tape of music had been given by the music department to obtain student's reactions to electronic music. The subjects then filled out a questionnaire to help enhance the credibility of the cover story.

### Task

The task consisted of listening to three, three minute segments of electronic music. After each segment the four subjects were given an evaluation sheet consisting of five semantic differential-type scales. The subjects were told their opinions would be compared with those of members of the music department. The differences between each subject's ratings and the music experts' were indicated by number on a blackboard.

### Status manipulations

In the high status condition the naive subject found that he or she was the best of the group in evaluating the first and third pieces of music, and second best on the second piece. After filling out a questionnaire, and on the way to the "art object", the subject was stopped by the experimenter who told the individual that he or she did a remarkable job in agreeing so closely with an expert and suggested that the subject possessed some hidden musical talent.

In the low status condition the naive subject discovered he or she was the worst of the group in evaluating the first and third pieces of music and next to worst on the second piece. The subject was stopped by the experimenter and told, "You did not do very well; are you sure you could hear the music," or, "Are you sure you understood the directions?"

In the control condition, no performance feedback was given, and the experimenter did not interrupt the subject on his or her way to the "art object."

### Dependent measures

After evaluating the three music selections, the naive subjects filled out a questionnaire which contained a question aimed at evaluating the

success of the manipulation. Subjects then seated themselves around an "art object." In all conditions the confederates took the same predetermined positions on the floor. These positions are illustrated diagrammatically in Figure 1. As soon as the naive subject was seated, the experimenter requested that no one move. With a tape measure, she first measured in inches, the distance of the naive subject to the "art object" and then the distance of the subject to the nearest confederate. She also took note of whether the subject sat in front of, or behind the confederates (see Figure 1).

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 Insert Figure 1 about here  
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## Results

### Success of the Manipulation

On the questionnaire given after the music evaluations, one item asked, "Compared to other Iowa State University students, how good are you at musical judgments?" Responses to this question were not significant, but since a major part of the status manipulation consisted in the experimenter confronting the subject and either complimenting or derogating him or her, this non-significance was <sup>not</sup> entirely unexpected.

### Quantity of Space Taken

It was predicted that high status subjects would take more space for themselves relative to the control group, while low status subjects would take less space. This prediction was partially supported, and the results are presented in Table 1. An analysis of variance showed that the status manipulation effected the amount of space taken ( $F=3.932$ ,  $df=2/42$ ,  $p < .05$ ), and Newman-Keuls analysis revealed that low status subjects sat closer to the nearest confederate

than did either the control or high status subjects; however, no differences were found in the amount of space taken between high status and control subjects.

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 Insert Table 1 about here  
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The distance of the subject from the "art object" was also measured, although no explicit hypotheses were made for this variable. These results are also presented in Table 1. Although the overall F-ratio for this measure was not significant ( $F=2.04$ ,  $df=2/42$ ), post-tests revealed a tendency for low status subjects to sit further from the "art object" than <sup>subjects</sup> in the other conditions.

#### Quality of Space Taken

It was hypothesized that high status subjects would take positions of prominence, while low status subjects would take positions out of view, behind other group members. The results, presented in Table 2, partially support this prediction. While over 85% of the subjects in the high status and control conditions sat opposite the confederates, only 40% of the low status subjects did so. Chi-square analysis shows this difference to be statistically significant ( $\chi^2=12.55$ ,  $df=2/42$ ,  $p < .01$ ).

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 Insert Table 2 about here  
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#### Discussion

The data, taken in entirety, supports the hypothesis that achieved status in terms of performance evaluations, affects both the quality and quantity of space taken in a group situation. Relative to the high status and control subjects, low status subjects positioned themselves behind the



confederates and closer to them. Such a position is obviously one of inferiority, out of view and slightly further from the object of interest. It appears as though success, or at least lack of failure, induces one to assume a position of importance.

Both the lack of significant sex differences and the failure of the performance evaluation to elicit effects before manipulation may be attributed to the conditions of noninteracting situations such as paper and pencil tests. In the present situation the subject was specifically instructed not to talk to other subjects. The three confederates were also told to avoid discussion and eye-contact.

The failure to find significant differences between the high status and control subjects was disappointing. It is unclear whether this was due to a lack of potency of the high status manipulation or to some other factor. Perhaps this non-significance could be explained by the tendency of individuals who are insulted to experience more of a bad feeling than those individuals who are positively complimented by a stranger, to experience a good feeling. An alternative explanation might be that most college students, in the absence of information to the contrary, assume they are superior to others in making evaluations. However, this last explanation may not be plausible due to the lack of familiarity and expertise of most subjects with respect to electronic music. It seems more likely that a high status subject would not believe that his apparently high performance on a music-rating task was that important or caused by any personal characteristic, and that his performance would be likely to deteriorate in the future.

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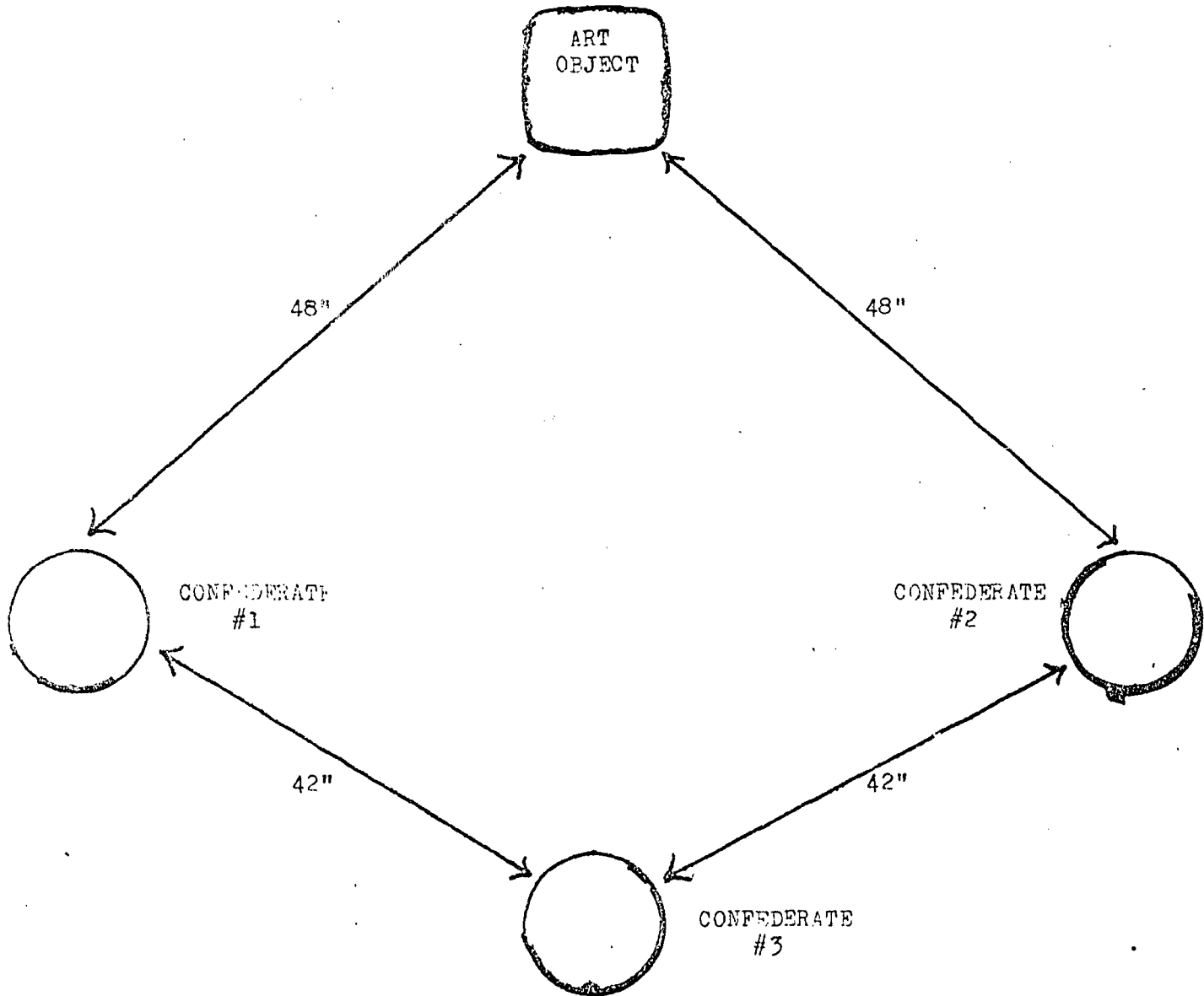


Figure 1. Arrangement of the Experimental Room.

Table 1

Distance in inches from the art object and closest person as a function of status.

	Achieved Status		
	Low	Control	High
Art Object	56.93"	49.567"	52.1"
Closest Person	40.517"	57.8"	53.9"

Table 2

Frequency of seating position, same side or opposite side of confederate, as a function of status.

	Achieved status		
	Low	Control	High
Same side	9	1	2
Opposite side	6	14	13