A study assessed whether space violations of women occur even when women do not yield their space, and further examined who violated the space of women when it was violated. Two persons of average height and weight (either a male-male, male-female, or female-female combination) were positioned across from each other in a busy hallway such that there was adequate space to go around or between them, and observers noted whether approaching students using the hallway walked around or through the dyad. The proxemic behavior of 1081 persons was observed over a period of four weeks. In general, more people went around the dyads than between the dyads, however, when space violations alone were considered (i.e., those times that people went in between the talking dyad), the results indicated that both men and women were more likely to go through two women rather than a man and a woman or two men. These findings demonstrate that when people violate space the space they violate will be women's (even when women do not explicitly yield their territory), and suggest that women are seen as having a lower status, even by other women. (Author)
Proxemics In Public: Space Violations as a Function of Dyad Composition.

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Poster presented through the Committee for Equality in Professional Opportunity at the 40th annual meeting of the Southeastern Psychological Association, April, 1994, New Orleans, LA. The order of the first three author names was determined randomly. We express our gratitude to Chad Lamasa, Chad Safrit, Tricia McNally, Jennifer Nelson, Pat Prizio, and Michele Hayworth for serving as confederates. Correspondence should be addressed to the last author at the Department of Psychology, Catawba College, Salisbury, NC 28144, or at sbrownlo@achilles.catawba.edu
Abstract

We assessed whether space violations of women occur even when women do not yield their space, and further examined who violated the space of women when it was violated. Two persons of average height and weight (either a male-male, male-female, or female-female combination) were positioned across from each other in a busy hallway such that there was adequate space to go around or between them, and observers noted whether approaching students using the hallway walked around or through the dyad. The proxemic behavior of 1081 persons was observed over a period of four weeks. In general, more people went around the dyads than between the dyads, however, when space violations alone were considered (i.e., those times that people went in between the talking dyad), the results indicated that both men and women were more likely to go through two women rather than a man and a woman or two men. These findings demonstrate that when people violate space the space they violate will be women's (even when women do not explicitly yield their territory), and suggest that women are seen as having a lower status, even by other women.
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Having our own personal space is important to us. Around our bodies is an area that we maintain as "our own", and we feel uncomfortable when this sphere is violated (Davis, 1990; Hayduk, 1983). However, the use--and abuse--of others' space and territory differs as a function of both status and gender (Henley, 1977, p. 27). One need only to observe people to perceive who is dominant and who is subordinate, as those who are of a higher status more freely infringe on the personal space of those who are subordinate (Knapp, 1980, p. 75) and are perhaps more likely to touch those who are subordinate (cf. Stier & Hall, 1984). A similar pattern of proxemic behavior occurs between men and women, as women have a smaller personal-space zone than do men, and are more likely to have their personal space violated, thereby increasing the perception that women are subordinate in interactions (Henley, 1973). However, women's space may be violated more often due to the fact that women yield their space more easily than do men (Silviera, 1972), and because women seek to control less territory than do men.

The purpose of this study is to understand who violates the space of others in a public setting, and whether space violations vary as a function gender. Because violations of women's space may be a result of their own behavior of yielding space, rather than a reflection of explicit space intrusions, we examined whether space violations of women occur even when women do not cede their space.

Method

Observations of proxemic behavior took place on the campus of a small (940 students) college, in a narrow hallway that connects a vestibule area to a stairway and involves heavy two-way foot traffic involving a substantial portion of the college.
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population. Four persons (two male, two female) served as confederates. Because height and weight influences proxemic behavior (Henley, 1977), each confederate was of average height and weight (Metropolitan Life, 1983). One of three types of dyads (male-male, female-female, or male-female) were positioned in the narrow hallway such that there was adequate space to go around either member of the dyad (56 cm behind each person and the wall behind each person), but slightly more room in between in dyad (63.5 cm). Members of the dyads stood on floor markings and conversed with each other during observation periods.

After the dyads were positioned an observer recorded whether targets (people using the hallway) walked in between or around the conversing dyad. A note of the target's race and gender was made, and only the behavior of student targets (rather than faculty or staff) was noted.

Observations were made by one of three observers at different times during the day, and each observation period lasted approximately ten minutes. In order to avoid sequence effects, dyad types, experimenters, and times were combined using a Latin Square design such that every dyad was observed by each experimenter in each time period. To determine whether the observations were reliable, a practice session was coded by all possible pairs from the set of three experimenters. Reliability of observations was assessed via percent agreement (number of agreements/number of agreements + number of disagreements), and ranged from .90-.95. A total of 1081 observations were made.

Results

As can be seen in Figure 1, more people (n = 899, or 83.2%) walked around the talking dyads than walked between the talking dyads (n = 182, or 16.8%), z > 1.96, p <
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As can also be seen in Figure 1, more people walked around rather than between all male dyads (90.4% vs. 9.6%, \( z > 1.96, p < .05 \)), all female dyads (73.1% vs. 26.9%, \( z > 1.96, p < .05 \)), and mixed dyads (13.6% vs. 86.4%, \( z > 1.96, p < .05 \)).

When space violations alone were considered (i.e., those times that people went in between the talking dyad), a three-way Chi-Square comparing frequencies of interruptions for each dyad type indicated that people were more likely to go through the female-female dyad (53.3%), rather than the male-female dyad (29.7%), or the male-male dyad (17.0%), \( \chi^2(2) = 35.28, p < .001 \). These data are displayed in Figure 2. However, the propensity to interrupt all-female dyads more often than other dyads (in those instances when an interruption was made) was not limited to one sex of target, as a 2 (Sex of Target) X 3 (Dyad Type) Chi-Square on space violations did not approach significance, \( \chi^2(2) < 1, ns \).

A proportion test to compare the percentage of time that people interrupted the female-female dyad (26.9%) to the percentage of time people went between all dyad types combined (16.8%) was significant, \( z = 2.00, p < .05 \); suggesting that women were interrupted at a greater rate than the overall sample. However, neither male-male dyads (9.6%) nor mixed dyads (13.6%) were interrupted significantly less than the entire sample (16.8%), both \( zs < 1.52, ns \). The percentage of time that all-male
dyads were interrupted (9.6%) was marginally less than that for all-female dyads, $z = 1.91, p < .06$.

There were too few non-Caucasian targets to examine whether race of target impacted space violations.

Discussion

The results indicate that, in general, people will not violate the space of others in public, even if it is more convenient to do so. However, when space violations do occur, the space that gets violated is more likely to belong to women. These findings are consistent with previous findings (e.g., Henley, 1977) that have suggested that the personal space zone of women is smaller than that of men. Not surprisingly, men were intruded upon the least (cf. Gilmour & Walkey, 1981). Unlike other studies, however, the results of this study demonstrated that violations of women’s space occurs even when women don’t yield their space, and that such intrusions are not made only by men. Moreover, previous research (Evans & Howard, 1973) indicated that mixed dyads have smaller personal space zones than same-sex pairs, however, the mixed dyads in this study were interrupted less often than all-female dyads, but not all-male pairs. Thus, the pattern of results suggest that women are seen as having a lower status than men, even by other women.

These findings have implications for the study of the relationship among gender, personal space, and status. However, space violations are either a reflection—or perhaps a partial cause—of status differences between men and women, and it is difficult to determine the independent effects of both these variables. Thus, future study of gender differences in space violations should be focussed on gender differences when status is held constant. Moreover, it is likely that a complex myriad of both verbal
and nonverbal factors influence gender differences in proxemic behavior (Hall & Veccia, 1990), and therefore isolating personal space violations in absence of other variables, such as touch, will not provide a clear picture of the relationship among status, space, and gender.
References


Figure 1. Use of space as a function of target sex and dyad type.

Figure 2. Space violations as a function of dyad composition.