ABSTRACT

Boys and girls (10-11 years) responded in a speed task faster in the presence than absence of an audience. Children were faster with the same-than opposite-sexed audiences. The results were discussed in terms of same-sex competitive motives, sex-stereotypes, and opposite-sex distractability. (Author)
Effects of Sex of Children and Experimenters on Social Facilitation

Gregory T. Fouts
University of Calgary

Effects of Sex of Children and Experimenters on Social Facilitation

Gregory T. Fouts
University of Calgary

Research in social facilitation indicates that both facilitation and impairment of learning and performance can result from another's presence. Zajonc (1965) originally placed these effects within the context of Hull-Spence behaviour theory by assuming that the presence of another increases a person's level of motivation, which then energizes all response tendencies. Within this framework, the following hypothesis was derived: For responses which are well-learned, the presence of another will improve performance; but when the responses are not well-learned, the presence of another will not enhance (and may impair) performance.

In the past few years, my colleagues and I have conducted several studies which have shown that young children and youth show the social facilitation effect, that is, there is a difference between performing in the absence and presence of another--with the other usually being an audience. We interpret these findings, as does Cottrell (1968), to indicate that children receive early experiences which lead them to have positive and/or negative anticipations associated with audiences, for example, evaluation, apprehension and excitement.

The purpose of the present study was to assess the effects of sex of preadolescents and sex of adult experimenters on social facilitation in both relatively easy and difficult tasks. It was expected that for easy tasks, the presence of an audience would improve performance; and for difficult tasks, an audience would perhaps impair performance. When considering the sex of subjects and the experimenters, two hypotheses were
formulated: Assuming that girls are more "socialized" and have received more experiences in learning various sources of motivation associated with audiences, it might be expected that the difference between performing in the presence and absence of an audience would be greater for girls than for boys. However, when examining the specific combinations of sex of subjects and experimenters more closely, differences in the amounts of social facilitation may occur depending upon whether the audience is of the same or different sex as the subject. That is, we expected more social facilitation with same-sexed audiences than opposite-sexed audiences. The rationale for this expectation was as follows. First, boys performing with male adults and girls with female adults may have competitive motives aroused; they may wish to impress or otherwise show their best performances. Second and a corollary of the first; with opposite-sexed audiences, boys may wish to appear nonchalant, "cool" or unconcerned, while girls may adopt nonathletic and passive roles with male audiences; both kinds of role adoptions would result in poorer performances with opposite-sexed audiences. And third, preadolescents' growing curiosity and attention to the opposite sex may result in the opposite-sexed audience distracting them from the ongoing task. That is, the motivations of interest and curiosity about opposite-sexed audiences may result in competing behaviours which impair performance. Any one or combination of these three reasons was expected to result in greater social facilitation in the presence of same-sexed audiences.

Forty-eight 10- and 11-year olds, 24 of each sex, were tested individually in a speed task which required correct depressing of six buttons.
forming a "V" shape on a small box; the buttons were consecutively numbered one through six. There were 20 trials of easy button-pushing sequences, for example, 1-2-3-4-5-6 or 1-2-3-1-2-3, and 20 trials of difficult sequences, for example, 3-1-5-2-4-6 or 5-1-3-6-4-2. These sequences had been pretested for difficulty and were randomly presented as well as randomly ordered across subjects. Each sequence was presented on a card and the stack of cards was facing down and located next to the button-pushing box. A subject was told that each time the light in front of the box was illuminated, he was to turn over the top card and push the appropriate buttons as quickly as possible without making errors. After two practice trials, a subject was tested alone and in the presence of a same- or different-sexed audience seated next to him. There were equal numbers of subjects in each of the cells forming the 2-by-2 sex of subject and sex of experimenter matrix. The order of testing alone and with an audience was counterbalanced, and there were 10 easy and 10 difficult trials within each alone and audience condition. The average duration between the first and sixth button depression was calculated, separately for the easy and difficult sequences for each subject within each social condition.

A Task Difficulty by Social Condition by Sex of Subject by Sex of Experimenter analysis of variance on the average durations revealed that the difficult sequences did indeed take longer, and that boys were faster than girls in this task. Also, regardless of the easy or difficult sequences, the presence of an audience produced faster responding than when performing alone. The main effect of interest in this study, however, was that of the combinations of sex of subjects and experimenters on social
facilitation. A significant triple interaction among Sex of Subject, Sex of Experimenter and Task Difficulty revealed that boys performed faster with male adult audiences and girls with female adult audiences, with these differences being more pronounced in the easy tasks. Thus, same-sexed audiences were found to facilitate performances in preadolescents, presumably for the reasons previously outlined.

In social facilitation research, we have not paid as much attention to possible sex differences as have many other areas of social influence, for example, those of imitation, interpersonal attraction, and conformity. It is suggested here that these variables may be of importance and that similar tasks may be sensitive to changes in preadolescents' perceptions of the opposite sex. Social facilitation tasks and others may also be used to monitor the changing sources of motivations which may produce social facilitation effects: for example, changes from negative sources of motivation to positive sources associated with same- and different-sexed audiences. The age of the audience is also likely to be important in social facilitation research with children and adolescents; for example, if the audiences in the present study had been peers, would the motives of competitiveness and curiosity have been more strongly or weakly aroused?

And finally, we should also be aware of the implications of such findings for classroom settings, which usually necessitate performance in the presence of others. When there are sex differences among students in their learning and performance, is it not possible that one variable may be whether the teacher is the same or opposite sex? And what are the
students' experiences which lead to social facilitation or impairment, and how can we optimize classroom performance given the likelihood of social facilitation effects? These issues and others in social facilitation need further refinement and research.