

SOCIAL FACILITATION

The question at the heart of social facilitation research is how the presence of another person affects performance. If you play a musical instrument alone versus in front of an audience, is your performance typically better or worse? If you type on a computer with no one around, compared with when someone else is merely working in the background or observing you, how do these conditions affect both the speed and the accuracy of your typing?

Allport (1924) first used the term *social facilitation* to describe “an increase in response merely from the sight or sound of others making the same movement” (p. 262), although it now refers to either an increase or decrease in response and from a person who might not be making the same movement. Vaughan and Guerin (1997) argued that an earlier experiment by Triplett (1898), commonly said to be first in social facilitation, was not related.

The factors affecting performance in the presence of another person were comprehensively delineated by Allport (1924) and Dashiell (1935), and they include competition (rivalry), modeling, encouragement or social reinforcement, arousal, monitorability, imitation, group membership, distraction, and evaluation (Guerin, 1993). There is evidence for each of these, and they have separate research literatures.

Social facilitation research has probably held together as a distinct topic only because of the work of Robert Zajonc. Zajonc (1965) first hypothesized that new or poorly learned actions would be facilitated. For example, an accomplished flute player would perform better with other people present, whereas a poor or beginner flute player would do worse. This formed a simple 2×2 experimental design with participants performing alone or with someone else present and performing either a well-learned or a new behavior. At least 15 theories for this were proposed between 1965 and 1993, and at least 100 tests were based on this simple design (Guerin, 1993). Since Zajonc’s thorough review, more theories and studies have appeared without adding anything new to the lists of Allport (1924) and Dashiell (1935).

The second hypothesis of Zajonc (1965) was that, apart from the factors mentioned earlier, there still might be effects from just the “mere presence” of another person, a term probably taken from Burnham (1910, p. 766). This negative definition led researchers to attempt to control for all other factors while measuring performance changes. However, it was difficult to control for so many other factors, and only 91 of 313 studies had suitable controls (Guerin, 1993). This situation has not improved since that review, and none of the new studies examined for this current review has learned from the earlier design faults. The most common of these faults was to have an experimenter present in the “alone” condition.

It has been argued that this whole research endeavor was unsuccessful not only because all the factors could not easily be controlled, but also because a single measure was typically used as evidence for both the effect of social facilitation and for the alternative theory (Guerin, 1993). Theories were needed of what constituted mere presence so that independent measurements could be made of performance and the theoretical mechanism. This has continued in the most recent research in this area.

Two reliable main effects have been found using the simple designs and single measures. First, when someone else is present, people tend to behave in accordance with socially expected standards of performance. This leads to conformity with what they think the experimenter or others want them to do, which is usually to try harder at their performance and to do well, but only when they believe that they can be monitored (i.e., when there can be consequences by the experimenter). The second main effect that has been found is an increase in alertness or attention. That is, people are more attentive to what is going on, or are more rule-governed or verbally governed in their behavior, when someone is present versus when they are alone. This impacts their performance in different ways: If the task is difficult or new, then they will do worse if they are paying attention elsewhere (Sanders, 1984); if the task is easy, then they might be more relaxed if they have time to watch what people are doing (Guerin, 1993).

There is also a large social facilitation research literature with nonhuman animals. The findings seem to reflect what the species normally does alone or in groups (Guerin, 1993). Normally, solitary animals (cats) will become fearful if put in the presence of another animal and will be therefore feeding but increase other aggressive or defensive behaviors. Animals that normally live in groups (rats) will tend to interact socially and eat less but play more when put together. Chicks put together in groups become less fearful but do not interact and therefore eat more than when alone.

The problem, then, is similar to that suggested for human studies. If only a single measure is used, such as the facilitation or inhibition of feeding, then there were contradictory findings: The rats eat less in groups, but the chicks eat more. If the whole context or social ecology is measured, then the contradictions disappear: The rats use their time together to groom and play and therefore stop eating, whereas the chicks reduce their fear activities when in groups and spend the extra time eating.

A recent new area to draw on the social facilitation literature is studying the effects of performance on electronic devices such as computers. As employers wish to know what computer operators are doing, the question is whether monitoring their performance electronically (when no actual person is present) has an effect. Although on the whole, such studies have not learned from the

design faults and theoretical distinctions outlined previously and still use the term *social facilitation* casually, some interesting research has been done. For example, one study linked the shell of a social facilitation study to participants' perceptions of fairness when being electronically monitored (Douthitt & Aiello, 2001).

The problem of social facilitation research with humans comes down to the fact that there is too much reliance on simple designs and sparse measures. It is not enough to know that people type less when someone else is present with them; we need to measure what they are doing instead. It has also been argued that all behavior is social for humans, even when alone (Guerin, 2001) and that the full context needs to be investigated if sense is to be made of the vexing question of social facilitation.

REFERENCES

- Allport, F. (1924). *Social psychology*. New York: Houghton Mifflin.
- Burnham, W. H. (1910). The group as a stimulus to mental activity. *Science*, *31*, 761–766.
- Dashiell, J. F. (1935). Experimental studies of the influence of social situations on the behavior of individual adults. In C. Murchison (Ed.), *A handbook of social psychology* (pp. 1097–1158). Worcester, MA: Clark University Press.
- Douthitt, E. A., & Aiello, J. R. (2001). The role of participation and control in the effects of computer monitoring on fairness perceptions, task satisfaction, and performance. *Journal of Applied Psychology*, *86*, 867–874.
- Guerin, B. (1993). *Social facilitation*. Cambridge, UK: Cambridge University Press.
- Guerin, B. (2001). Individuals as social relationships: 18 ways that acting alone can be thought of as social behavior. *Review of General Psychology*, *5*, 406–428.
- Sanders, G. S. (1984). Self-presentation and drive in social facilitation. *Journal of Experimental Social Psychology*, *20*, 312–322.
- Triplet, N. (1898). The dynamogenic factors in pacemaking and competition. *American Journal of Psychology*, *9*, 507–533.
- Vaughan, G. M., & Guerin, B. (1997). A neglected innovator in sports psychology: Norman Triplett and the early history of competitive performance. *International Journal of the History of Sport*, *14*, 82–99.
- Zajonc, R. B. (1965). Social facilitation. *Science*, *149*, 269–274.

BERNARD GUERIN
University of South Australia