A LINE ON LIFE

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Social Facilitation *

Do you perform better when people are around or when you are alone? As early as 1897, psychologists noted that cyclists achieved higher speeds when racing together than when racing alone. This led to an experiment with children in which they were instructed to turn a fishing reel as fast as possible. Sometimes two children worked together, each with their own reel. At other times, the children worked alone. The children tended to work faster in **coaction** – with someone else doing the same task – than when they were working alone.

In the 1920s, psychologists found that even a passive spectator – not a co-actor, but merely an audience – had the same effect of increasing the productivity. These positive effects of both an audience and coaction were labeled **social facilitation**.

However, social psychologists found that social facilitation was not all it first appeared to be. In contrast to the alone condition, even though subjects did *more* with others around, they also made *more errors*. In other words, even though the *quantity* increased, the *quality* decreased! Even so, this was contradicted by later studies, which indicated that *both* the quantity and the quality of performance improved under social facilitation as compared to being alone. How could this contradiction be resolved?

Social facilitation helps productivity with overlearned tasks,
but it hinders effectiveness with complex or less-learned tasks.

When experiments in social facilitation are looked at more closely, an interesting fact seemed to surface. If the tasks were highly practiced or instinctive responses – like eating – the subjects performed better in the presence of others than when alone. When the tasks were more complex or not learned well, they did worse with others than when alone.

These results relate well to a principle of motivation. If you are highly aroused, you tend to do better in your **dominant responses** – those that are habitual or overlearned. Simpler tasks are more easily overlearned, leading to social facilitation. More complex tasks – that have not been extremely well learned – tend to suffer when other people are present.

As an example, when watched by an audience, humans tend to learn a simple maze faster and a complex maze more slowly than when they are alone. Likewise, easier word lists are memorized faster and harder lists slower in front of an audience than when done alone.

One theory uses feelings of competition or concerns about being evaluated to explain this effect. Apparently, these concerns raise the person's **arousal level**. Early studies did indicate that – if elements of competition are removed – the effects of social facilitation are almost gone. In contrast, other studies indicate varying effects depending on the type of audience. If an expert watches, social facilitation increases. However, if the observers are "*undergraduates who want to watch a psychology experiment*," social facilitation decreases. If the audience was blindfolded – so they could not watch what the person did – they found no social facilitation.

Even so, there is still a problem. Since they are in an experiment and their responses are recorded, subjects might still *believe* that they are being evaluated. It is hard to separate evaluation concerns from the presence of others.

However, a clever study was designed to eliminate concerns about both alone and audience conditions. In a waiting room, each subject was seated in front of a computer and asked to provide "*background information before the experiment begins*." First the subject enters his/her own name – for example, "*Joan Smith*." Then s/he is asked to construct a code name for her/his record by alternating the reversed letters of their name with ascending numbers. (With our example, it would be "*h1t2i3m4s5n6a7o8j*.") In reality, this was the whole experiment. Typing the real name was the easy task, while typing the code name was the hard task. The experiment was over before the subjects had realized that it had begun! One group had typed the material alone – alone condition – while the other group did so with the experimenter watching over their shoulder – evaluation condition. A third group had another "*subject*" in the room with earphones and blindfolded, supposedly being prepared for a sensory deprivation experiment – mere presence condition. The computer automatically recorded how long it took to do each task.

In contrast to the alone condition, subjects in the other conditions performed the complex task more slowly and the easy task more quickly. In other words, both evaluation and the mere presence of another person produce the social facilitation effect.

So if you are going to do any complex task in front of others, you will do much better if you *overlearn* it to the point where it seems to be part of you. In this way, your higher level of arousal will work to your benefit. This is why – in contrast to last minute cramming – it is much better to overlearn material that is going to be given in an exam.

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* Adapted from Atkinson, Atkinson, Smith & Bem's *Introduction to Psychology*, Harcourt Brace Jovanovich Publishers, 1990, pages 724-726.