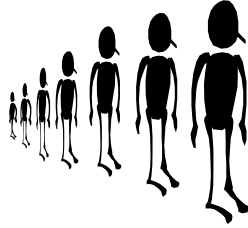


# Social Psychology



## Social Facilitation and Inhibition in Groups

On many occasions during your student life you will be working in groups. Group activities occur frequently in our lives, whether it's being brought up in a family, working with colleagues or playing in teams. The common factor in this is interaction between members of the group and it is often assumed that being in a group has an influence on the individual. Studies on social facilitation and inhibition (SFI) concern the extent to which a given piece of an individual's behaviour is affected by the real, imagined or implied presence of others.

Perhaps the first social psychology laboratory experiment was undertaken in this area by Norman Triplett in 1897/8. In his research on the speed records of cyclists, he noticed that racing against each other rather than against the clock alone increased the cyclists' speeds. He attempted to duplicate this under laboratory conditions using children and fishing reels. There were two conditions: the child alone and children in pairs but working alone. Their task was to wind in a given amount of fishing line and Triplett reports that many children worked faster in the presence of a partner doing the same task. Subsequent researchers found that performance improved as a result of the presence of others (**social facilitation**) whilst others found that it was impaired (**social inhibition**). Triplett's experiments demonstrate the **co-action effect**, a phenomenon whereby increased task performance comes about by the mere presence of others doing the same task. F.H. Allport found that even when elements of competition were reduced, subjects performed better when they could see others performing similar tasks. The co-action effect may come into operation if you find that you work well in a library in preference to working at home where it is equally quiet (and so on). Other co-action effect studies include Chen (1937) who observed that worker ants will dig more than three times as much sand per ant when working (non-co-operatively) alongside other ants than when working alone and Platt, Yaksh and Darby (1967) found that animals will eat more of their food if there are others of their species present.

Social facilitation occurs not only in the presence of a co-actor but also in the presence of a passive spectator/audience. This is known as the **audience effect**, surprisingly. Dashiell (1935) found that the presence of an audience facilitated subjects' multiplication performance by increasing the number of simple multiplications completed. Travis (1925) found that well-trained subjects were better at a psychomotor task (pursuit rotor) in front of spectators. However, Pessin (1933) found an opposite audience effect, namely that subjects needed fewer trials at learning a list of nonsense words when on their own than when in front of an audience.

It seems, then, that the extent of social facilitation or inhibition depends upon the nature of the interaction between the task and the performer. In some cases the

presence of co-actors/audience improved the quality of performance (Dashiell 1935, Cottrell 1972) but in others it impaired the quality (though it increased the quantity of, say, multiplications). What sorts of behaviours are improved by the presence of others and what sorts impaired? According to the main recent researcher in this field, Zajonc, behaviour that is either instinctive or very well learned/ highly practised is improved whereas behaviour that is novel or complex is impaired. Zajonc's (1966) fundamental claim is that "an audience impairs the acquisition of new responses and facilitates the emission of well learned responses". His crucial theoretical contribution was that the **presence of others enhances the emission of dominant responses**. A dominant response is simply the response that is most likely to occur in the presence of the given array of stimuli. If a task is easy for the person, then the dominant response will be the correct one (i.e. most likely) and so the audience/co-actor helps elicit this. In a difficult task, the dominant response is the incorrect one(s) (i.e. the most likely again) and so the audience/co-actor helps elicit this. The question is why? Why does the presence of others result in the dominant response?

Zajonc's explanation is based upon Clark Hull's theory of motivation which states that a high level of arousal/drive will result in what is now called stress and will produce habitual behaviours (which are often incorrect). The presence of others adds to arousal and when combined with the arousal arising from a difficult or unfamiliar task results in stress and consequent poor performance. The extra arousal contributed by the presence of others takes us past our optimum level of arousal and result in the dominant response being something we can do easily, not something which is new or demanding. If the task's successful completion depends upon showing learning then the dominant (already learned) responses will, of course, be wrong. This is supported by the Yerkes-Dodson theory of optimal arousal and it would be reasonable to assume that, as individuals differ in their optimum arousal level according to whether they are introvert or extrovert, so it might be expected that the social facilitation/inhibition effects will similarly be different between individuals. It is not a straight forward case that easy tasks are facilitated, difficult tasks inhibited. Rather, the *interaction* between the individual and the task nature needs to be considered. A difficult task for Sam might be simple for Alex. Perhaps this is why we say an extrovert likes to show off in front of a crowd but nothing could be more stressful for an introvert. Of course, you wouldn't want an extrovert flying your space shuttle.

Zajonc, Heingartner and Herman (1969) tested this theory of SFI using the interesting phenomenon that cockroaches are highly motivated to run away from bright lights. If there is such a thing as an audience/co-action effect, they should do this faster when there are some of their mates around than when they are on their tod. Sure enough, when the roaches were in a simple maze, they were quicker in pairs or if there were other shiny creature watching them through the transparent walls of the maze, but when they were in a complex maze they were slower at escaping if there were others around. (So, if you need to catch a scurrying roach, give it a complex task and some onlookers to slow it down. What do you mean that never occurred to you?) Lest you think it's just cockroaches, Hunt and Hillary (1973) found similar results with humans and Cottrell, Rittle and Wack (1967) found that humans memorise simple words more quickly with a social presence than a list of difficult words. It just goes to show, once again, the remarkable parallels between the cockroach and the human condition.

Arguably, SFI is more complex in humans than in our crustacean cousins and we might expect that our performance is affected not just by the mere presence of others but by feelings of being judged by others. Cottrell (1968, 1972) criticised Zajonc's view, suggesting that increased arousal results not in innate responses but solely in well-learned responses. We are aroused by audiences because we have learned that they evaluate our performance, they are not merely passive spectators, we believe. Such **performance evaluation apprehension** enhances drive/arousal. A study by Henchy and Glass (1968) illustrates Cottrell's point. Subjects were assigned to one of four conditions:

- |                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| 1. <i>alone</i>               | Erm...                                                    |
| 2. <i>expert together</i>     | task in front of two others perceived as experts          |
| 3. <i>non-expert together</i> | task performance in front of two non-experts              |
| 4. <i>alone recorded</i>      | subject alone but filmed to be evaluated later by experts |

Facilitation of the dominant (well-learned) responses occurred only in conditions 2 and 4, whilst task performance in the non-expert together condition was similar to that in the alone condition. These results show that some concern over being evaluated is required in order that dominant responses are emitted. Another experiment which attempts to investigate whether it is the mere presence of others that affects us or whether there is evaluation apprehension was carried out by Schmitt et al in 1986. Subjects were asked 'before the experiment' to type their name onto a form (which amounted to the simple task) and then were asked to type it in code (backwards with ascending digits between each letter e.g. H1P2L3A4R5, amounting to the difficult task - try it; it just took me five minutes, but my name's not Ralph, I suppose). This was done under one of three conditions: a) alone b) with the experimenter looking on c) with another person merely present in the corner of the room blindfolded and wearing headphones. The results showed that an easier task is made easier by the mere presence of another (10 seconds compared with 15 seconds alone) and that someone perceived as judging the subjects had the effect of speeding them up even more (7 seconds). However, in the difficult task, the presence of others led to social inhibition but less so if the other present was seen to be judging performance (52 seconds alone, 63 being judged and 73 seconds with the geezer just sitting in the corner). The interesting bit, in case you are finding it a bit difficult to focus at this point, is the difference between 63 and 73 seconds, explained by Cottrell's notion of performance evaluation apprehension.

I bet you wish you'd read this with an audience don't you? Don't worry. Your performance might be improved by performance evaluation apprehension when you realize that you could get an exam question on this.