SOCIAL REINFORCEMENT OF THE WORK BEHAVIOUR
OF RETARDATES AND NORMALS

by

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SUMMARY

This work is concerned, in general, with investigation of the social reinforcement of working behaviour in a variety of settings. In theoretical terms, work is considered as an instance of operant behaviour, and comparisons are made between it as an operant and work conceptions deriving from ergonomics and industrial/organizational psychology. Possibilities concerning the origin of social reinforcement are examined, as are theories proposed that explain its operation. The special need of retardates for social reinforcement is also discussed. The literatures on behaviour modification in classrooms involving social reinforcement and on the use of such reinforcement in sheltered workshops are reviewed.

A series of experiments was conducted to investigate the efficacy of social reinforcement in a number of work situations. Experiment 1 investigated the effect on working behaviour in retarded clients of social reinforcement from the supervisor contingent upon working behaviour within a sheltered workshop. Significant improvements in working behaviour in treated subjects confirmed this as a useful technique. The time of day in which reinforcement was delivered was not a significant factor.

Experiment 2 investigated the importance of the reinforcement contingency in the same situation. Noncontingent social reinforcement (achieved via yoking) was as effective in increasing attending behaviour of the mildly retarded clients as was such
reinforcement delivered contingently, except during a phase of
twice daily reinforcement sessions.

The durability of supervisor social reinforcement in the
sheltered workshop was tested in Experiment 3. This study
investigated a decline in reinforcer effectiveness noted in
Experiment 1 after several weeks of exposure. Experiment 3
showed that contingent social reinforcement was still effective
after prolonged periods of treatment.

Experiments 4 and 5 examined social reinforcement with
tertiary students involved in a complex cognitive task.
Experiment 4 compared the effects on performance of contingent
and noncontingent social reinforcement from the experimenter, and
showed that noncontingent reinforcement was ineffective in this
situation. However, contingent social reinforcement was
effective in increasing progress and in producing specific
knowledge gains. The interaction between anxiety level and
responsivity to contingent social reinforcement was examined in
Experiment 5, testing the prediction that more anxious subjects
would be most influenced by the reinforcement. This hypothesis
was not supported although the overall efficacy of social
reinforcement was confirmed.

Experiment 6 investigated social reinforcement in a high
school classroom using reinforcement from the teacher to increase
attention to mathematics work. In this study, the effect of
such reinforcement on the behaviour of adjacentally seated peers
who thus received vicarious reinforcement was observed.
Contingent reinforcement was superior to noncontingent reinforcement as under one condition in Experiment 2, and vicarious reinforcement was equally as effective as direct reinforcement. A significant trend upwards in responding during the initial baseline phase indicated that the observer's presence was influencing students' performance.

Further experiments monitored attending behaviour and output concurrently. Experiment 7A investigated the effect of contingent social reinforcement on both attending behaviour and output of retarded clients in a sheltered workshop. The delivery of social reinforcement led to a significant increase in attending behaviour in experimental subjects, but output increased in both treated and nontreated subjects, suggesting that control subjects were somewhat affected by the reinforcement to targets. In Experiment 7B vicarious reinforcement in clients seated at the same table with direct reinforcement subjects was examined. Vicarious reinforcement was as effective in increasing attending behaviour as direct reinforcement and output was similarly affected.

The nature of the reinforcing stimulus was considered in Experiment 8. Retarded clients working at a simple packing task in a laboratory-type situation received social reinforcement contingent upon output. The social reinforcement was either "warm" or "cold" and either standardized or nonstandardized. "Warm" reinforcement did lead to higher output but standardization was not a significant factor. Attending to the task was also
monitored and was unaffected by the type of reinforcement, although a main reinforcement effect occurred.

Experiments 9A and 9B investigated the effects of vicarious and direct reinforcement, both contingent and noncontingent, on the working behaviour and output of retardates in a sheltered workshop. As in Experiments 2 and 6, social reinforcement from the supervisor was given either contingently upon attending to task or noncontingently via yoking. The social reinforcement treatment was again effective. Contingent reinforcement was associated with higher attention than noncontingent reinforcement but not with higher output. Correlations between changes in the two performance measures during experimental intervention (as found in Experiments 7A and 7B) were found to be significant. Vicarious reinforcement was not inferior to direct reinforcement.

The results of the experimental series are discussed in terms of the power and usefulness of both vicarious and non-contingent reinforcement as control techniques, and the value of social reinforcement in improving performance in the disadvantaged groups studied. Implications for future research are considered along the following lines: the importance of the reinforcement contingency in the situations studied; the nature of the vicarious reinforcement effect; and the similarity between retardates and normals viewed as populations exhibiting behavioural deficits differing substantially only in extent.