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Field-experimental approaches  
to modeling of social behavior  
of adults

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### Summary

Three field experimental studies using pretest-posttest control group designs are reported in which modeling procedures were applied to adult persons. All activities investigated referred to the concrete professional performances of the subjects, i.e. work in a textile factory, kindergarten teachers' behavior, and nurses' therapeutic interactions with psychiatric patients, respectively. The results confirm the notion that social learning through imitation is efficient in adult educational processes where the acquisition or modification of concrete behavioral units is endeavoured.

### Zusammenfassung

Es wird über drei feldexperimentelle Untersuchungen zum Modellernen bei Erwachsenen berichtet. Pretest-Posttest-Kontrollgruppenversuchspläne wurden auf das konkrete, berufsbezogene Verhalten von Textilarbeiterinnen in einer Fabrik, von Kindergärtnerinnen in der Ausbildung und von Pflegepersonal in der Ausbildung an einer psychiatrischen Klinik angewendet. Die Ergebnisse stützen die Auffassung, wonach soziales Lernen durch Imitation ein wirksames Verfahren des Erwerbs bzw. der Modifikation konkreten Verhaltens im Rahmen der Erwachsenenbildung darstellt.

Field-experimental approaches to modeling of social  
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The role of modeling (social learning through imitation) (BANDURA 1977) in processes of early socialization is well known since decades, and is well established in psychological studies of human development (cf. GOSLIN 1969). Besides developmental concepts of social learning through imitation, the theory has been transferred in the last several years to areas of adult learning, mainly as "arbitrary" behavior modification in therapeutic or clinical fields of application (BANDURA 1969).

The studies reported as follows also represent a transfer of the social learning paradigm; in this case to three different sectors of adult education. The three studies have the following characteristics in common:

- a) they are all field experimental, i.e. modeling procedures were induced as part of the participants' usual lectures
- b) all the experiments used the same design:
  - 1) the experimental groups were presented a model via videotape
  - 2) the control groups I received the identical information as the experimental groups, however as a verbal report of the same length, presented life
  - 3) the control groups II received no information
- c) in all experiments the participants had to learn to cope with special problems of different kind in each study

d) the kind of behavior to be learned was an essential part of the participants usual interactions in their different professional performances.

All field experiments were planned and organized to overcome the well-known criticisms concerning external or ecological validity of laboratory studies in social psychology and to check the modeling effect in natural settings so that the possibility of application to actual adult educational processes could be explored.

### Summary of experimental procedures

#### Experiment 1

The effects of a solidarity model in coping with three problem situations on evaluations and intended performances of joint actions (solidarity) in similar situations (operationalized via behavior-oriented inventories) are studied in a pretest-posttest control group design with follow-up seven weeks after the first posttest (three experimental runs).

#### Experiment 2

The effects of model "social-integrative" behavior in kindergarten interactions on evaluations and performances of prospective kindergarten teachers' social-integrative behavior (operationalized via inventories and behavior observations) were studied in a pretest-posttest control group design with follow-up after four weeks (one experiment).

#### Experiment 3

The effects of model educational/therapeutic behavior in nurses' interactions with psychiatric patients on the evaluation and readiness to perform similar forms of behavior (operationalized via a behavior-oriented inventory) were

studied in a pretest-posttest control group design with follow-up after four weeks.

In Experiment 1 the subjects were 31 participants of three different adult education lectures sponsored by the textile trade-union. The experimental groups saw a film showing a female worker together with a group of others initiating successfully actions of solidarity to solve different problems of disadvantaging female workers in a textile factory (augmenting norms of piecework, prospective loss of employment, prospective replacement of older female workers to inferior positions). Control group I listened to a lecture on "Solidarisches Verhalten"; control group II listened to a general lecture on women's discrimination. Evaluations and potential or actual performances of joint behavior (solidarity) in critical situations of female discrimination in the factory were assessed by a special behavior-oriented inventory (in a pretest; in a posttest just after experimental treatment; and in a follow-up seven weeks later). Results exhibit a modeling effect: There are tendencies of increasing preferences of the behavioral alternatives of solidarity within the experimental group and control group I while control group II decreased in preference. Experimental group and control group I differ only in the follow-up, the film-model group showing greater stability of the treatment effect.

In Experiment 2 the subjects were 18 prospective female kindergarten teachers. The experimental group saw a film with teacher-model interacting with children in a social-integrative manner, solving several minor conflicts between children or motivating children to do jobs they don't usually like. The control group listened to a lecture as usual concerning educational behavior in kindergarten. Observations of behavior in kindergarten interactions of

all subjects/participants were assessed by 12 behavior categories while evaluations and behavior performances were assessed by a special behavior-oriented inventory (during pretest, first posttest after treatment, and follow-up after three weeks). Nonparametric tests exhibited only tendencies of modeling effects, the film-group performing more social-emotional acts and less negative verbalizations towards the children as compared with the control group.

In Experiment 3 the subjects were 12 students of the nursing staff in a psychiatric facility. The experimental group saw a film showing a nurse model performing interactive behavior with different patients motivating them to autonomous acts like dressing, washing up, participating in group sessions etc. Control group I listened to a verbal report on positive forms of social interactions between staff and patients. Control group II received no treatment except normal lessons. Evaluations and preferences of educational/therapeutic vs. protective behavior were assessed by a special behavior-oriented inventory (pretest; posttest just after treatment; follow-up after four weeks). Nonparametric tests exhibited the following results: Both the film and report groups show tendencies of more educational/less guarding behavior towards patients in the first posttest; the follow-up shows stable improvement of desirable behavior only in the film group; the report group decreases to its initial position after four weeks.

The field-experimental results support our expectations that social learning through imitation may be a potential pathway to improve several adult educational processes especially where the acquisition or modification of concrete behavioral units is endeavoured. The results are in accordance with those of WALLACE et al. (1973) concerning

life-models in psychiatric settings, GULANICK & SCHMECK (1977) and ALSSID & HUTCHINSON (1977) concerning film-models for undergraduate students of psychology in counselor trainings, and TALBERT et al. (1975) concerning filmed models for undergraduate students of psychology acquiring different techniques of behavior modification of children.

Further field-experimental investigations actually performed aim at demonstrating the efficiency of behavior modification procedures concerning staff members of psychiatric facilities by using behavior observation data instead of verbal report measures.

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