This study was designed to investigate the following question: what treatment is most effective for particular types of clients with a specific problem. One of the objectives of the study was to determine if any relationship existed between two predictor variables (perceptual orientation: field independence-dependence, and personality type: extraversion-introversion) and treatment effects as shown by the criterion variables. The reasons for using these two predictor variables are that studies had been done on these variables pointing out characteristics of each. On the basis of this study it was not possible to conclude that any relationship exists between treatment effects and predictor variables. A variety of difficulties which may have contributed to these results were identified, including differences in subjects and their career development, field setting, and the treatments themselves. (KJ)
SELECTING PERSONALITY AND PERCEPTUAL CHARACTERISTICS OF SUBJECTS FOR PREDICTING THE EFFECTS OF COUNSELING TREATMENTS

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One of the more important questions in counseling research today involves the tailoring of specific treatments to individual clients. Since no one counseling technique will be satisfactory with all clients, "counseling research must deal with client variability and with the problem of matching client needs and counseling treatment" (Blocher, 1967). Recognizing that individual differences do, in fact, exist, one of the tasks of counseling research is to determine what characteristics of clients interact with different treatments so that the most effective treatment for different types of clients can be found (Paul, 1967; Thoreson & Kunce, 1968; Thoresen, 1969). This paper deals with a study designed to explore this notion.

Criterion Variables

Since a detailed description of the study has been reported elsewhere (Hamilton, 1969), only a brief review will be presented here. Two alternative treatments for stimulating adolescent career exploratory behaviors were developed and experimentally tested: (1) video peer social modeling, and (2) structured group interaction using written stimulus materials.

Structured Stimulus Materials

Planned stimulus materials were used in small group counseling sessions consisting of eight Ss per group, led by one counselor. The groups met once a week for four weeks. The written stimulus materials were designed to assist adolescents in identifying career goals, gathering relevant and reliable information, processing information and considering alternatives. During each small group session, the counselor verbally and nonverbally reinforced S responses, such as asking effectively-phrased questions relevant to a particular occupational characteristic.
Peer Social Modeling

Four video-presented peer social modeling sessions were used in four meetings paralleling the content of the structured stimulus materials. In each meeting Ss observed a video tape in which four peer social models and a model counselor discussed specific ways of gathering information and processing it according to preferences and alternatives. On each video tape, the model counselor verbally and nonverbally reinforced career relevant responses on the part of the model students. No group discussion occurred after Ss viewed the video tape.

Predictor Variables

The Ss in the present study were assessed on two predictor variables: perceptual orientation (field dependence-independence) and personality style (extraversion-introversion). Regarding an earlier study that sought similar treatment outcomes and that employed an audio modeling technique. (Stewart, 1969), the author noted, "much needs to be learned about what types of modeling procedures work best with what kinds of students." The Stanford study attempted to gather this type of interaction data.

Perceptual orientation (field dependence-independence) was measured by means of the Hidden Figures Test (French, Ekstrom & Price, 1963). It consisted of two sections of sixteen questions each. Ss were given 10 minutes on each section and were required to find a geometric figure, embedded in one of the five complex "fields," that corresponded to a given design. The use of the perceptual field dependence-independence is based primarily on the research done by Witkin (1963, 1964, 1965, 1967) which suggests that this variable may be important in observational learning. This idea is strengthened by research from social psychology (Brown, 1965) which supports the contention that an
individual's performance on a variety of tasks is affected by the way that individual perceives environmental events. According to Witkin, a field dependent person is one who finds it "difficult to overcome the influence of the surrounding field or to separate an item from its context," A field independent person, on the other hand, is one who can "distinguish an item from its context."

Specifically, with regard to perceptual orientation, the following hypothesis was tested: perceptually independent Ss (those scoring high on the Hidden Figures Test) would be more influenced by the peer social modeling treatment while perceptually dependent Ss (low scorers) would be more influenced by the structured stimulus materials treatment. Because of the tremendously complex pattern of visual and auditory stimulus cues presented in a social modeling procedure, it seemed reasonable to assume that, based on the work of Witkin, a field independent person would be better able to discriminate the various parts of the modeled demonstration and would be able to isolate, out of the whole, certain specific cues. The perceptual variable was selected because it seemed to hold some promise for helping to identify Ss who would be likely to benefit from a video taped presentation.

On the other hand, Ss who were judged to be field dependent might be expected to benefit more from the structured stimulus materials. In this treatment, the range and nature of stimuli were much more narrow and direct than they were in the modeling presentation. Therefore, field dependent Ss were expected to have less difficulty learning from structured group interactions than from observational experiences.

Ss were assessed on the second predictor variable, extraversion-introversion, based on the work of Eysenck (1960, 1967). He maintains that a combination
of constitutional and environmental factors determines the degree to which an individual learner is responsive to his immediate environment. Individuals labeled as introverts possess a strong excitation and weak inhibition balance and, according to Teplov (Gray, 1967) are characterized by high arousability. They are responsive to their environment and can learn new responses quickly and extinguish slowly. Extraverts, on the other hand, possess a weak inhibition and a strong excitation balance which means, according to Teplov, that they are slow to learn new responses and quick to extinguish.

Eysenck's work suggests that the effectiveness of different types of counseling treatments may depend on the individual's personality type. Introverts should be provided with counseling procedures involving considerable reflective and imagery-related behavior because they acquire new responses readily without the aid of direct sensory stimuli. Extraverts, however, should be counseled in a setting demanding more social group interaction and a variety of sensory activities involving movement and action since they are less sensitive to their immediate environment.

The Stanford study attempted an empirical test of these assumptions derived from Eysenck's research findings. Ss were classified as introverts and extraverts using the Maudsley Personality Inventory (Eysenck, 1962), an instrument which has been used in a large number of other studies and research on personality. One reason for using the Maudsley was due to the fact that the introversion-extraversion scale "has been the subject of intensive experimental research in Eysenck's laboratory for more than a decade" (Buros, 1965). Specifically, it was hypothesized that Ss classified as introverts would be more influenced by peer social modeling while extraverts would be more influenced by the structured stimulus materials.
Results

It should be noted that, for purposes of this paper, we are not interested in the main effect difference between treatments, but rather in the interaction effect of a particular treatment with the two predictor variables. The results of the data analysis will be discussed in detail in the symposium paper by Bruce W. Bergland. Suffice it to say that the degree of perceptual field independence and of personality extraversion as assessed in the present study did not practically or statistically predict in a significant way the extent to which peer social modeling or the structured stimulus materials treatments influenced Ss' performance on the various criterion measures. In other words, the major source of variability in Ss' performances were not accounted for by the variables used in this study. Due to factors to be discussed next, it cannot be concluded, based on this study, that a relationship between these particular predictor variables and these particular treatments does not exist. Rather we can only say that such a relationship was not demonstrated in this particular case.

Discussion

One of the problems of the present study was the lack of control exercised over numerous variables. For example, Ss may have been quite different in terms of their career development and vocational exploratory experiences. Differences in the field settings of the three high schools from which Ss were drawn may also have affected the results. It would be advantageous in the future to have a greater degree of homogeneity among Ss on the criterion (and other) variables in order to increase the likelihood of finding interactions, if any do in fact exist, between the predictor variables in this study on the one hand and treatment outcomes on the other.
Another source of difficulty may have been the treatments themselves. The complexity of presentational forms in the treatments interacting with heterogeneous Ss in uncontrolled ways probably modulated the effects the predictor variables had. In addition, the treatments may have been too similar to each other. For instance, is observing a video tape of a group session sufficiently different from actually being part of a group counseling experience, especially for Ss who spoke infrequently? For Ss who participated little in the structured interaction, it may have been tantamount to observing live models, i.e., Ss who were more actively involved in the discussion and role play. Thus, in some cases, the two treatments may simply have been variations of the same technique—modeling—and not really two different treatments. In the future, great care must be taken to differentiate treatments if the question of what treatment works best for what kinds of clients is to be answered. In other words, future studies should use treatments whose component characteristics are known and controlled beforehand.

The possibility exists that the instruments used to assess the predictor variables may have been inappropriate, especially the Hidden Figures Test. In retrospect, many Ss seemed to have required a "warm-up" period. For them, scores on the second section were much higher than on the first. Other Ss failed to complete the test after finding it very difficult to detect several of the figures. They invariably received scores of "0" on the second part. In both situations Ss' scores reflected the effects of learning and motivational variables in addition to their actual performance. Future investigations should explore the use of alternative instruments to assess perceptual field independence-dependence.
A further difficulty involved the problems encountered in administering the instruments used to assess field independence-dependence and extraversion-introversion. There was tremendous variability between the three schools in the actual testing conditions. For instance, in one school all the As were tested in a room large enough for each to have a desk of his own, while in another, the testing room was very small. There were only enough seats for half of the As, and the rest had to make their responses while sitting on the floor. Also As' reactions to treatments and performance on the criterion variables may have been affected by their experiences with these assessment instruments. All As volunteered for what was described to them as a special counseling project and then their first contact with it was in the form of the two tests. It was, in other words, a surprise to them since they had no prior information about what was happening. In future studies, testing should be done, if possible, as part of the regular school program, both in order to more closely standardize conditions and to disassociate the testing from actual treatment conditions.
Summary

This paper dealt with a study designed to pursue the question of what treatment is most effective for particular types of clients with a specific problem. One of the objectives of the study was to determine if any relationship existed between two predictor variables (perceptual orientation: field independence-dependence and personality type: extraversion-introversion) and treatment effects as shown by the criterion variables. The reasons for using these two predictor variables was discussed. On the basis of this study it was not possible to conclude that any relationship exists between treatment effects and predictor variables. A variety of difficulties which may have contributed to these results were identified and some implications for future research were presented.
References


