In spite of the potential which experimental research methods affords counselors in the development of effective counseling services, such methods are seldom used. After briefly reviewing the arguments against experimental research and their underlying beliefs, the author sets out: (1) to explore the implications of using the laboratory to conduct experimental counseling research; and (2) to describe a laboratory-based counseling research program. A distinction was drawn between the implications of research for counseling (viewed as a function of bridging counseling theories) and applications of research findings to counseling (viewed as a function of theory and the effects of "boundary" conditions which must be considered in applying laboratory research results to counseling.) The conditions were stated as: (1) a conversation (2) between persons of unequal status (3) of some duration in which one participant (4) is motivated to change and (5) may be psychologically distressed. The author provides an example and concludes that laboratory research which evaluates relevant hypothesis and attends to boundary conditions, fills the gap between basic research and counseling practice. (TL)
Experimental Laboratory Research in Counseling

Stanley R. Strong
Student Life Studies
University of Minnesota

ABSTRACT

Laboratory based experimental counseling research answers questions about counseling and avoids the ethical problems attending experimental research in the counseling office. Laboratory events differ from other events only in that laboratory events are created for research purposes. Implications to "real" counseling of the results of "contrived" laboratory research are a function of bridging counseling theories. Applications are a function of theory and the effects of the "boundary" conditions of counseling: (1) A conversation (2) between persons of unequal status (3) of some duration in which one participant (4) is motivated to change and (5) may be psychologically distressed. Laboratory research which evaluates relevant hypotheses and attends to boundary conditions fills the gap between basic research and counseling practice.
Experimental Laboratory Research in Counseling

Stanley R. Strong
Student Life Studies
University of Minnesota

Experimental research methods offer counselors valuable tools for developing effective counseling services. By systematically varying the conditions of treatment offered clients, the helpfulness of these conditions can be assessed. Yet, experimental methods are seldom used. These methods conflict in several respects with counseling services. They require that clients be randomly assigned to the different conditions of treatment. However, the counselor's job is to assign clients to treatments on the basis of client needs. Experimental research methods require that differences among treatments be predetermined and rigorously maintained across clients. However, the counselor's job is to vary ongoing treatment according to each client's needs, and to offer his maximum effort to all clients. Experimental methods may require that clients be misinformed about the conditions of treatment. However, counselors are repulsed by deception. Indeed, Tyler has recommended "outlawing" deception because she feels such practices will reduce client trust in counselors and counseling (Tyler, 1965).

The above arguments against experimental research are based on beliefs about the helpfulness of counseling and the harmfulness of manipulation and deception. Counselors implicitly believe their efforts are beneficial to clients and thus, to withhold their complete helpfulness is contrary to their obligations to clients. Most empirical evidence denies this belief of helpfulness (Eysenck, 1952, 1955). However, counselors have attempted to discredit the negative evidence in favor of their beliefs (Astin, 1961). Secondly,
counselors fear that if the counseling office becomes a setting for extensive experimental manipulation, an expectation for manipulation and deception would be generated in client populations which would impede whatever effectiveness counseling has or may gain. This phenomena is already evident in psychology subject pools where "naive" students distrust experimenters and expect deception.

I believe that clients have a right to expect counselors to be as helpful as they can. When research is conducted in the counseling office, clients should be informed of its purposes and should be given an opportunity to decline to participate. Because of these considerations, it is reasonable that most counseling research has relied on correlational methods where ongoing processes are observed but not manipulated. Unfortunately, correlational methods lack the power to evaluate the casual efficacy of various techniques and have not been helpful in improving counseling. This is the dilemma faced by counselors. In exercising reasonable caution to preserve the integrity of counseling, counselors inhibit the use of research methods most likely to lead to improvements in counseling. The purposes of this paper are (1) to explore the implications of one possible solution to this problem, recourse to the laboratory to carry out experimental counseling research, and (2) to describe a laboratory based counseling research program.

The Research Laboratory and Counseling

The research laboratory provides a method or strategy of answering questions. Using this method, the researcher begins by defining the phenomenon he wishes to study. He then creates or brings about events which will manifest the phenomenon of interest. Because the researcher creates the events, he can rigorously control their occurrence so that error and ambiguity are minimized and the phenomenon of interest is observed and measured. The only factors
which limit the events contrived for research are the physical resources of the researcher, his ingenuity, and ethical and moral considerations. Within these limits, an event in the laboratory may assume the characteristics of any other event. The defining difference between laboratory events and other events is that laboratory events occur solely for research purposes. Other events, such as a counseling interview, occur for other purposes, such as to provide services.

Because of the flexibility of laboratory methods, they can be used in research on questions important to counselors. The major question in the use of laboratory methods in counseling research is the relevance to "real" counseling of results obtained in "contrived" settings. This question may be considered on two levels: (1) When do laboratory results have implications for counseling; and (2) When are the results of laboratory research directly applicable to counseling (Goldstein & Dean, 1966, p. 369). I believe that the implications of research results for counseling are a function of theories or viewpoints which embrace both counseling and the research phenomenon. For example, if dissonance theory is applied to counseling, then the results of research which modify or extend that theory have implications for counseling. That is, as dissonance theory is modified, its implications for counseling are modified. Counseling theory, then, serves as a bridge between the "contrived" laboratory event and the "real" counseling interview. One of the reasons counseling has been affected little by laboratory research is that most theories of counseling are specific to counseling. Thus, knowledge of other events cannot be extended to counseling unless the events simulate counseling. Recently, several more general theories have been applied to counseling such as Hullian learning theory (Dolland & Miller, 1950; Pepinsky & Pepinsky, 1954), Skinnerian learning theory (Krasner, 1963; Strong, 1964; Krumboltz, 1965), dissonance theory (Goldstein, Heller, & Sechrest, 1966; Strong, 1968),
attribution theory (Strong, 1970), social learning theory (Heller, 1969), and
effect expectancy theory (Goldstein, 1966). As a consequence of these applications,
the results of research supporting these theories have implications for
counseling.

"Implications" for counseling is not the same as "applications" to
counseling. This distinction is based on the effect of the specific behavioral
setting on the manifestation of theoretical phenomena. As the characteristics
of behavioral settings differ, the manifestations of theoretical phenomena
may differ. Spence points out that "the application of a theory to any partic-
ular situation involves not only considerations of the laws or hypothetical
relations postulated in the theory but also a careful taking account of the
initial and boundary conditions of the situation. That is, the logical impli-
cations of a theory are always a joint function of both the laws (hypotheses)
and the particular combination of conditions in the situation" (Spence, 1956,
pp. 199-200). In applying the results of laboratory research to counseling, not
only is a "bridging" theory necessary, but also we must evaluate the consequences
of the conditions of counseling which differ from the conditions of the lab-
oratory research. We need to determine what conditions of counseling must be
taken into account and what effects these conditions have on behavioral
phenomena. While these questions can be fully answered only be laboratory
studies in which the similarity of conditions in the laboratory to counseling
are systematically varied, I believe that the following five conditions of
counseling need to be considered in applying laboratory research results to
counseling:

1. Counseling is a conversation between or among persons. Because of
   this, behavior change must be brought about through interpersonal interaction.
   This condition may be particularly restrictive for individual counseling as
   little research on behavior change has been done with dyads where the influence
factors are mediated through conversation. As more research has been carried out in group interaction, the effects of this condition on change processes can be estimated with more confidence.

2. Status differences between or among interactants constrain the conversation. The counselor is the Helper, the client is the Seeker of help. The conversation is not symmetrical as both participants do not make equivalent contributions. While both participants' tasks are to produce verbal responses, the client's responses describe some aspects of his experiencing, while the counselor's responses describe the client's descriptions, from the counselor's viewpoint.

3. The duration of contact between interactants in counseling varies, and at times is extended. The duration of contact may moderate the effects of other factors in the interaction. Most laboratory experiments endure one, or, at best, a few sessions. Theories based on these observations would seem more directly applicable to short term counseling than to long term counseling. The effects of duration of contact are probably matters of acquaintance, differentiation of roles, and shared expectations, and are potentially amenable to study in the laboratory. (Weick, 1965, pp. 214-216).

4. Many clients are motivated to change. They actively seek counseling, they wish to achieve certain changes, and they are personally involved in the process and outcome of counseling. While clients are ready to be influenced, subjects in laboratory experiments are not. Subject involvement in laboratory experiments is usually a function of the intrinsic aspects of the experimental task or of instructions designed to increase the personal meaning of the task. Considering only the aspect of desire to change, research and theory on expectancy (Goldstein, 1966) and persuasibility (Janis & Hovland, 1959) suggest that methods found effective in changing the behavior of people who do not want to
change should be even more effective with people who do want to change. People who seek counsel and advice from others would seem more open to suggestion than those who do not.

5. Many clients are psychologically distressed and are heavily invested in the behaviors they seek to change. This condition concerns the effects of personally involving content as well as the effects of pathological and abnormal behavior. The effects of these conditions on behavior change variables may not be great in vocational counseling and some personal counseling. However, more severe disturbance surely must affect change processes in counseling.

According to these arguments, some results of laboratory research have implications for counseling, and some results are directly applicable to counseling. Any research which affects a theory which has been applied to counseling has implications for counseling through its effects on that theoretical view of counseling. In addition, the results of laboratory research which attempts to account for the above five "boundary" conditions of counseling may be directly applicable to counseling practice. Research of this sort attempts to evaluate hypotheses drawn from relevant theory within the boundary conditions of counseling practice. It is a laboratory analogue to counseling and fills the gap between "basic" research and counseling practice.

**An Example: Counselor Characteristics and Influence in Counseling.**

In an earlier paper I applied dissonance theory to counseling and pointed out implications to counseling of research on communication and attitude change (Strong, 1968). Some of these implications to counseling were later tested in an experimental laboratory setting intended to be an analogue of short term counseling. The boundary conditions of this research were (1) a conversation between two persons; (2) unequal status between the interactants; (3) one interview duration; (4) subjects not motivated to change; and
(5) subjects not psychologically distressed.

The research was based on the view that counseling is an interpersonal influence situation in which the counselor influences the client by revealing to the client his disagreement with the client's views. He reveals his disagreement in many ways including reflections, questions, declarative statements, and interpretations, all of which are seen as "influence attempts". The counselor's influence attempts create dissonance for the client, which motivates the client to change the situation so as to remove the disagreement. To restore consonance, the client may change his views to agree with the counselor. However, he can also restore consonance by discrediting the counselor, discontinuing contact with the counselor, changing the counselor's views or seeking support elsewhere. Which of these avenues of dissonance reduction the client uses is controlled in part by the client's perception of the counselor's characteristics. If the client perceives the counselor as expert, trustworthy, and attractive (likable) he probably will accept the counselor's views. If he perceives the counselor as inexpert, untrustworthy, or unattractive, he probably will not change his views but rather pursue another avenue of dissonance reduction.

In this research, we pursued the following questions: (1) How can the counselor control the client's perception of the counselor's expertness, trustworthiness, and attractiveness? (2) Will high and low values of these perceptual variables control the extent of client opinion change resulting from counselor influence attempts? (3) Are there client (subject) characteristics related to being influenced regardless of their perception of the counselor? (4) Are expertness, trustworthiness, and attractiveness perceived independently, or are they inseparable? The procedures and results of this series of studies are reported elsewhere (Schmidt & Strong, 1970a, 1970b; Strong & Schmidt, 1970a,
1970b). We pursued these questions using experimental laboratory methods which allowed us to provide more direct, unambiguous answers than would have been possible using traditional correlational methods and "real" clients.

Given that experimental laboratory methods are necessary for developing an empirical base for counseling, I am concerned about who will apply these methods to counseling. Certainly experimental social and learning psychologists cannot be expected to turn their attention to developing a data base for counseling. I believe that reliance on these methods in counseling research will result only from training counseling students to use them. There seems to be a growing emphasis in counselor education on social and learning psychology. By introducing students to experimental laboratory research methods and by giving them experience in running experiments in the laboratory, we may be able to develop counselors who turn to experimental laboratory methods to answer their questions about counseling.
REFERENCES


Tyler, L. E. *Comment*. *Journal of Counseling Psychology*, 1965, 12, 10-16.

FOOTNOTE

1Presented at the 1970 annual meeting of the American Personnel and Guidance Association in New Orleans, Louisiana.