TOWARD A THEORY OF MOTIVE ACQUISITION

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Too little is known about the processes of personality change at relatively complex levels. The empirical study of the problem has been hampered by both practical and theoretical difficulties. On the practical side it is very expensive both in time and effort to set up systematically controlled educational programs designed to develop some complex personality characteristic like a motive, and to follow the effects of the education over a number of years. It also presents ethical problems since it is not always clear that it is as proper to teach a person a new motive as it is a new skill like learning to play the piano. For both reasons, most of what we know about personality change has come from studying psychotherapy where both ethical and practical difficulties are overcome by the pressing need to help someone in real trouble. Yet, this source of information leaves much to be desired: It has so far proven difficult to identify and systematically vary the “inputs” in psychotherapy and to measure their specific effects on subsequent behavior, except in very general ways (cf. Rogers & Dymond, 1954).

On the theoretical side, the dominant views of personality formation suggest anyway that acquisition or change of any complex characteristic like a motive in adulthood would be extremely difficult. Both behavior theory and psychoanalysis agree that stable personality characteristics like motives are laid down in childhood. Behavior theory arrives at this conclusion by arguing that social motives are learned by close association with reduction in certain basic biological drives like hunger, thirst, and physical discomfort which loom much larger in childhood than adulthood. Psychoanalysis, for its part, pictures adult motives as stable resolutions of basic conflicts occurring in early childhood.

Neither theory would provide much support for the notion that motives could be developed in adulthood without somehow recreating the childhood conditions under which they were originally formed. Furthermore, psychologists have been hard put to it to find objective evidence that even prolonged, serious, and expensive attempts to introduce personality change through psychotherapy have really proven successful (Eysenck, 1952). What hope is there that a program to introduce personality change would end up producing a big enough effect to study?

Despite these difficulties a program of research has been under way for some time which is attempting to develop the achievement motive in adults. It was undertaken in an attempt to fill some of the gaps in our knowledge about personality change or the acquisition of complex human characteristics. Working with n Achievement has proved to have some important advantages for this type of research: The practical and ethical problems do not loom especially large because previous research (McClelland, 1961) has demonstrated the importance of high n Achievement for entrepreneurial behavior and it is easy to find businessmen, particularly in underdeveloped countries, who are interested in trying any means of improving their entrepreneurial performance. Furthermore, a great deal is known about the origins of n Achievement in childhood and its specific effects on behavior so that educational programs can be systematically planned and their effects evaluated in terms of this knowledge. Pilot attempts to develop n Achievement have gradually led to the formulation of some theoretical notions of what motive acquisition involves and how it can be effectively promoted in adults. These notions have been summarized in the form of 12 propositions which it is the ultimate purpose of the research program to test. The propositions are anchored so far as possible in experiences with pilot courses, in supporting research findings from other studies, and in theory.

Before the propositions are presented, it is necessary to explain more of the theoretical and practical
background on which they are based. To begin with, some basis for believing that motives could be acquired in adulthood had to be found in view of the widespread pessimism on the subject among theoretically oriented psychologists. Oddly enough we were encouraged by the successful efforts of two quite different groups of "change agents"—operant conditioners and missionaries. Both groups have been "naive" in the sense of being unimpressed by or ignorant of the state of psychological knowledge in the field. The operant conditioners have not been encumbered by any elaborate theoretical apparatus; they do not believe motives exist anyway, and continue demonstrating vigorously that if you want a person to make a response, all you have to do is elicit it and reward it (cf. Bandura & Walters, 1963, pp. 238 ff.). They retain a simple faith in the infinite plasticity of human behavior in which one response is just like any other and any one can be "shaped up" (strengthened by reward)—presumably even an "achievement" response as produced by a subject in a fantasy test. In fact, it was the naive optimism of one such researcher (Burris, 1958) that had a lot to do with getting the present research under way. He undertook a counseling program in which an attempt to elicit and reinforce achievement-related fantasies proved to be successful in motivating college students to get better grades. Like operant conditioners, the missionaries have gone ahead changing people because they have believed it possible. While the evidence is not scientifically impeccable, common-sense observation yields dozens of cases of adults whose motivational structure has seemed to be quite radically and permanently altered by the educational efforts of Communist Party, Mormon, or other devout missionaries.

A man from Mars might be led to observe that personality change appears to be very difficult for those who think it is very difficult, if not impossible, and much easier for those who think it can be done. He would certainly be oversimplifying the picture, but at the very least his observation suggests that some theoretical revision is desirable in the prevailing views of social motives which link them so decisively to early childhood. Such a revision has been attempted in connection with the research on n Achievement (McClelland, Atkinson, Clark, & Lowell, 1953) and while it has not been widely accepted (cf. Berelson & Steiner, 1964), it needs to be briefly summarized here to provide a theoretical underpinning for the attempts at motive change to be described. It starts with the proposition that all motives are learned, that not even biological discomforts (as from hunger) or pleasures (as from sexual stimulation) are "urges" or "drives" until they are linked to cues that can signify their presence or absence. In time clusters of expectancies or associations grow up around affective experiences, not all of which are connected by any means with biological needs (McClelland et al., 1953, Ch. 2), which we label motives. More formally, motives are "affectively toned associative networks" arranged in a hierarchy of strength or importance within a given individual. Obviously, the definition fits closely the operations used to measure a motive: "an affectively toned associative cluster" is exactly what is coded in a subject's fantasies to obtain an n Achievement score. The strength of the motive (its position in the individual's hierarchy of motives) is measured essentially by counting the number of associations belonging to this cluster as compared to others that an individual produces in a given number of opportunities. If one thinks of a motive as an associative network, it is easier to imagine how one might go about changing it: The problem becomes one of moving its position up on the hierarchy by increasing its salience compared to other clusters. It should be possible to accomplish this end by such tactics as: (a) setting up the network—discovering what associations, for example, exist in the achievement area and then extending, strengthening, or otherwise "improving" the network they form; (b) conceptualizing the network—forming a clear and conscious construct that labels the network; (c) tying the network to as many cues as possible in everyday life, especially those preceding and following action, to insure that the network will be regularly rearoused once formed; and (d) working out the relation of the network to superordinate associative clusters, like the self-concept, so that these dominant schemata do not block the train of achievement thoughts—for example, through a chain of interfering associations (e.g., "I am not really the achieving type").

This very brief summary is not intended as a full exposition of the theoretical viewpoint underlying the research, but it should suffice to give a rough idea of how the motive was conceived that we set out to change. This concept helped define
the goals of the techniques of change, such as reducing the effects of associative interference from superordinate associate clusters. But what about the techniques themselves? What could we do that would produce effective learning of this sort? Broadly speaking, there are four types of empirical information to draw on. From the animal learning experiments, we know that such factors as repetition, optimal time intervals between stimulus, response, and reward, and the schedule of rewards are very important for effective learning. From human learning experiments, we know that such factors as distribution of practice, repetitions, meaningfulness, and recitation are important. From experiences with psychotherapy (cf. Rogers, 1961), we learn that warmth, honesty, nondirectiveness, and the ability to recode associations in line with psychoanalytic or other personality theories are important. And, from the attitude-change research literature, we learn that such variables as presenting one side or two, using reason or prestige to support an argument, or affiliating with a new reference group are crucial for developing new attitudes (cf. Hovland, Janis, & Kelley, 1953). Despite the fact that many of these variables seem limited in application to the learning situation in which they were studied, we have tried to make use of information from all these sources in designing our “motive acquisition” program and in finding support for the general propositions that have emerged from our study so far. For our purpose has been above all to produce an effect large enough to be measured. Thus we have tried to profit by all that is known about how to facilitate learning or produce personality or attitude change. For, if we could not obtain a substantial effect with all factors working to produce it, there would be no point to studying the effects of each factor taken one at a time. Such a strategy also has the practical advantage that we are in the position of doing our best to “deliver the goods” to our course participants since they were giving us their time and attention to take part in a largely untried educational experience.²

² Parenthetically, we have found several times that our stated desire to evaluate the effectiveness of our course created doubts in the minds of our sponsors that they did not feel about many popular courses for managers that no one has ever evaluated or plans to evaluate. An attitude of inquiry is not always an asset in education. It suggests one is not sure of his ground.

Our overall research strategy, therefore, is “subtractive” rather than “additive.” After we have demonstrated a substantial effect with some 10–12 factors working to produce it, our plan is to subtract that part of the program that deals with each of the factors to discover if there is a significant decline in the effect. It should also be possible to omit several factors in various combinations to get at interactional effects. This will obviously require giving a fairly large number of courses in a standard institutional setting for the same kinds of businessmen with follow-up evaluation of their performance extending over a number of years. So obviously it will be some time before each of the factors incorporated into the propositions which follow can be properly evaluated so far as its effect on producing motive change is concerned.

The overall research strategy also determined the way the attempts to develop the achievement motive have been organized. That is to say, in order to process enough subjects to permit testing the effectiveness of various “inputs” in a reasonable number of years, the training had to be both of short duration (lasting 1–3 weeks) and designed for groups rather than for individuals as in person-to-person counseling. Fortunately these requirements coincide with normal practice in providing short courses for business executives. To conform further with that practice, the training has usually also been residential and voluntary. The design problems introduced by the last characteristic we have tried to handle in the usual ways by putting half the volunteers on a waiting list or giving them a different, technique-oriented course, etc. So far we have given the course to develop n Achievement in some form or another some eight times to over 140 managers or teachers of management in groups of 9–25 in the United States, Mexico, and India. For the most part the course has been offered by a group of 2–4 consultant psychologists either to executives in a single company as a company training program, or to executives from several different companies as a self-improvement program, or as part of the program of an institute or school devoted to training managers. The theoretical propositions which follow have evolved gradually from these pilot attempts to be effective in developing n Achievement among businessmen of various cultural backgrounds.

The first step in a motive development program is to create confidence that it will work. Our
initial efforts in this area were dictated by the simple practical consideration that we had to "sell" our course or nobody would take it. We were not in the position of an animal psychologist who can order a dozen rats, or an academic psychologist who has captive subjects in his classes, or even a psychotherapist who has sick people knocking at his door every day. So we explained to all who would listen that we had every reason to believe from previous research that high n Achievement is related to effective entrepreneurship and that therefore business executives could expect to profit from taking a course designed to understand and develop this important human characteristic. What started as a necessity led to the first proposition dealing with how to bring about motive change.

Proposition 1. The more reasons an individual has in advance to believe that he can, will, or should develop a motive, the more educational attempts designed to develop that motive are likely to succeed. The empirical support for this proposition from other studies is quite impressive. It consists of (a) the prestige-suggestion studies showing that people will believe or do what prestigious sources suggest (cf. Hovland et al., 1953); (b) the so-called "Hawthorne effect" showing that people who feel they are especially selected to show an effect will tend to show it (Roethlisberger & Dickson, 1947); (c) the "Hello-Goodbye" effect in psychotherapy showing that patients who merely have contact with a prestigious medical authority improve significantly over waiting list controls and almost as much as those who get prolonged therapy (Frank, 1961); (d) the "experimenter bias" studies which show that subjects will often do what an experimenter wants them to do, even though neither he nor they know he is trying to influence them (Rosenthal, 1963); (e) the goal-setting studies which show that setting goals for a person particularly in the name of prestigious authorities like "science" or "research" improves performance (Kausler, 1959; Mierke, 1955); (f) the parent-child interaction studies which show that parents who set higher standards of excellence for their sons are more likely to have sons with high n Achievement (Rosen & D'Andrade, 1959). The common factor in all these studies seems to be that goals are being set for the individual by sources he respects—goals which imply that his behavior should change for a variety of reasons and that it can change. In common-sense terms, belief in the possibility and desirability of change are tremendously influential in changing a person.

So we have used a variety of means to create this belief: the authority of research findings on the relationship of n Achievement to entrepreneurial success, the suggestive power of membership in an experimental group designed to show an effect, the prestige of a great university, our own genuine enthusiasm for the course and our conviction that it would work, as expressed privately and in public speeches. In short, we were trying to make every use possible of what is sometimes regarded as an "error" in such research—namely, the Hawthorne effect, experimenter bias, etc., because we believe it to be one of the most powerful sources of change.

Why? What is the effect on the person, theoretically speaking, of all this goal setting for him? Its primary function is probably to arouse what exists of an associative network in the achievement area for each person affected. That is, many studies have shown that talk of achievement or affiliation or power tends to increase the frequency with which individuals think about achievement or affiliation or power (cf. Atkinson, 1958). And the stronger the talk, the more the relevant associative networks are aroused (McClelland et al., 1953). Such an arousal has several possible effects which would facilitate learning: (a) It elicits what exists in the person of a "response" thus making it easier to strengthen that response in subsequent learning. (b) It creates a discrepancy between a goal (a "Soll-lage" in Heckhausen's—1963—theory of motivation) and a present state ("Ist-lage") which represents a cognitive dissonance the person tries to reduce (cf. Festinger, 1957); in common-sense terms he has an image clearly presented to him of something he is not but should be. (c) It tends to block out by simple interference other associations which would inhibit change—such as, "I'm too old to learn," "I never learned much from going to school anyway," "What do these academics know about everyday life?" or "I hope they don't get personal about all this."

After the course has been "sold" sufficiently to get a group together for training, the first step in the course itself is to present the research findings in some detail on exactly how n Achievement is related to certain types of successful entrepreneurial performance. That is, the argument of The
Achieving Society (McClelland, 1961) is presented carefully with tables, charts, and diagrams, usually in lecture form at the outset and with the help of an educational TV film entitled the Need to Achieve. This is followed by discussion to clear up any ambiguities that remain in their minds as far as the central argument is concerned. It is especially necessary to stress that not all high achievement is caused by high n Achievement—that we have no evidence that high n Achievement is an essential ingredient in success as a research scientist, professional, accountant, office or personnel manager, etc.; that, on the contrary, it seems rather narrowly related to entrepreneurial, sales, or promotional success, and therefore should be of particular interest to them because they hold jobs which either have or could have an entrepreneurial component. We rationalize this activity in terms of the following proposition.

Proposition 2. The more an individual perceives that developing a motive is consistent with the demands of reality (and reason), the more educational attempts designed to develop that motive are likely to succeed. In a century in which psychologists and social theorists have been impressed by the power of unreason, it is well to remember that research has shown that rational arguments do sway opinions, particularly among the doubtful or the uncommitted (cf. Hovland et al., 1953). Reality in the form of legal, military, or housing rules does modify white prejudice against Negroes (cf. Berelson & Steiner, 1964, p. 512). In being surprised at Asch’s discovery that many will go along with a group in calling a shorter line longer than it is, we sometimes forget that under most conditions their judgments conform with reality. The associative network which organizes “reality”—which places the person correctly in time, place, space, family, job, etc.—is one of the most dominant in the personality. It is the last to go in psychosis. It should be of great assistance to tie any proposed change in an associative network in with this dominant schema in such a way as to make the change consistent with reality demands or “reasonable” extensions of them. The word “reasonable” here simply means extensions arrived at by the thought processes of proof, logic, etc., which in adults have achieved a certain dominance of their own.

The next step in the course is to teach the participants the n Achievement coding system. By this time, they are a little confused anyway as to exactly what we mean by the term. So we tell them they can find out for themselves by learning to code stories written by others or by themselves. They take the test for n Achievement before this session and then find out what their own score is by scoring this record. However, we point out that if they think their score is too low, that can be easily remedied, since we teach them how to code and how to write stories saturated with n Achievement; in fact, that is one of the basic purposes of the course: to teach them to think constantly in n Achievement terms. Another aspect of the learning is discriminating achievement thinking from thinking in terms of power or affiliation. So usually the elements of these other two coding schemes are also taught.

Proposition 3. The more thoroughly an individual develops and clearly conceptualizes the associative network defining the motive, the more likely he is to develop the motive. The original empirical support for this proposition came from the radical behaviorist Skinnerian viewpoint: If the associative responses are the motive (by definition), to strengthen them one should elicit them and reinforce them, as one would shape up any response by reinforcement (cf. Skinner, 1953). But, support for this proposition also derives from other sources, particularly the “set” experiments. For decades laboratory psychologists have known that one of the easiest and most effective ways to change behavior is to change the subject’s set. If he is responding to stimulus words with the names of vegetables, or with words meaning the opposite, and he changes his behavior immediately and efficiently without a mistake. At a more complex level Orne (1962) had pointed out how powerful a set like “This is an experiment” can be. He points out that if you were to go up to a stranger and say something like “Lie down!” he would in all probability either laugh or escape as soon as possible. But, if you say “This is an experiment! Lie down!” more often than not, if there are other supporting cues, the person will do so. Orne has demonstrated how subjects will perform nonsensical and fatiguing tasks for very long periods of time under the set that “This is an experiment.” At an even more complex level, sociologists have demonstrated often how quickly a person will change his behavior as he adopts a
new role set (as a parent, a teacher, a public official, etc.). In all these cases an associative network exists usually with a label conveniently attached which we call set and which, when it is aroused or becomes salient, proceeds to control behavior very effectively. The purpose of this part of our course is to give the subjects a set or a carefully worked out associative network with appropriate words or labels to describe all its various aspects (the coding labels for parts of the n Achievement scoring system like Ga*, I*, etc.; cf. Atkinson, 1958). The power of words on controlling behavior has also been well documented (cf. Brown, 1958).

It is important to stress that it is not just the label (n Achievement) which is taught. The person must be able to produce easily and often the new associative network itself. It is here that our research comes closest to traditional therapy which could be understood as the prolonged and laborious formation of new associative networks to replace anxiety-laden ones. That is, the person over time comes to form a new associative network covering his relations, for example, to his father and mother, which still later he may label an “unresolved Oedipus complex.” When cues arise that formerly would have produced anxiety-laden associations, they now evoke this new complex instead, blocking out the “bad” associations by associative interference. But all therapists, whether Freudian or Rogerian, insist that the person must learn to produce these associations in their new form, that teaching the label is not enough. In fact, this is probably why so-called directive therapy is ineffective: It tries to substitute new constructs (“You should become an achiever”) for old neurotic or ineffective ones (“rather than being such a slob”) without changing the associative networks which underlie these surface labels. A change in set such as “Respond with names of vegetables” will not work unless the person has a whole associative network which defines the meaning of the set. The relation of this argument is obvious both to Kelly’s (1955) insistence on the importance of personal constructs and to the general semanticists’ complaints about the neurotic effects of mislabeling or overabstraction (Korzybsky, 1941).

But, theoretically speaking, why should a change in set as an associative network be so influential in controlling thought and action? The explanation lies in part in its symbolic character. Learned acts have limited influence because they often depend on reality supports (as in typewriting), but learned thoughts (symbolic acts) can occur any time, any place, in any connection, and be applied to whatever the person is doing. They are more generalizable. Acts can also be inhibited more easily than thoughts. Isak Dinesen tells the story of the oracle who told the king he would get his wish so long as he never thought of the left eye of a camel. Needless to say, the king did not get his wish, but he could easily have obeyed her prohibition if it had been to avoid looking at the left eye of a camel. Thoughts once acquired gain more control over thoughts and actions than acquired acts do because they are harder to inhibit. But why do they gain control over actions? Are not thoughts substitutes for actions? Cannot a man learn to think achievement thoughts and still not act like an achiever in any way? The question is taken up again under the next proposition, but it is well to remember here that thoughts are symbolic acts and that practice of symbolic acts facilitates performing the real acts (cf. Hovland, 1951, p. 644).

The next step in the course is to tie thought to action. Research has shown that individuals high in n Achievement tend to act in certain ways. For example, they prefer work situations where there is a challenge (moderate risk), concrete feedback on how well they are doing, and opportunity to show these characteristics in action. Research has shown that individuals high in n Achievement tend to act in certain ways. For example, they prefer work situations where there is a challenge (moderate risk), concrete feedback on how well they are doing, and opportunity to show these characteristics in action. Research has shown that individuals high in n Achievement tend to act in certain ways. For example, they prefer work situations where there is a challenge (moderate risk), concrete feedback on how well they are doing, and opportunity to show these characteristics in action.
more the change in both thought and action is likely to occur and endure. The evidence for the importance of action for producing change consists of such diverse findings as (a) the importance of recitation for human learning, (b) the repeated finding that overt commitment and participation in action changes attitudes effectively (cf. Berelson & Steiner, 1964, p. 576), and (c) early studies by Carr (cf. McGeoch & Irion, 1952) showing that simply to expose an organism to what is to be learned (e.g., trundling a rat through a maze) is nowhere near as effective as letting him explore it for himself in action.

Theoretically, the action is represented in the associative network by what associations precede, accompany, and follow it. So including the acts in what is learned enlarges the associative network or the achievement construct to include action. Thus, the number of cues likely to trip off the n Achievement network is increased. In commonsense terms, whenever he works he now evaluates what he is doing in achievement terms, and whenever he thinks about achievement he tends to think of its action consequences.

So far the course instruction has remained fairly abstract and removed from the everyday experiences of businessmen. So, the next step is to apply what has been learned to everyday business activities through the medium of the well-known case-study method popularized by the Harvard Business School. Actual examples of the development of the careers or firms of business leaders or entrepreneurs are written up in disguised form and assigned for discussion to the participants. Ordinarily, the instructor is not interested in illustrating "good" or "bad" managerial behavior—that is left to participants to discuss—but in our use of the material, we do try to label the various types of behavior as illustrating either n Achievement and various aspects of the achievement sequence (instrumental activity, blocks, etc.), or n Power, n Affiliation, etc. The participants are also encouraged to bring in examples of managerial behavior from their own experience to evaluate in motivational terms.

**Proposition 5.** The more an individual can link the newly conceptualized association-action complex (or motive) to events in his everyday life, the more likely the motive complex is to influence his thoughts and actions in situations outside the training experience. The transfer-of-training research literature is not very explicit on this point, though it seems self-evident. Certainly, this is the proposition that underlies the practice of most therapy when it involves working through or clarifying, usually in terms of a new, partially formed construct system, old memories, events from the last 24 hours, dreams, and hopes of the future. Again, theoretically, this should serve to enlarge and clarify the associative network and increase the number of cues in everyday life which will rearouse it. The principle of symbolic practice can also be invoked to support its effectiveness in promoting transfer outside the learning experience.

For some time most course participants have been wondering what all this has to do with them personally. That is to say, the material is introduced originally on a "take it or leave it" objective basis as something that ought to be of interest to them. But, sooner or later, they must confront the issue as to what meaning n Achievement has in their own personal lives. We do not force this choice on them nor do we think we are brainwashing them to believe in n Achievement. We believe and we tell them we believe in the "obstinate audience" (cf. Bauer, 1964), in the ultimate capacity of people to resist persuasion or to do in the end what they really want to do. In fact, we had one case in an early session of a man who at this point decided he was not an achievement-minded person and did not want to become one. He subsequently retired and became a chicken farmer to the relief of the business in which he had been an ineffective manager. We respected that decision and mention it in the course as a good example of honest self-evaluation. Nevertheless, we do provide them with all kinds of information as to their own achievement-related behavior in the fantasy tests, in the business game, in occasional group dynamics session—and ample opportunity and encouragement to think through what this information implies so far as their self-concept is concerned and their responsibilities to their jobs. Various devices such as the "Who am I?" test, silent group meditation, or individual counseling have been introduced to facilitate this self-confrontation.

**Proposition 6.** The more an individual can perceive and experience the newly conceptualized motive as an improvement in the self-image, the more the motive is likely to influence his future thoughts and actions. Evidence on the importance of the ego or the self-image on controlling behavior has been summarized by Allport (1943). In recent years, Rogers and his group (Rogers, 1961; Rogers
& Dymond, 1954) have measured improvement in psychotherapy largely in terms of improvement of the self-concept in relation to the ideal self. Indirect evidence of the importance of the self-schema comes from the discussion over whether a person can be made to do things under hypnosis that are inconsistent with his self-concept or values. All investigators agree that the hypnotist can be most successful in getting the subject to do what might normally be a disapproved action if he makes the subject perceive the action as consistent with his self-image or values (cf. Berelson & Steiner, 1963, p. 124).

The same logic supports this proposition. It seems unlikely that a newly formed associative network like n Achievement could persist and influence behavior much if it had somehow "come to terms" with the pervasive superordinate network of associations defining the self. The logic is the same as for Proposition 2 dealing with the reality construct system. The n Achievement associations must come to be experienced as related to or consistent with the ideal self-image; otherwise associations from the self-system will constantly block thoughts of achievement. The person might be thinking, for example: "I am not that kind of person; achievement means judging people in terms of how well they perform and I don't like to hurt people's feelings."

Closely allied to the self-system is a whole series of networks only half conscious (i.e., correctly labeled) summarizing the values by which the person lives which derive from his culture and social milieu. These values can also interfere if they are inconsistent with n Achievement as a newly acquired way of thinking. Therefore, it has been customary at this point in the course to introduce a value analysis of the participants' culture based on an analysis of children's stories, myths, popular religion, comparative attitude surveys, customs, etc., more or less in line with traditional, cultural anthropological practice (cf. Benedict, 1946; McClelland, 1964). For example, in America we have to work through the problem of how being achievement oriented seems to interfere with being popular or liked by others which is highly valued by Americans. In Mexico a central issue is the highly valued "male dominance" pattern reflected in the patriarchal family and in the macho complex (being extremely masculine). Since data show that dominant fathers have sons with low n Achievement and authoritarian bosses do not encourage n Achievement in their top executives (Andrews, 1965), there is obviously a problem here to be worked through if n Achievement is to survive among thoughts centered on dominance. The problem is not only rationally discussed. It is acted out in role-playing sessions where Mexicans try, and often to their own surprise fail, to act like the democratic father with high standards in the classic Rosen and D'Andrade (1959) study on parental behavior which develops high n Achievement. Any technique is used which will serve to draw attention to possible conflicts between n Achievement and popular or traditional cultural values. In the end it may come to discussing parts of the Bhagavad Gita in India, or the Koran in Arab countries, that seem to oppose achievement striving or entrepreneurial behavior.

**Proposition 7.** The more an individual can perceive and experience the newly conceptualized motive as an improvement on prevailing cultural values, the more the motive is likely to influence his future thoughts and actions. The cultural anthropologists for years have argued how important it is to understand one's own cultural values to overcome prejudices, adopt more flexible attitudes, etc., but there is little hard evidence that doing so changes a person's behavior. What exists comes indirectly from studies that show prejudice can be decreased a little by information about ethnic groups (Berelson & Steiner, 1963, p. 517), or that repeatedly show an unconscious link between attitudes and the reference group (or subculture to which one belongs—a link which presumably can be broken more easily by full information about it, especially when coupled with role-playing new attitudes (cf. Berelson & Steiner, 1963, pp. 566 ff.).

The theoretical explanation of this presumed effect is the same as for Proposition 2 and 6. The newly learned associative complex to influence thought and action effectively must somehow be adjusted to three superordinate networks that may set off regularly interfering associations—namely, the networks associated with reality, the self, and the social reference group or subculture.

The course normally ends with each participant preparing a written document outlining his goals and life plans for the next 2 years. These plans may or may not include references to the achievement motive; they can be very tentative, but they are supposed to be quite specific and realistic; that is to say, they should represent moderate levels of aspiration following the practice established in
learning about n Achievement of choosing the moderately risky or challenging alternative. The purpose of this document is in part to formulate for oneself the practical implications of the course before leaving it, but even more to provide a basis for the evaluation of their progress in the months after the course. For it is explained to the participants that they are to regard themselves as “in training” for the next 2 years, that 10–14 days is obviously too short a time to do more than conceive a new way of life: It represents the residential portion of the training only. Our role over the next 2 years will be to remind them every 6 months of the tasks they have set themselves by sending them a questionnaire to fill out which will serve to rearouse many of the issues discussed in the course and to give them information on how far they have progressed toward achieving their goals.

Proposition 8. The more an individual commits himself to achieving concrete goals in life related to the newly formed motive, the more the motive is likely to influence his future thoughts and actions.

Proposition 9. The more an individual keeps a record of his progress toward achieving goals to which he is committed, the more the newly formed motive is likely to influence his future thoughts and actions. These propositions are both related to what was called “pacing” in early studies of the psychology of work. That is, committing oneself to a specific goal and then comparing one’s performance to that goal has been found to facilitate learning (cf. Kausler, 1959), though most studies of levels of aspiration have dealt with goal setting as a result rather than as a “cause” of performance. At any rate, the beneficial effect of concrete feedback on learning has been amply demonstrated by psychologists from Thorndike to Skinner. Among humans the feedback on performance is especially effective if they have high n Achievement (French, 1958), a fact which makes the relevance of our request for feedback obvious to the course participants.

The theoretical justification for these propositions is that in this way we are managing to keep the newly acquired associative network salient over the next 2 years. We are providing cues that will regularly rearouse it since he knows he is still part of an experimental training group which is supposed to show a certain type of behavior (Proposition 1 again). If the complex is rearoused sufficiently often back in the real world, we believe it is more likely to influence thought and action than if it is not aroused.

As described so far the course appears to be devoted almost wholly to cognitive learning. Yet this is only part of the story. The “teachers” are all clinically oriented psychologists who also try to practice whatever has been learned about the type of human relationship that most facilitates emotional learning. Both for practical and theoretical reasons this relationship is structured as warm, honest, and non-evaluative, somewhat in the manner described by Rogers (1961) and recommended by distinguished therapists from St. Ignatius to Freud. That is to say, we insist that the only kind of change that can last or mean anything is what the person decides on and works out by himself, that we are there not to criticize his past behavior or direct his future choices, but to provide him with all sorts of information and emotional support that will help him in his self-confrontation. Since we recognize that self-study may be quite difficult and unsettling, we try to create an optimistic relaxed atmosphere in which the person is warmly encouraged in his efforts and given the opportunity for personal counseling if he asks for it.

Proposition 10. Changes in motives are more likely to occur in an interpersonal atmosphere in which the individual feels warmly but honestly supported and respected by others as a person capable of guiding and directing his own future behavior. Despite the widespread belief in this proposition among therapists (except for operant conditioners), one of the few studies that directly supports it has been conducted by Ends and Page (1957) who found that an objective learning-theory approach was less successful in treating chronic alcoholics than a person-oriented, client-centered approach. Rogers (1961) also summarizes other evidence that therapists who are warmer, more empathic, and genuine are more successful in their work. Hovland et al. (1953) report that the less...
manipulative the intent of a communicator, the greater the tendency to accept his conclusions. There is also the direct evidence that parents of boys with high n Achievement are warmer, more encouraging and less directive (fathers only) than parents of boys with low n Achievement (Rosen & D'Andrade, 1959). We tried to model ourselves after those parents on the theory that what is associated with high n Achievement in children might be most likely to encourage its development in adulthood. This does not mean permissiveness or promiscuous reinforcement of all kinds of behavior; it also means setting high standards as the parents of the boys with high n Achievement did but having the relaxed faith that the participants can achieve them.

The theoretical justification for this proposition can take two lines: Either one argues that this degree of challenge to the self-schema produces anxiety which needs to be reduced by warm support of the person for effective learning to take place, or one interprets the warmth as a form of direct reinforcement for change following the operant-conditioning model. Perhaps both factors are operating. Certainly there is ample evidence to support the view that anxiety interferes with learning (cf. Sarason, 1960) and that reward shapes behavior (cf. Bandura & Walters, 1963, pp. 283 ff.).

One other characteristic of the course leads to two further propositions. Efforts are made so far as possible to define it as an “experience apart,” “an opportunity for self-study,” or even a “spiritual retreat” (though that term can be used more acceptably in India than in the United States). So far as possible it is held in an isolated resort hotel or a hostel where there will be few distractions from the outside world and few other guests. This permits an atmosphere of total concentration on the objectives of the course including much informal talk outside the sessions about Ga’, Ga’, I’, and other categories in the coding definition. It still comes as a surprise to us to hear these terms suddenly in an informal group of participants talking away in Spanish or Telugu. The effect of this retreat from everyday life into a special and specially labeled experience appears to be twofold: It dramatizes or increases the salience of the new associative network and it tends to create a new reference group.

Proposition 11. Changes in motives are more likely to occur the more the setting dramatizes the importance of self-study and lifts it out of the routine of everyday life. So far as we know there is no scientific evidence to support this proposition, though again if one regards Jesuits as successful examples of personality change, the Order has frequently followed the advice of St. Ignatius to the effect that “the progress made in the Exercises will be greater, the more the exercitant withdraws from all friends and acquaintances, and from all worldly cares.” Theory supports the proposition in two respects: Removing the person from everyday routine (a) should decrease interfering associations (to say nothing of interfering appointments and social obligations), and (b) should heighten the salience of the experience by contrast with everyday life and make it harder to handle with the usual defenses (“just one more course,” etc.). That is to say, the network of achievement-related associations can be more strongly and distinctly aroused in contrast to everyday life, making cognitive dissonance greater and therefore more in need of reduction by new learning. By the same token we have found that the dramatic quality of the experience cannot be sustained very long in a 12-18-hour-a-day schedule without a new routine attitude developing. Thus, we have found that a period somewhere between 6 to 14 days is optimal for this kind of “spiritual retreat.” St. Ignatius sets an outside limit of 30 days, but this is when the schedule is less intensive (as ours has sometimes been), consisting of only a few hours a day over a longer period.

Proposition 12. Changes in motives are more likely to occur and persist if the new motive is a sign of membership in a new reference group. No principle of change has stronger empirical or historical support than this one. Endless studies have shown that people’s opinions, attitudes, and beliefs are a function of their reference group and that different attitudes are likely to arise and be sustained primarily when the person moves into or affiliates with a new reference group (cf. Berelson & Steiner, 1963, pp. 580 ff.). Many theorists argue that the success of groups like Alcoholics Anonymous depends on the effectiveness with which the group is organized so that each person demonstrates his membership in it by “saving” another alcoholic. Political experience has demonstrated that membership in small groups like Communist or Nazi Party cells is one of the most effective ways to sustain changed attitudes and behavior.

Our course attempts to achieve this result (a)
### TABLE 1

<table>
<thead>
<tr>
<th>Input or independent variables</th>
<th>Intervening variables</th>
<th>Output or dependent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goal setting for the person (P1, P11)</td>
<td>Arousal of associative network (salience)</td>
<td>Duration and/or extensiveness of changes in:</td>
</tr>
<tr>
<td>2. Acquisition of n Achievement associative network (P2, P3, P4, P5)</td>
<td>Experiencing and labeling the associative network</td>
<td>1. n Achievement associative network</td>
</tr>
<tr>
<td>3. Relating new network to superordinate networks reality (P2)</td>
<td>Variety of cues to which network is linked</td>
<td>2. Related actions: use of feedback, moderate risk taking, etc.</td>
</tr>
<tr>
<td>the self (P6)</td>
<td>Interfering associations assimilated or bypassed by reproductive interference</td>
<td>3. Innovations (job improvements)</td>
</tr>
<tr>
<td>cultural values (P7)</td>
<td>Positive affect associated with network</td>
<td>4. Use of time and money</td>
</tr>
<tr>
<td>4. Personal goal setting (P8)</td>
<td></td>
<td>5. Entrepreneurial success as defined by nature of job held and its rewards</td>
</tr>
<tr>
<td>5. Knowledge of progress (P3, P4, P9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Personal warmth and support (P10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Support of reference group (P11, P12)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note.—P1, P11, etc., refer to the numbered propositions in the text.

by the group experience in isolation—creating the feeling of alumni who all went through it together; (b) by certain signs of identification with the group, particularly the language of the coding system, but also including a certificate of membership; and (c) by arranging where possible to have participants come from the same community so that they can form a "cell" when they return that will serve as an immediate reference group to prevent gradual undermining of the new network by other pressures.

In theoretical terms a reference group should be effective because its members constantly provide cues to each other to re arous the associative network, because they will also reward each other for achievement-related thoughts and acts, and because this constant mutual stimulation, and reinforcement, plus the labeling of the group, will prevent assimilation of the network to bigger, older, and stronger networks (such as those associated with traditional cultural values).

In summary, we have described an influence process which may be conceived in terms of "input," "intervening," and "output" variables as in Table 1. The propositions relate variables in Column A via their effect on the intervening variables in Column B to as yet loosely specified behavior in Column C, which may be taken as evidence that "development" of n Achievement has "really" taken place. The problems involved in evaluation of effects are as great and as complicated as those involved in designing the treatment, but they cannot be spelled out here, partly for lack of space, partly because we are in an even earlier stage of examining and classifying the effects of our training 1 and 2 years later preparatory to conceptualizing more clearly what happens. It will have to suffice to point out that we plan extensive comparisons over a 2-year period of the behaviors of our trained subjects compared with matched controls along the lines suggested in Column C.

What the table does is to give a brief overall view of how we conceptualize the educational or treatment process. What is particularly important is that the propositions refer to operationally defined and separable treatment variables. Thus, after having demonstrated hopefully a large effect of the total program, we can subtract a variable and see how much that decreases the impact of the course. That is to say, the course is designed so that it could go ahead perfectly reasonably with very little advanced goal setting (P1), with an objective rather than a warm personal atmosphere (P11), without the business game tying thought to action (P9), without learning to code n Achievement and write achievement-related stories (P3), without cultural value analysis (P7), or an isolated residential setting (P1, P11, P12). The study units are designed in a way that they can be omitted without destroying the viability of the treatment which has never been true of other studies of the psychotherapeutic process (cf. Rogers & Dymond, 1954).

But is there any basis for thinking the program works in practice? As yet, not enough time has elapsed to enable us to collect much data on long-
term changes in personality and business activity. However, we do know that businessmen can learn to write stories scoring high in n Achievement, that they retain this skill over 1 year or 2, and that they like the course—but the same kinds of things can be said about many unevaluated management training courses. In two instances we have more objective data. Three courses were given to some 34 men from the Bombay area in early 1963. It proved possible to develop a crude but objective and reliable coding system to record whether each one had shown unusual entrepreneurial activity in the 2 years prior to the course or in the 2 years after course. “Unusual” here means essentially an unusual promotion or salary raise or starting a new business venture of some kind. Of the 30 on whom information was available in 1965, 67% had been unusually active before the course, 67% after the course ($\chi^2 = 11.2, p < .01$). In a control group chosen at random from those who applied for the course in 1963, out of 11 on whom information has so far been obtained, 18% were active before 1963, 27% since 1963.

In a second case, four courses were given throughout 1964 to a total of 52 small businessmen from the small city of Kakinada in Andhra Pradesh, India. Of these men, 25% had been unusually active in the 2-year period before the course, and 65% were unusually active immediately afterwards ($\chi^2 = 17.1, p < .01$). More control data and more refined measures are needed, but it looks very much as if, in India at least, we will be dealing with a spontaneous “activation” rate of only 25%–35% among entrepreneurs. Thus we have a distinct advantage over psychotherapists who are trying to demonstrate an improvement over a two-thirds spontaneous recovery rate. Our own data suggest that we will be unlikely to get an improvement or “activation” rate much above the two-thirds level commonly reported in therapy studies. That is, about one-third of the people in our courses have remained relatively unaffected. Nevertheless the two-thirds activated after the course represent a doubling of the normal rate of unusual entrepreneurial activity—no mean achievement in the light of the current pessimism among psychologists as to their ability to induce lasting personality change among adults.

One case will illustrate how the course seems to affect people in practice. A short time after participating in one of our courses in India, a 47-year-old businessman rather suddenly and dramatically decided to quit his excellent job and go into the construction business on his own in a big way. A man with some means of his own, he had had a very successful career as employee-relations manager for a large oil firm. His job involved adjusting management-employee difficulties, negotiating union contracts, etc. He was well-to-do, well thought of in his company, and admired in the community, but he was restless because he found his job increasingly boring. At the time of the course his original n Achievement score was not very high and he was thinking of retiring and living in England where his son was studying. In an interview, 8 months later, he said the course had served not so much to “motivate” him but to “crystallize” a lot of ideas he had vaguely or half consciously picked up about work and achievement all through his life. It provided him with a new language (he still talked in terms of standards of excellence, blocks, moderate risk, goal anticipation, etc.), a new construct which served to organize those ideas and explain to him why he was bored with his job, despite his obvious success. He decided he wanted to be an n-Achievement-oriented person, that he would be unhappy in retirement, and that he should take a risk, quit his job, and start in business on his own. He acted on his decision and in 6 months had drawn plans and raised over $1,000,000 to build the tallest building in his large city to be called the “Everest Apartments.” He is extremely happy in his new activity because it means selling, promoting, trying to wangle scarce materials, etc. His first building is partly up and he is planning two more.

Even a case as dramatic as this one does not prove that the course produced the effect, despite his repeated use of the constructs he had learned, but what is especially interesting about it is that he described what had happened to him in exactly the terms the theory requires. He spoke not about a new motive force but about how existing ideas had been crystallized into a new associative network, and it is this new network which is the new “motivating” force according to the theory.

How generalizable are the propositions? They have purposely been stated generally so that some term like “attitude” or “personality characteristic” could be substituted for the term “motive” throughout, because we believe the propositions will hold for other personality variables. In fact, most of the supporting experimental evidence cited comes from attempts to change other characteristics.
Nevertheless, the propositions should hold best more narrowly for motives and especially the achievement motive. One of the biggest difficulties in the way of testing them more generally is that not nearly as much is known about other human characteristics or their specific relevance for success in a certain type of work. For example, next to nothing is known about the need for power, its relation to success, let us say, in politics or bargaining situations, and its origins and course of development in the life history of individuals. It is precisely the knowledge we have about such matters for the achievement motive that puts us in a position to shape it for limited, socially and individually desirable ends. In the future, it seems to us, research in psychotherapy ought to follow a similar course. That is to say, rather than developing "all purpose" treatments, good for any person and any purpose, it should aim to develop specific treatments or educational programs built on laboriously accumulated detailed knowledge of the characteristic to be changed. It is in this spirit that the present research program in motive acquisition has been designed and is being tested out.

REFERENCES


