

R E P O R T R E S U M E S

ED 015 501

CG 001 082

THE CAPACITY FOR SELF DIRECTION. WORKING PAPER.  
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PUB DATE 67

EDRS PRICE MF-\$0.25 HC-\$1.20 28F.

DESCRIPTORS- RESEARCH, COLLEGE STUDENTS, \*T GROUPS,  
\*OBJECTIVES, \*BEHAVIOR CHANGE, SELF CONCEPT, SELF CONGRUENCE,  
MANN WHITNEY U TEST, ROKEACH DOGMATISM SCALE

SELF-DESCRIPTIVE ESSAYS WRITTEN BY BUSINESS-SCHOOL STUDENTS WHO WERE SUBSEQUENTLY SUCCESSFUL (N=13) WERE COMPARED WITH THOSE WRITTEN BY STUDENTS UNSUCCESSFUL (N=11) IN ATTAINING PERSONAL CHANGE GOALS DURING SEMESTER-LONG, SELF-ANALYTIC GROUPS. A NEW METHOD FOR SELF-DIRECTED BEHAVIOR CHANGE WAS USED. CONTENT ANALYSIS COMPARISONS OF THE GROUPS REVEALED THREE SIGNIFICANT DIFFERENCES--(1) HIGH-CHANGE SUBJECTS MORE FREQUENTLY STATED GOALS WITH IMPLICIT RECOGNITION THAT THE GOAL HAD NOT YET BEEN ATTAINED, (2) LOW-CHANGE SUBJECTS MORE FREQUENTLY DESCRIBED THEMSELVES WITH LITTLE RECOGNITION OF ALTERNATE POSSIBILITIES, AND (3) LOW-CHANGE SUBJECTS WERE HIGHER IN TENTATIVENESS AND UNCERTAINTY ABOUT THEMSELVES, EXHIBITING IDENTITY DIFFUSION. THESE FINDINGS WERE CROSS-VALIDATED IN A SECOND SAMPLE OF STUDENTS WHO WERE SUCCESSFUL (N=9) AND UNSUCCESSFUL (N=22) IN REACHING THEIR CHANGE GOALS. THE RESULTS SUGGEST THAT SUCCESSFUL SELF-DIRECTED PERSONAL CHANGE IS MOTIVATED BY AWARENESS OF COGNITIVE DISSONANCE CREATED WHEN AN INDIVIDUAL COMMITS HIMSELF TO A VALUED GOAL PERCEIVED AS DIFFERING FROM HIS PRESENT BEHAVIOR. THE LOW-CHANGE SUBJECT IS ONE WHO DOES NOT CREATE COGNITIVE DISSONANCE IN THE PROCESS OF SETTING PERSONAL GOALS EITHER (1) BECAUSE THE GOAL IS IMPERFECTLY DIFFERENTIATED FROM PRESENT BEHAVIOR, OR (2) BECAUSE HE CAN TOLERATE AN UNUSUALLY GREAT AMOUNT OF INTERNAL SELF CONTRADICTION WITHOUT EXPERIENCING DISSONANCE. (AUTHORS/SK)

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THE CAPACITY FOR SELF DIRECTION<sup>1</sup>

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<sup>1</sup>The authors are indebted to the M.I.T. students who devoted time and energy to reporting their self-directed change projects and to John Aram, Michael Fulenwider, Douglas Hall, David Meredith, William McKelvey and Irwin Rubin who served as T-group trainers. This research was in part supported by the Sloan Research Fund of M.I.T. ~~This paper is not to be cited, quoted, or reproduced prior to publication.~~

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## ABSTRACT

This study compares self-descriptive essays written by business-school students who were subsequently successful (N=13) and unsuccessful (N=11) in attaining personal change goals during semester-long self-analytic groups, using a new method for self-directed behavior change. Content analysis comparisons of the two groups revealed three significant differences: (a) High-change subjects more frequently stated goals with implicit recognition that the goal had not yet been attained; (b) Low-change subjects more frequently described themselves with little recognition of alternate possibilities; (c) Low-change subjects were higher in tentativeness and uncertainty about themselves ("identity diffusion"). These findings were then cross-validated in a second sample of students who were successful (N=9) and unsuccessful (N=22) in reaching their change goals.

The results are interpreted as suggesting that successful self-directed personal change is motivated by awareness of the cognitive dissonance which is created when an individual commits himself to a valued goal that he sees as different from his present behavior. The low-change subject is one who does not create cognitive dissonance in the process of setting personal goals, either (a) because the goal is imperfectly differentiated from present behavior; or (b) because he can tolerate an unusually great amount of internal self-contradiction without experiencing dissonance.

It was about this time I conceiv'd the bold and arduous project of arriving at moral perfection. I wish'd to live without committing any fault at any time; I would conquer all that either natural inclination, custom, or company might lead me into. As I knew, or thought I knew, what was right and wrong, I did not see why I might not always do the one and avoid the other. But I soon found I had undertaken a task of more difficulty than I had imagined. While my care was employ'd in guarding against one fault, I was often surprised by another; habit took the advantage of inattention; inclination was sometimes too strong for reason. I concluded, at length, that the mere speculative conviction that it was our interest to be completely virtuous, was not sufficient to prevent our slipping; and that the contrary habits must be broken, and good ones acquired and established, before we can have any dependence on steady, uniform rectitude of conduct. For this purpose I therefore contriv'd the following method.... I proposed to myself, for the sake of clearness, to use rather more names, with fewer ideas annex'd to each, than a few names with more ideas; and I included under thirteen names of virtues all that annexed to each a short precept, which fully expressed the extent I gave to its meaning .... My intention being to acquire the habitude of all these virtues, I judg'd it would be well not to distract my attention by attempting the whole at once, but to fix it on one of them at a time; and, when I should be master of that, then to proceed to another, and so on, till I should have gone thro' the thirteen; and, as the previous acquisition of some might facilitate the acquisition of certain others, I arrang'd them with that view, ... I made a little book, in which I allotted a page for each of the virtues. I rul'd each page with red ink, so as to have seven columns, one for each day of the week, marking each column with a letter for the day. I cross'd these columns with thirteen red lines, marking the beginning of each line with the first letter of one of the virtues, on which line, and its proper column, I might mark, by a little black spot, every fault I found upon examination to have been committed respecting that virtue upon that day .... I determin'd to give a week's strict attention to each of the virtues successively .... I enter'd upon the execution of this plan for self-examination, and continu'd it with occasional intermissions for some time. I was surpris'd to find myself so much fuller of faults than I had imagined; but I had the satisfaction of seeing them diminish.

Benjamin Franklin

The idea that people can change themselves has been unfashionable among psychologists for some time. Since Freud and his followers cast doubt on the will psychology of William James, psychologists have generally accepted the notion that present behavior is rooted in the past and in the unconscious. As Allport (1960) has noted, contemporary psychological theories focus heavily on the ways in which men respond reactively to external stimuli, and pay little attention to man's proactive, self-directing capacities. There is a corresponding assumption that an individual cannot by his own efforts effect personal change.

In the popular mind, however, self-directed personal change has consistently been recognized as difficult but worthy of consideration. Self-improvement books are commercially successful, and New Years' resolutions, although often broken, continue to be made. Moreover, in recent years members of the treatment professions are increasingly questioning Freudian assumptions about personality change. The growing and widespread interest in behavior therapy (Grossberg, 1964) suggests a return to the belief that isolated symptoms can be accepted more or less at face value, and can be treated without probing for "deeper" problems. One recent publication (Goldiamond, 1965) addresses itself directly to "the application of self-controlled procedures to the solution of certain limited behavioral problems". It appears that many psychologists are increasingly willing to explore the possibility that, at least to a limited extent, an individual can identify his own problems and work to effect a change.

The study reported here is part of a research program aimed at developing a method for self-directed personal change, and at understanding the psychological processes involved in successful personal change efforts. The

simple change method employed in the research provides a paradigm for studying factors and processes which presumably are also important in other situations where people work to change themselves.

The major emphasis of the method is on self-research. The individual is given responsibility for diagnosing his own problem, setting his own goal, and accomplishing change by his own efforts. When business-school students used this method to change themselves as part of their participation in self-analytic groups (Kolb; Winter and Berlew, 1967), we found two factors which predicted their degree of success in changing. Change was found to be related to the individual's commitment to his change goal and the amount of feedback he received from other group members during the last half of the group. Improving the change method to increase goal commitment and feedback increased the percentage of students successfully attaining their goals from 5% to 61%.

This research gave no attention, however, to the question of individual differences in ability to achieve personal change goals. The purpose of the study reported here is to gain further insight into the self-directed change process by learning more about the attributes of individuals who are and are not able to achieve personal change. The approach is inductive, since so little is known about personality factors important in self-directed change.

In the present paper, self-descriptive essays written by subjects who later prove to be successful in their change efforts are compared with the essays of subjects who later prove unsuccessful in changing. Through content analysis we isolate features of the essays which distinguish between the two groups. These findings are then cross-validated for a second sample

of successful and unsuccessful subjects. In the last section of the paper we discuss the implications of the differences discovered for understanding the process of self-directed personal change.

### Procedure

Setting: The setting for the study described here was a semester long course in Psychology and Human Organization, required of candidates for a Master's degree in Industrial Management at the Massachusetts Institute of Technology. As a part of the course, students participated in 15-man self-analytic Training Groups (T-Groups) which met twice weekly throughout the semester (see Bradford et. al., 1964, for a general description of T-Groups). The self-directed change projects which are the major focus of the present research were required as a part of the students' T-Group participation, but were ungraded. The study reported here was carried out during two successive semesters.

Subjects: High-change and Low change subjects for the present study were selected as described below from among the 51 students in Semester I (85% of the total course enrollment of 60) and the 70 students in Semester II (92% of the total course enrollment of 76) who completed self-directed change projects. All students were male undergraduates or Master's candidates in Industrial Management at M.I.T. They ranged in age from 20 to 35, with most subjects in their early twenties.

Change method: The self-directed change technique employed by all subjects in both Semester I and Semester II can be summarized as follows. Before learning of the change projects, each student wrote in the first week of the course a brief essay on "how I would ideally like to be in a group". This

essay (referred to below as the Ideal-Self paper) was followed in the third week of the course by a brief essay on "How I am actually perceived in groups" (referred to below as the Real-Self paper). These two essays were assigned to increase students' thoughtfulness about themselves and their goals, preparatory to the actual change projects. In Semester II, the Rokeach Dogmatism scale (Rokeach, 1960) was administered at this time, since it seemed that this measure of cognitive openness might predict ability to change by the self-directed method.

The change technique was introduced in the fifth week of the course with a lecture by the course instructor. After a discussion of factors influencing behavior change (following McClelland, 1965) and a presentation of individual case studies in which the present change method had been successfully employed (following Schwitzgebel, 1964; Zachs, 1965), the instructor explained the procedure for carrying out the change projects. Students were asked to spend the next two T-Group meetings considering and discussing possible personal change goals. They were encouraged, though not required, to select goals relevant to their participation in the T-Group sessions.

In the seventh week of the course, each student selected a personal change goal and noted how he planned to measure progress toward his goal. Goals varied widely; some students selected global objectives (e.g., "to become more sensitive to others' feelings"), while other students chose more discrete behavior change goals (e.g., "I would like to speak more slowly and clearly."). In successive group meetings (9 meetings in Semester I, 10 in Semester II) the student rated after each session his progress toward his goal. The basis for these ratings again varied widely; some students made subjective personal judgments, while others kept objective counts of the

behavior in question or asked other group members to provide peer ratings. Ratings were entered on a graph, so that the student could examine a visual record of his progress toward the goal from meeting to meeting. Group members were encouraged to give one another feedback on their progress.

At the end of the semester each student evaluated his overall progress in a short final paper which included his estimate of the degree to which he had achieved his change goal, and a discussion of factors contributing to change or lack of change.

Selection of High-change and Low-change samples: From the total group of students completing change projects, two samples of subjects were selected for comparison: A High-change group of subjects who were clearly successful in achieving their change goals, and a Low-change group who were clearly unsuccessful in this task. For this exploratory study, a method employing sharply contrasting groups was considered more appropriate than an examination of data from the entire sample.

A subject's degree of success in achieving his change goal was determined by two criteria: A Subjective Change Rating, and a Trainer Rating of Change. The Subjective Change Rating was assigned on the basis of the student's own evaluation of the success of his project, as reported in his final paper. (The rating was based on the final paper rather than on the meeting-by-meeting record of progress because meeting-by-meeting records were difficult to compare due to the wide variety of indices of progress employed by different students.) Two raters, unacquainted with the subjects, read each final paper and assigned a Subjective Change Rating using the following 5-point scale:

- |   |  |
|---|--|
| 5. Great Success                                  | The student showed significant change and has for the most part achieved his goals. He seems comfortable with his new behavior.                |
| 4. Success with some negative elements            | The student showed substantial change but was not comfortable with it. He showed change but not consistently.                                  |
| 3. Some success<br>Some failure                   | The student managed to act in accordance with his goals some of the time but there was no integration of these behaviors into his personality. |
| 2. Generally failure<br>A few successful elements | There was occasional trying of new behaviors but for the most part no change.  |
| 1. Utter failure                                  | There was no change. The project was a complete failure.   |

In 75% of the cases, raters independently assigned ratings within one point of each other. For one-point discrepancies, the two ratings were averaged. For papers where disagreement was greater than one point, the two raters conferred and assigned a common rating.

The Trainer Rating of Change was provided by each student's T-Group leader at the close of the semester. Each leader rated each member of his group on the degree to which his change goal appeared to have been attained, using the 5-point scale described above.

The High-change sample consists of subjects who by both criteria were judged to have achieved their change goals to a substantial degree (both ratings were 4 or 5). Low-change subjects are those who failed to achieve their change goals by both criteria (both ratings were 1 or 2). Among the 51 students in Semester I there were 13 High-change and 11 Low-change subjects by these criteria. In Semester II, the total sample of 70 students included 9 High-change and 22 Low-change subjects.

Change projects of the remaining students, who (a) received moderate ratings of change by either criterion of (b) rated themselves higher or lower in change than did the T-Group trainer, were excluded from the present analysis. Trainer ratings of change were significantly although not highly correlated with Subjective Change Ratings in both semesters (Semester I,  $r = .36$ ,  $N = 51$ ,  $p < .01$ ; Semester II,  $r = .26$ ,  $N = 70$ ,  $p < .05$ ). Discrepancies between the two ratings are difficult to interpret, since they could be due to (a) subjects' biased perceptions of degree of change; (b) trainers' difficulty in observing degree of change for subjects whose goals involved changes in feelings or internal states; or (c) the fact that subjects and trainers may have used quite different data as the basis for their ratings. Since it was difficult to determine whether subjects or trainers were in a better position to estimate change "accurately", it was decided that both types of ratings should be used to select High-change and Low-change subjects for the present analysis.

Content Analysis of Ideal-Self Papers and Real-Self Papers: The Ideal-Self and Real-Self essays that students wrote represent samples of the way High-change and Low-change subjects (a) think about personal goals and (b) describe their interpersonal behavior, before the change technique has influenced them. We hypothesized that analysis of these data on ideal-self and real-self conceptualizations would reveal personality differences between the High-change and Low-change subjects that would explain their success or lack of success with their self-directed change project, although we did not specify in advance of the study what kinds of difference might emerge.

In examining the essays, the content-analysis method used by McClelland and his associates for developing new scoring systems for written TAT proto-

cols (Atkinson, 1958) was employed. In this method, two groups of protocols are compared in order to discover content and/or stylistic features which are more frequent in one group than in the other. After categories differentiating the two groups are inductively derived, the investigator writes category definitions which specify scoring criteria for these categories. Scoring criteria should be sufficiently objective so that interscorer reliability exceeds 75%.

The second stage of data analysis is to cross-validate the obtained intergroup differences by blind scoring of protocols from a second sample of subjects. This step is essential to ensure (a) that the obtained differences hold up when the investigator does not know which protocols come from which group; and (b) that the differences are not unique to the initial sample from which the categories were derived.

In the present study, the essays of the 13 High-change and 11 Low-change subjects in Semester I were used for the inductive phase of data analysis. Six categories were discovered for which High-change and Low-change subjects' scores were significantly different ( $p < .05$ , 2-tailed) by the Mann-Whitney U Test. These findings were cross-validated by scoring the essays of the 9 High-change and 22 Low-change subjects in Semester II. We will discuss in detail here only the three categories which did cross-validate successfully in Semester II.<sup>1</sup> These categories are as follows:

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<sup>1</sup>The remaining three categories, for which there are statistically significant differences in Semester I but not in Semester II, were as follows: (a) In the Ideal-Self essay, High-change subjects exceeded Low-change subjects in number of different goals named; (b) In the Ideal-Self essay, High-change subjects' goals dealt with cooperation with other group members more often than did goals of Low-change subjects; (c) In the Ideal-Self essay, Low-change subjects mentioned social inadequacy or fear of failure more frequently than did High-change subjects.

(A) In the Ideal-Self Essay:

(1) Conditional Desire (CD) (more frequent in the essays of High-change subjects). This category scores those statements which indicate a desire for a goal with the implicit recognition that this goal has not yet been achieved. The most common statement in this category is a statement beginning, "I would like ...". The category is an index of the degree to which the student thinks conditionally about himself, in the sense that he indicates awareness of and desire for a goal which has not yet been attained.

The following example includes several statements scoreable for Conditional Desire:

"I would like to be more sensitive to others in groups."

"I want to become aware of how others feel; I would hope to be less dogmatic and insensitive to others in the future."

A high score on Conditional Desire indicates that the student is responding directly to the Ideal-Self essay assignment by speaking clearly of his ideal-self as distinguished from present behavior.

(2) Description of Essence (DE) (more frequent in the essays of Low-change subjects). This category codes those instances where the individual gives an unconditional description of his present or future self. There is no recognition of separation between the person's ideal and his current state. Examples are:

"I am not too sensitive to others, although I do often perceive feelings accurately. I will be more sensitive in this group in the future. A good member is sensitive to others at all times."

A student whose Ideal-Self essay is high in Description of Essence fails to come to terms directly with the essay assignment, since he speaks not of a hypothetical self-image, but rather of present behavior or of what he definitely will be.

(B) In the Real-Self Essay:

(3) Identity Diffusion (ID) (more frequent in the essays of Low-change subjects). This category codes statements from which one can infer confusion about the self or about the relationship of the self to others and to the outside world. Four types of statements are included:

(a) Concern with Reality. Score all phrases that stress that one thing is "more real or less real than another.

(b) Feelings of Playing a Role. Score statements which indicate lack of congruence between the way the person acts and the way he feels, with no stated desire to resolve the contradiction.

(c) Vagueness about Others' Perceptions of the Self. Score expressions of uncertainty about how the self is perceived by others, or doubts about how the person wants others to perceive him.

(d) Indecisiveness and Lack of Conviction. Score any statement indicating uncertainty, tentativeness or lack of conviction about one's own ideas or actions.

The following example includes a number of statements scorable for Identity Diffusion:

"I am not myself in this T-Group. It is unreal to speak of my actual self, because I am not exactly sure who I am and I don't know how I want to be perceived. I act like a leader but I'm not sure if this is my true role."

After this scoring category had been derived inductively, it was titled Identity Diffusion on the basis of its similarity to Erik Erikson's description of that concept (Erikson, 1959). The title seems appropriate in that all statements scored for ID connote the student's uncertainty and tentativeness about his identity or about the congruence between his self-perceptions and the ways he is perceived by others.

Interscorer Reliability for content-analysis categories. Interscorer reliability for the three content-analysis categories described here was calculated in the following way. The original scores assigned by the authors were compared with the scoring of another rater unaware of the hypotheses of the study, and of which essays come from the High-change and Low-change groups. This rater scored 10 essays, conferred with the authors about cases where her scores differed from the original scores, and then independently scored 25 essays for which interscorer reliability percentages are presented in Table 1.

Table 1

Interscorer Reliability for Content-Analysis Categories

Category n=25 cases	Per Cent, <sup>1</sup> Agreement
Conditional Desire	90.0 %
Description of Essence	90.0 %
Identity Diffusion	84.0 %

$$^1 \text{Per Cent Agreement} = \frac{2(\text{Number instances scored by both scorers})}{(\text{Number scored by one scorer}) + (\text{Number scored by 2nd scorer})}$$

Comparison of High-change and Low-change subjects' scores on content-analysis variables in Semester I and II. In Table 2 the reader will find mean values and p levels of High-change/Low-change comparisons for the three content-analysis categories described above. Data for Semester I appear in the left-hand portion of the table, while the cross-validation data from Semester II are presented in the right-hand portion of the table. Significance of differences between High-change and Low-change subjects was tested by the Mann-Whitney U Test.

For all three content-analysis categories, High-change and Low-change subjects' scores were significantly different in both semesters. It should be noted that the Identity Diffusion category differentiates High-change and Low-change essays even more strongly in the cross-validation sample than in the sample from which it was derived.

Table 2

Content-Analysis Category Scores of High and Low-change Subjects in Original Sample and in Cross-validation Sample

Content-analysis code (number of references)	Semester I			Semester II		
	$\bar{X}$ score High n = 11	$\bar{X}$ score Low n = 13	p-value <sup>1</sup>	X score High n = 9	X score Low n = 22	p-value <sup>2</sup>
Conditional Desire (Ideal-Self essays)	6.91	3.69	<.02	8.22	3.59	<.02
Description of Essence (Ideal-Self essays)	3.18	8.46	<.002	4.22	6.36	<.02
Identity Diffusion (Real-Self essays)	2.64	4.23	<.05	2.12	4.00	<.004

<sup>1</sup>Mann-Whitney U Test, 2-tailed. This statistic tests the difference between two sets of ranked scores; mean values are presented here for descriptive purposes only.

<sup>2</sup>Mann-Whitney U Test, 1-tailed.

Contrary to prediction, High-change and Low-change subjects' scores on the Rokeach Dogmatism scale were not significantly different. Within the Semester II sample as a whole, the Rokeach score was unrelated to degree of change ( $r$  with Subjective Change Rating =  $-.07$ ,  $r$  with Trainer Rating of Change =  $-.19$ ) but was significantly correlated with the Description of Essence score ( $r = .28$ ,  $p < .05$ ). This finding will be discussed below.

There are some interesting relationships among the three content-analysis categories. It was stated above that the Conditional Desire and Description of Essence categories appear to reflect psychologically opposite approaches to the Ideal-Self essay. This impression is supported by the negative correlation between these two variables in both Semester I and Semester II. For the entire sample of students completing change projects, CD is correlated with DE -  $.38$  in Semester I ( $p < .05$ ) and  $-.37$  in Semester II ( $p < .01$ ).

Since these variables are negatively correlated, it may be meaningful to think of the Conditional Desire : Description of Essence ratio as a psychologically significant variable in its own right. An Ideal-Self essay in which CD statements exceed DE statements would indicate a well-developed ability to look beyond the present self and think conditionally about possibilities for change, while an essay with more DE than CD would suggest that the subject attends less to the discrepancy between goal and present self than he does to the present state of being.

As the reader can see in Table 3, this ratio of Conditional Desire to Description of Essence differentiates the High-change and Low-change subsamples in both semesters more strongly than does either of the categories alone. In Semester I all High-change subjects include more CD than DE state-

Table 3

Relationship between Conditional Desire : Description of Essence  
Ratio and Change Classification in Semesters I and II

Change Classification	Semester I		Semester II	
	CD > DE	CD ≤ DE	CD > DE	CD ≤ DE
High Change	11	0	7	2
Low Change	0	13	5	17
	$\chi^2$ corrected for continuity = 20.14 $p < .001$		$\chi^2$ corrected for continuity = 6.06 $p < .015$	

ments in their Ideal-Self essays, while all Low-change subjects show the reverse pattern. In the cross-validation sample the change classifications of 24 of the 31 subjects can be predicted correctly from the CD : DE ratio.

The Identity Diffusion category does not appear to be related consistently to either Conditional Desire or Description of Essence. In Semester I, ID is significantly correlated with Description of Essence ( $r = .37, p < .05$ ) but not with Conditional Desire ( $r = -.09$ ). In the cross-validation sample neither of these correlations is significant (ID with DE,  $r = .06$ ; ID with CD,  $r = .02$ ).

Discussion. The results presented above suggest that two relatively independent personality characteristics are related to the ability to attain personal change goals. The first important characteristic, measured by the Conditional Desire : Description of Essence ratio, is the ability to think conditionally about oneself. The High-change subject is one who, in the free-response situation of an Ideal-Self essay, displays the ability to postulate future possibilities for himself with the implicit recognition that these have not yet been attained. The Low-change subject appears deficient in this ability; his high Description of Essence score suggests that future possibilities are less salient for him than is his present behavior and/or his convictions about what he will be like in the future.

The second characteristic is confusion or tentativeness about the present self, as reflected in the Identity Diffusion code for the Real-Self essay. The Low-change subject's concern with defining "reality", his sense of playing an artificial role, his vagueness about how he is perceived by others and his indecisiveness regarding his own thoughts and actions appear to be incompatible with successful self-directed change. We have already

suggested the similarity of this personality syndrome to identity diffusion as described by Erikson (1959).

Why should these particular personality characteristics be important for the outcome of an individual's self-directed change project? To answer this question, we must first briefly consider the psychological processes which we hypothesize are involved in the process of self-directed change. Within this context the significance of the present findings will be more clear.

In earlier research with the self-directed change method (Kolb, Winter and Berlew, 1967), an individual's commitment to his goal was found to be related to degree of change. Moreover, the overall percentage of High-change subjects increased sharply when the change technique was modified so as to encourage more thoughtful consideration of goals. It appears that the goal-setting process is a central element in successful self-directed change, perhaps because the establishment of a goal is crucial in arousing motivation for the difficult and often painful struggle to achieve a change. Cognitive dissonance theory (Festinger, 1957; Brehm and Cohen, 1962) provides a conceptual framework within which this notion can be understood.

We argue, here, that the self-directed change effort is motivated by an individual's desire to reduce the dissonance which he has created for himself by establishing and attaching value to a personal goal. Goal-setting is dissonance-creating in that the person consciously sets up a tension between two different conceptions of himself -- the present self and the desired ideal self. Both conceptions are highly valued and dissonant with one another. The goal is valued to the extent that the individual clearly

commits himself to attaining it; the present self is valued as a source of esteemed security. To the degree that the person clearly recognizes an incompatibility between his present self and a valued goal-state, he becomes aware of dissonance and he is motivated to reduce this dissonance in some way.

There several possible ways to resolve this dissonance between present self and goal. One way is to retract commitment from the goal, and to decide that the present behavior is satisfactory after all. Another possible solution is to change one's perception of the present self (without changing present behavior), so that one becomes convinced that the goal has already been attained. The third and often most difficult avenue of dissonance-reduction is to change the present behavior until it becomes congruent with the valued goal.

The present self-directed change method includes several mechanisms which discourage individuals from reducing dissonance in either of the first two ways, however. First, the method makes abandonment of the goal difficult by forcing the individual to focus attention on the goal over a protracted period of time. Not only has he committed himself to his goal publicly before other T-Group members, but he must consider the goal anew at each group meeting when he assigns himself his progress ratings from week to week.

Second, dissonance-reduction via an inaccurate perception that the goal is being attained is made difficult by the change method's emphasis on feedback. Two sorts of feedback encourage the individual to perceive his progress realistically. First, the person gives himself weekly feedback through his meeting-by-meeting ratings, which are based on objective criteria

of progress established at the outset of the project. Second, feedback is provided by other members of the group.

Thus through emphasis on the goal and through feedback, the self-directed change method makes it difficult for the individual to reduce Real-Self/Ideal-Self dissonance by the quick-and-easy methods which presumably short-circuit many unsuccessful personal change efforts in everyday life. The probability is thereby increased that dissonance will be reduced by a change in behavior, bringing behavior into closer approximation to the goal.

Returning now to the data of the present study, it becomes clearer why Conditional Desire, Description of Essence and Identity Diffusion are important personality variables for the self-directed change process. These categories appear to reflect individual differences in ability to create and maintain awareness of dissonance in the goal-setting phase of a self-directed change project.

The Conditional Desire category appears to reflect the student's natural tendency, before introduction to the change method, to phrase personal goals in a manner which implies dissonance between the goal and present behavior. By phrasing goal-statements conditionally, the person demonstrates simultaneous awareness of two dissonant elements: the present self, and the goal. The CD measure is in this sense an operational definition of a subject's awareness of dissonance. Such clearly recognized dissonance motivates the individual in his change effort. If other factors (e.g., feedback) important in change are present, the individual is likely to attain his goal.

We have suggested that the High-change subject is one who is able to create and maintain dissonance between present-self-conception and goal.

The Low-change subject, in contrast, may be an individual who, in the course of setting goals, does not create dissonance for himself in the manner outlined above. A consideration of the two content-analysis categories characteristic of the papers of Low-change subjects suggests reasons why this may be so.

First, the Low-change subject's goals may be imperfectly differentiated in his mind from his present behavior. Low-change subject's Ideal-Self essays are characterized by high Description of Essence, and by a CD : DE ratio of less than one. In other words, when the Low-change subject is asked to think of goals he concentrates heavily on what he is, and appears to be unable to postulate for himself clearly different behaviors or feelings. He appears closed-minded to possibilities for himself that do not exist at the present time. In the light of the positive correlation between Description of Essence and the Rokeach Dogmatism scale, this closed-mindedness may extend to other areas of such individuals' functioning as well. In any case, the Low-change subject's inability to clearly articulate differences between present behavior and future goal reduces the probability of his experiencing dissonance between these two elements. Accordingly, little motivation to change behavior is likely to be present.

The Identity Diffusion category can be interpreted in a similar manner. A high Identity Diffusion score on the Real-Self essay implies two potential difficulties which could prevent the Low-change subject from creating dissonance when he sets a goal. The first problem is analagous to the one outlined above. We have noted that the individual high in Identity Diffusion appears confused and uncertain about the nature of the present self. For dissonance to be created, two elements incompatible with one another must be

clearly identified and distinguished from one another, so that the contradiction between them becomes obvious. Without a firm conception of what he is at the present time, the individual high in Identity Diffusion may be unable to set up this motivating tension between clearly differentiated self and ideal.

There is a further reason why a person high in Identity Diffusion may not create dissonance for himself in the process of setting a goal. As Roger Brown (1965) points out, a dissonant relationship between two cognitive elements exists not when the elements are logically contradictory, but when the elements are psychologically incompatible for the particular individual in question. Individuals doubtless differ, he says, as to whether given elements are or are not experienced as dissonant with one another. The classical dissonance experiments in the psychological literature work because most people share certain suppressed premises about themselves -- "I say what I believe," "I do things that are worthwhile," and so on. But "since dissonance derives from premises about oneself and the world, it must vary with self-concept and world-view." (p. 598). Thus there may be individuals for whom the usual premises do not hold. For such persons, elements which we generally term dissonant can coexist without creating motivation to change.

In the terms of the present study, a person high in Identity Diffusion would appear to be one who tolerates internal ambiguity and contradiction without experiencing dissonance. The high Identity Diffusion score suggests that the person ordinarily conceives of himself in contradictory terms. It is reasonable to suppose that for him no contradiction is necessarily implied by the fact that present behavior and valued goal are different from one another.

We suggest here that for most subjects dissonance between present self and valued goal is created because of the presence of the unspoken premise "I do what I value". For subjects high in Identity Diffusion, however, this premise appears to be directly refuted in the Real-Self essay. Thus, high Identity Diffusion subjects will experience as consonant discrepancies between ideal and real-self which would be felt as dissonant by low Identity Diffusion individuals.

One further question, in the light of these findings, is the degree to which the ability to create or recognize dissonance can be developed. Can subjects be made more aware to the dissonance between images of the Real-Self and the Ideal-Self and thus become more motivated to change? Would this lead to increased ability to attain personal change goals? It may be possible to create conditions which will stimulate individuals to greater awareness of dissonance, just as it was possible, in earlier work with the self-directed change method (Kolb, Winter and Berlew, 1967), to create conditions which increased subjects' commitment to goals and attention to feedback relevant to the change projects.

One possible technique for increasing perceived Real-Self/Ideal-Self dissonance would be to train subjects to phrase their goals in terms similar to those used by the High-change subjects of the present study. It may be possible to facilitate change by teaching subjects Conditional Desire, just as McClelland and his associates have increased subjects' achievement behavior by teaching the technique of writing TAT stories which score high in achievement (Kolb, 1965; McClelland, 1965). If individuals can confront the mechanisms by which their own thought processes deny them awareness of their ideals, perhaps they can begin to experience their natural desires for personal growth.

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