





LIBRARY
OF THE
MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

HD28
.M414
no. 309-
68

WORKING PAPER
ALFRED P. SLOAN SCHOOL OF MANAGEMENT

THE CAPACITY FOR SELF DIRECTION¹

309-68

Supersedes 245-67 and 182-66

Sara K. Winter² Jeffery C. Griffith³

David A. Kolb⁴

MASSACHUSETTS
INSTITUTE OF TECHNOLOGY
50 MEMORIAL DRIVE
CAMBRIDGE, MASSACHUSETTS 02139



THE CAPACITY FOR SELF DIRECTION¹

309-68

Supersedes 245-67 and 182-66

Sara K. Winter² Jeffery C. Griffith³

David A. Kolb⁴

¹The 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.

²Wesleyan University.

³Harvard University

⁴Massachusetts Institute of Technology.

HC 28

m414

no 309-68

RECEIVED
FEB 5 1968
M. I. I. LIBRARIES

Abstract

A content analysis of self-descriptive essays written by students who were subsequently successful ($N=13$) and unsuccessful ($N=11$) in attaining self-directed behavior change goals revealed: (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 alternative possibilities; (c) Low-change subjects showed more tentativeness and uncertainty about themselves ("identity diffusion"). The findings were cross-validated in a second sample of successful ($N=9$) and unsuccessful ($N=22$) students. The results suggest that successful self-directed change is motivated by awareness of the cognitive dissonance created when an individual commits himself to a valued goal that he sees as different from his present behavior.

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 solu-

tion of certain limited behavioral problems". It appears that many psychologists are increasingly willing to explore the possibility that 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), two factors were found that predicted their 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. Improving the change method to increase goal commitment and feedback increased the percentage of students successfully attaining their goals from 5% to 61%.

This reason 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 features of the essays which distinguish between the two groups will be isolated. These findings will then be cross-validated for a second sample of successful and unsuccessful subjects.

Procedure

Setting: The study was conducted in a semester long course in Psychology and Human Organization, required of candidates for a Master's degree in Management at M.I.T. As a part of the course, students participated in 15-man 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 were required as a part of the student's T-Group participation, but were ungraded. The study reported here was carried out during two successive semesters.

Subjects: High-change and Low-change subjects 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 of Master's candidates in Industrial Management at M.I.T. They ranged in age from 20 to 35, with most 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. In the first week of the course, before hearing of the change projects, each student wrote 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" (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 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 of self-directed change (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 after each session rated 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 contribution 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. 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 a 5-point scale ranging from utter failure (1) to great success (5). 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 used the same 5-point scale and was provided by each student's T-Group leader at the close of the semester. Trainers did not read the final papers of self descriptive essays.

The High-change sample consists of subjects who by both criteria were successful in achieving their change goals (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 received moderate ratings of change by either criterion, or who 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 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 student's Ideal-Self and Real-Self essays represent samples of the way High-change and Low-change subjects think about personal goals and describe their interpersonal behavior, before the change technique has influenced them. It was hypothesized that analysis of these data on ideal-self and real-self conceptualizations would reveal personality differences that would explain success or lack of success with a self-directed change project, although no specific predictions were made. In examining the essays, the content-analysis method used by McClelland and his associates for developing new scoring systems for written

TAT protocols (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.

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. Blind scoring of the essays by the authors revealed six categories 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 blind scoring of the essays of the 9 High-change and 22 Low-change subjects in Semester II. Only the three categories which did cross-validate successfully in Semester II will be discussed in detail.² These categories are as follows:

In the Ideal-Self Essay

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.

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

In the Real-Self Essay

Identity Diffusion (ID) (more frequent in the essays of Low-change subjects). This category scores statements from which one can infer confusion about the self or about the relationship of the self to others and to the outside world. It seems to be related to Etikson's (1959) definition of the term. Four types of statements are included: (1) Concern with Reality. All phrases that stress that one thing is more real or less real than another. (2) Feelings of Playing a Role. 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. (3) Vagueness about Others' Perceptions of the Self. Expressions of uncertainty about how the self is perceived by others, or doubts about how the person wants others to perceive him. (4) Indecisiveness and Lack of Conviction. Any statement indicating uncertainty, tentativeness or lack of conviction about one's own ideas or actions.

Interscorer reliability for the content-analysis categories was calculated in the following way. The original scores assigned by the authors were compared with the scoring of another rater unaware either of the hypotheses of the study or of the identity of the essays. 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. The percent agreement on scoring these 25 essays was 90% for both CD and DE and 84% for ID.

Comparison of High-change and Low-change subjects' scores on content-analysis variables in Semester I and II. In Table 1 are 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, which 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.

Table 1

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 ^a	\bar{X} score High $N = 9$	\bar{X} score Low $N = 22$	p-value ^b
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

^aMann-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.

^bMann-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. The notion that the Conditional Desire and Description of Essence categories appear to reflect psychologically opposite approaches to the Ideal-Self Essay 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. This ratio of Conditional Desire to Description of Essence differentiates the High-change and Low-change sub-samples in both semesters more strongly than does either category alone. In Semester I all High-change subjects include more CD than DE statements in their Ideal-Self essays, while all Low-change subjects show the reverse pattern (χ^2 corrected for continuity = 20.14 , $p < .001$). In the cross-validation sample the change classifications of 24 of the 31 subjects can be predicted correctly from CD : DE ratio (χ^2 corrected for continuity = 6.06 , $p < .015$).

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 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 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 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 about his own thoughts and actions appear to be incompatible with successful self-directed change. The similarity of this personality syndrome to identity diffusion as described by Erikson (1959) has already been noted.

Why should these particular personality characteristics be important for the outcome of an individual's self-directed change project? 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 when the change technique was modified so as to encourage more thoughtful consideration of goals. Thus, 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 struggle to achieve a change. Cognitive dissonance theory (Festinger, 1957; Brehm and Cohen, 1962) would suggest 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 which he has not yet achieved.

There are 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 mechanisms which discourage individuals from reducing dissonance in either of the first two ways. 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 objective feedback. The person gives him-

self weekly feedback through his meeting-by-meeting ratings, and 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 shortcircuit many personal change efforts in everyday life. The probability is thereby increased that dissonance will be reduced by bringing behavior into closer approximation to the goal.

It now 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 seems to reflect the student's natural tendency 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. Such clearly recognized dissonance motivates the individual in his change effort.

If the High-change subject is one who is able to create and maintain dissonance between his present self concept and his goal, the Low-change subject, in contrast, seems to be one who does not create dissonance for himself when he sets goals. 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 subjects' 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. The positive correlation between Description of Essence and the Rokeach Dogmatism scale may indicate that this closed-mindedness extends to other areas of such individuals' functioning as well. In any case, this inability to clearly articulate differences between present behavior and future goal reduces the probability of 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. 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. 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.

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. For low identity diffusion 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. 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.

If the above reasoning is correct it may be possible to increase an individual's success in self-directed change by creating conditions which will increase his awareness of dissonance between his self-concept and his ideal self-concept. Future research should investigate this possibility.

References

- Allport, G. Personality and social encounter. Boston: Beacon Press, 1960.
- Atkinson, J.W. (Ed.). Motives in fantasy, action and society. Princeton: Van Nostrand, 1958.
- Bradford, L.P., Gibb, Jack and Benne, Kenneth. T-group theory and laboratory method. New York: John Wiley, 1964.
- Brehm, J.W. and Cohen, A.R. Explorations in cognitive dissonance. New York: John Wiley, 1962.
- Brown, Roger. Social psychology. Glencoe, Illinois: The Free Press, 1965.
- Erikson, Erik. Identity and the life cycle. Psychological Issues, Vol. 1, No. 1.
- Festinger, Leon. A theory of cognitive dissonance. Evanston: Row-Peterson, 1957.
- Goldiamond, I. Self-control procedures in personal behavior problems. Psychological Reports, 1965, 17, 851-868.
- Grossberg, J.M. Behavior therapy: a review. Psychological Review, 1964, 62, 73-88.
- Kolb, David A., Winter, Sara K. and Berlew, David E. Self-directed change: two studies, Journal of Applied Behavioral Science. In press, 1967.
- McClelland, D.C. Toward a theory of motive acquisition. American Psychologist, 1965, 20, 321-333.
- Rokeach, Milton. The open and closed mind. New York: Basic Books, 1960.
- Schwitzgebel, R. A simple behavioral system for recording and implementing change in natural settings. Unpublished Doctoral thesis, Harvard School of Education, 1964.
- Zachs, J. Collaborative therapy for smokers. Unpublished A.B. thesis, Harvard University, 1965.

Footnotes

¹The 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.

²The 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 complete scoring manual is available from the authors.

1969

10 '71

111-11/5

AUG 24 78

DEC 6 74

BASIN

Date Due

~~MAR 27 '78~~

AG 29 '91

Lib-26-67



304-68

3 9080 003 702 021



305-68

3 9080 003 671 044



306-68

3 9080 003 702 112



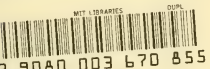
307-68

3 9080 003 702 096



308-68

3 9080 003 670 830



309-68

3 9080 003 670 855



310-68

3 9080 003 671 119



311-68

3 9080 003 671 093



312-68

3 9080 003 671 069



313-68

3 9080 003 671 085

P. 2

