

## THE ENHANCEMENT OF SOCIAL SELF-ESTEEM

W. L. MARSHALL  
 M. M. CHRISTIE  
*Queen's University*

### Abstract

This paper describes two controlled single-case studies and one group study investigating the enhancement of social self-esteem. The two singlecase analyses suggested the value of a self-managed reinforcement procedure that targetted positive self-evaluations, in enhancing the very low social confidence of two young women who presented at our clinic. The group study included 18 undergraduate volunteers (10 females and 8 males) who were markedly low in social self-esteem. This study compared the relative effectiveness of three self-management procedures: one where the emission of personalized positive self-evaluations was followed by a pleasant event; one where the pleasant event preceded the emission of the positive statements; and one where the positive statements were unrelated to any particular events. The latter procedure was significantly less effective than the former two, which were equally effective. Thus a self-managed procedure was demonstrated to be effective in enhancing social self-esteem but the underlying mechanisms of change were obscure.

### Résumé

Cet article relate deux études sur l'amélioration de l'estime de soi en situation sociale, l'une réalisée avec deux cas individuels, l'autre avec un groupe de sujets. Les analyses des cas (deux jeunes femmes vues en clinique) laissent entrevoir que l'auto-administration d'un procédé de renforcement axé sur les auto-évaluations positives contribue à rehausser la très faible estime de soi des sujets en situation sociale. L'étude de groupe se fait auprès de 18 volontaires (10 féminins, 8 masculins), tous étudiants de premier cycle. Elle vise à comparer l'efficacité relative de trois procédés d'auto-administration: 1) auto-évaluations positives suivies d'un événement plaisant; 2) auto-évaluations positives précédées d'un événement plaisant; 3) auto-évaluations associées à aucun événement particulier. Ce dernier procédé s'avère moins efficace que les deux premiers qui, sous ce rapport, ne diffèrent pas l'un de l'autre. En conséquence, on démontre que l'auto-administration de procédés de renforcement contribue à rehausser l'estime de soi en situation sociale bien que restent à élucider les mécanismes sous-jacents à un tel changement.

The recent concern with *self-management* (Goldfried & Merbaum, 1973; Kanfer, 1975; Mahoney & Thoresen, 1974; Thoresen & Mahoney, 1974) *cognitive factors* (Beck, 1970; Mahoney, 1975) and *covert processes* (Cautela, 1971; Mahoney, 1970) in treatment,

has encouraged at least some behaviorally-oriented researchers to attempt to manipulate feelings of self-worth. For example, several case studies (Mahoney, 1971; Seitz, 1971; Todd, 1972) have suggested the possible value of self-reinforcing positive self-evaluations, and Krop, Calhoun and Verrier (1971) showed that experimenter-administered reinforcement of positive self-statements led to significant improvements in the self-concept of children.

*The enhancement of social self-esteem*

Of course behavior therapists were not the first to note the importance of self-esteem. William James, Freud, and Adler, to name just a few, pointed to the crucial role in human behavior of the person's concept of themselves, and the history of psychotherapy consistently includes references to the importance of self-conceptualizations in determining behavior (Wylie, 1961, 1968) with Rogers (1951) considering the enhancement of self-esteem to be one of the main goals of therapy.

Behavioral attempts to enhance self-esteem have assumed that self-confidence is a function of the frequency with which the subject emits positive self-evaluations where it is supposed that these self-evaluations are generally covert and not well-articulated. It is not clear from these formulations just what part is played by negative self-evaluations although a complementary proposition might suggest that persons low in self-esteem differ from those who are self-confident by their tendency to characteristically appraise their own performance in a negative manner. Indeed Beck's (1967) cognitive analysis of depressives' mood proposes just such a negative tendency. Both views however, suggest that the result of increasing the frequency of positive self-evaluations should be an enhancement of self-esteem, although the cognitive approach would encourage therapists to also reduce negative self-appraisals. Concerning this latter possibility Mahoney (1971) observed that a reduction in negative self-statements did not produce a reciprocal increase in positive self-evaluations, and Hannum, Thoresen, and Hubbard (1974) found little or no benefit from suppressing self-condemnatory remarks.

Before treatment can be initiated the first problem confronting the researcher in any area of study is measurement, and nowhere is this problem more exaggerated than in the modification of covert processes. Although a number of measures of self-esteem are in widespread use (e.g., Butler & Haigh's (1954) Q-sort; Coopersmith's (1967) scale; and Osgood, Suci, & Tannenbaum's (1957) Semantic Differential) most of them are factorially complex and it is not clear precisely what they are measuring (Wylie, 1974). It is clear however, that most of these instruments define self-esteem in terms too broad to permit accurate measurement and too vague to imply appropriate modification procedures. What is needed is a more restricted definition; one that matches the kinds of problems of self-confidence commonly reported by patients referred for treatment. An earlier study

(Lawson, Marshall, & McGrath, 1979) made a case for the relevance of focussing assessment on feelings of self-worth in social situations on the basis that difficulties in these situations were more common among clinical patients and that such an approach narrowed the range of description so that change procedures could be more readily specified. Lawson *et al.*, (1979), described a factorially pure measure of social self-esteem. The present study then, will target social self-confidence defined in terms of this measure.

Of course it may be claimed that a failure to provide an overt behavioral measure is a serious omission. Such a criticism however, would be based on both a lingering skepticism concerning the status of subjective experiences in a science of human behavior, and a misunderstanding of the nature of self-esteem. Certain human behaviors can be understood and studied in terms of overt responses (e.g. social skills), while other behaviors (e.g. anxiety) are better considered as multiple responses occurring in the motoric, physiologic and cognitive systems. Self-esteem, on the other hand, is by definition (see Coopersmith (1967) and Wylie (1974) for a discussion of the nature of self-esteem) a subjective self-evaluative response. This is not to deny that such self-evaluations have consequences for overt behavior. Indeed they do but the influence is not always clearly predictable (Wylie, 1974), and in any case when patients complain of low self-esteem they are not distressed about their overt behaviors but rather it is their feelings about themselves that cause concern. This subjective state then, is the target for treatment and should form the basis of assessment, although it may well turn out that modifying overt behaviors in certain situations will facilitate behavioral changes.

Mahoney (1970) has identified many aspects of self-management and covert control procedures that await research but for our purposes the two most relevant topics are: (a) the effectiveness of such procedures in enhancing self-esteem; and (b) the role and nature of reinforcers in this procedure. The present paper reports two single-case analyses and one group study that address themselves to these questions.

*The Single-case Analyses*

In order to establish that the proposed procedure does indeed produce effects we

initially chose a single-case design with one replication as the most economical strategy. Two subjects who learned of our interest in enhancing self-esteem, called to request help in increasing their confidence in social interactions. An assessment of their social self-esteem using Lawson *et al.*'s (1979) scale, revealed that both subjects were indeed quite low in self-confidence in social situations. This *Social Self-esteem Inventory* (SSEI) contains thirty self-evaluative statements, and requires the subject to rate each statement on a 6-point scale in terms of how accurately it describes his or her self-perceptions so that higher scores reflect more positive self-esteem. Lawson *et al.*, provided normative data ( $\bar{X} = 132$ ;  $sd = 21$ ), demonstrated factorial purity, and described the scale's reliability over a four-week test-retest period ( $r = 0.88$ ). The validity of the SSEI was supported by its power to discriminate psychiatric patients (Gauthier, Marshall, & Hoaken, Note 1) and sexual offenders (Marshall, Christie, & Lanthier, Note 2) from normals.

In addition to repeatedly measuring self-confidence using the SSEI, subjects were also required to self-monitor the frequency of positive self-evaluations on a daily basis throughout treatment. In this way we attempted to examine the effects of the procedures on both self-reported confidence and the frequency of positive self-appraisals that occurred independently of treatment, especially when the procedures were no longer in operation.

The primary aim was to produce a self-managed procedure that could be carried out by the subjects during their daily routine. However in order to demonstrate the effects of increasing positive self-statements per se, subjects initially followed the procedure in the therapist's office so that it could be objectively determined that they were following, and comprehending, the requirements.

*Case 1.* The first subject (a 22 year-old female) was instructed to self-monitor the occurrence of positive self-evaluations each day for a period of one week (Baseline 1). Self-evaluations were described as a tendency to state (vocally or subvocally) or think positive or negative ideas, or to feel positively or negatively about oneself or one's own behavior. The subject was informed that these self-evaluations might occur in various contexts; might be prompted by some event or behavior;

or might seem to arise completely unsolicited. Only those positive self-evaluations concerned with social interactive behavior were to be recorded, and during treatment the subject was advised to record only those evaluations that occurred over-and-above the rate required by the treatment procedures.

The subject was provided with a 4 inch x 3 inch card that divided each day into 1-hour intervals. She was instructed to record the number of positive self-evaluations on each hour by reflecting on her experiences over the previous 1-hour period. This may not have been ideal but previous experiences had suggested that anything more onerous than this would be unlikely to elicit cooperation. Weekly scores are simply the sum of the daily tallies.

The SSEI was completed three times each week, with each week's scores representing the mean of these three assessments. Figure 1 shows that the subject's SSEI scores during Baseline 1 were almost two standard deviations below the normative mean.

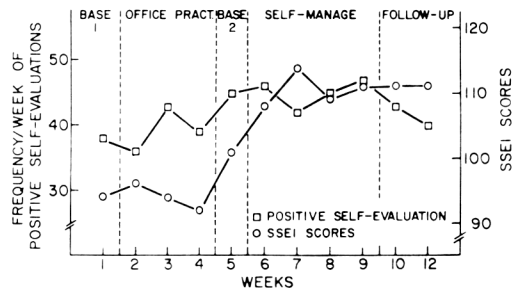


Figure 1. Data for case one

During Baseline 1 the subject came to the therapist's office three times each week to hand in self-monitoring data and to complete the SSEI. At the end of this baseline the "Office Practice" procedure was initiated. This procedure, occurring three times per week over a three-week period, required the subject to repeat aloud to the therapist each of ten positive self-statements three times.

The list of ten positive self-statements described personal characteristics or abilities that the subject agreed were valuable in social interaction, and that were true and realistic statements about herself. It was not the aim to produce unrealistic appraisals such as "I am wonderful", but more modestly accurate statements such as "I am a reasonably interesting person" or "I am quite pleasant to others" or other idiosyncratic self-appraisals.

*The enhancement of social self-esteem*

Initially it was difficult to get the subject to consider the possibility that she had any positive characteristics, and this seemed to be a result of her tendency to set unrealistically high standards for judging herself to be worthy of compliment. However once persuaded of the goal of defining only modestly positive attributes, the task was completed. There can be no denying the possible therapeutic value of changing subjects' criteria for evaluating themselves and Bandura (1971) cogently argues for inducing such changes in individuals who are low in self-esteem. Each block of three repetitions of each statement was followed by a pleasant thought or activity (e.g., imagining she was lying on a beach on a sunny day; talking to her boyfriend on the telephone; or listening to a tape-recording of a song she particularly liked) so that the procedure used both covert and overt events as potential reinforcers.

As can be seen from Figure 1 there was very little change as a result of "Office Practice" on either the SSEI or the frequency of treatment independent positive self-evaluations. This failure to find any change not only reflects on the direct and immediate benefits deriving from the office practice, but also indicates that whatever changes were induced in the subject's criteria for self-appraisals, these changes did not enhance self-esteem. Because the office-based procedure did not have immediate and direct benefits, does not necessarily mean that it has no worth. Indeed it was employed to ensure that the subject understood the procedural requirements of treatment and it certainly secured that goal. In addition the office practice may have had effects that were somewhat delayed, and it did seem to increase the subject's confidence in the general approach to her problem. In any case we would recommend the routine use of explicit office practice in attempts to enhance self-esteem.

A further baseline period (Baseline 2) revealed an increase in both sets of data for reasons unknown to either the therapist or subject, although it is tempting to suppose that these are delayed effects of the office practice. The subsequent institution of the "Self-management" procedure appeared to augment and maintain these gains on the SSEI, but it would be unwise to attribute these effects exclusively to self-management owing to the inexplicable increases during Baseline 2.

The "Self-management" procedure

followed the same pattern as the "Office Practice" except that the subject was instructed to spread the practice throughout the day by emitting the possible self-appraisals immediately prior to regularly scheduled occurrences of events that it was hoped would function as reinforcers. If the frequency of these regular pleasant events was not sufficient, the subject was advised to augment the usual occurrence with additional potential reinforcers.

Follow-up data showed a maintenance of the gains although it is important to note that the subject still scored one standard deviation below the mean for normals on the SSEI. However she did report increased feelings of self-confidence after treatment and was pleased with the effects of the program.

*Case 2.* Owing to the failure to clearly demonstrate benefits that could be attributed to the Self-management procedure, we attempted a replication that included one additional feature. The subject in this study (a 19 year-old female) followed identical procedures in the same sequence as did the first subject, except that after Baseline 2 a "Home Practice" component was added followed by another baseline (Baseline 3) before the introduction of the "Self-management" program. Home Practice consisted of instructing the subject to rehearse each of the ten positive statements three times each day for three weeks. No instructions were given about when to practice the statements nor was any advice given concerning associating the emission of the statements with pleasant activities.

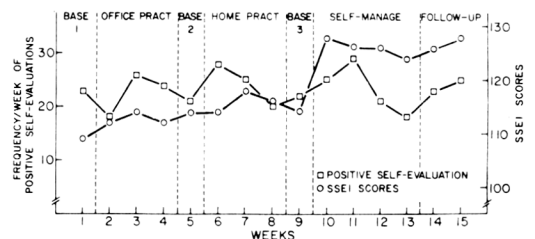


Figure 2. Data for case 2

Measurement matched that of the first study and, as Figure 2 shows, Self-management was effective while none of the other procedures produced any changes. In this second case-study the benefits from treatment are clearly attributable to the Self-management procedure. Again the subject reported feeling much greater self-confidence after treatment.

### *Discussion of Single-cases*

Together these cases suggest a procedure has been defined replicating the effects of earlier studies, so that this procedure can now be subjected to further analyses based on group designs. Two important points to note about the case studies however, concern the failure to obtain increases in the frequency of positive self-evaluations that occurred independent of treatment, and the fact that the simple repetition of the statements (as happened in the Office and Home Practice procedures) was not sufficient to enhance self-esteem.

If self-esteem is a function of the absolute frequency of positive self-appraisals, as at least some versions of the behavioral perspective seem to imply, then the Office and Home Practice procedures should have been just as effective as Self-management. Furthermore, since there was no explicit treatment during follow-up, there should either have been a loss of gains on the SSEI (due to the drop in frequency of positive Self-statements as a result of suspension of treatment) or an increase in the self-monitored report of the number of positive self-evaluations. After the cessation of treatment the subjects may have continued to engage in the practice required by the Self-management procedure (in which case the self-monitoring data should have shown an upswing), or they may have discontinued this practice. They apparently followed the latter course if one is to believe their self-monitoring data. If this is true, then it cannot be maintained that self-esteem is a function of the absolute frequency of positive self-appraisals. As an alternative, it may be said to be a function of the relative frequency of such appraisals, but since we have no data on the rate of negative self-evaluations, no conclusion can be reached regarding this possibility. However, it seems unlikely that simplistic notions concerning direct relationships between self-esteem and the frequency of either positive or negative self-statements, will constitute satisfactory accounts of the changes that were observed. It seems more likely that a change was induced in some more general cognitive structure(s) such as the tendency to focus on positive as opposed to negative aspects of one's own behavior as well as environmental feedback, and the tendency to set unrealistic standards against which to judge one's behavior. Indeed the fact that the clear drop in treatment-independent positive self-appraisals that occurred for Case 2 in weeks 12 and 13, was

not associated with changes in SSEI scores or self-reported confidence, indicates that some more general cognitive structure must be affected by treatment.

Despite these limitations to our inferences about the causes of the observed changes, it is clear that the procedure is effective. However it seems likely that it is effective only under certain conditions: namely when the emission of the positive self-statements occurs in the subject's every-day environment, and when such evaluations are followed by some personally-defined pleasurable experience. A group design will now examine the effectiveness of this procedure across subjects.

### *The Experimental Study*

Both single-case subjects reported that whenever they were about to take coffee (or whatever else they were using as an overt reinforcer), the preparation would remind them of the procedure and they would spontaneously emit positive self-evaluations. This suggests that the cueing properties of pleasant overt behaviors may be at least as important as their supposed reinforcing properties. Indeed Hannum *et al.*, (1974) found that when positive self-thoughts followed (i.e., were cued by) high frequency behaviors, the self-esteem of teachers was effectively increased.

The aim of the present study then, is to examine the importance of the order of the self-evaluations and the supposed reinforcers.

*Subjects:* 18 subjects (10 females and 8 males) were chosen from undergraduate volunteers on the basis of having scores on the SSEI that were at least one standard deviation (a maximum score of 111) below the mean of the normative sample. Selected subjects were allocated to stratified blocks on the basis of their pretreatment assessment data and then randomly assigned to one of three groups. There was an approximately equal allocation of males and females to each group.

*Measures.* Three scales were employed to assess social self-esteem: the SSEI, as previously described; a Semantic Differential; and a Subjective Rating Scale.

*The Semantic Differential (SD)* requires subjects to rate "Myself as I really am" using a 5-point scale on fifteen bipolar adjectives so

*The enhancement of social self-esteem*

that higher scores indicate greater self-esteem. The fifteen adjective-pairs were chosen from forty-eight pairs by each member of a selection panel (three clinical psychologists and seven graduate students enrolled in clinical psychology) who were instructed to choose only those adjectives relevant to performance in social situations (e.g., interesting, pleasant, attractive, etc.). Grinter (Note 3) showed that this scale was quite reliable over a six week test-retest period ( $r = 0.79$ ). The SD scale was included to provide an estimate of social self-esteem that was independent of specific situations, and in this way add something to the description over and above that obtained by the SSEI.

The *Subjective Rating Scale* (SR) requires subjects to rate their self-esteem in social situations on a single percentage scale where 100 indicates maximal self-confidence, and zero represents a total absence of confidence. Grinter (Note 3) found that this scale was also highly reliable over a six week test-retest period ( $r = 0.90$ ). The SR scale was added to provide a more global estimate of social self-esteem, thereby adding to the descriptions offered by the SSEI and the SD.

*Treatments.* Subjects met with the experimenter for an initial 30-minute orientation and training session, and then self-administered their treatment program for four weeks. During this time subjects were contacted twice weekly to ensure that they were meeting the requirements and to solve any ongoing difficulties. For the Reinforcement and Cueing subjects additional positive self-statements and pleasant events were added to their lists at each of these contacts.

Subjects in the *Reinforcement* group were provided with a rationale that emphasized the importance of consequating behaviors in order to increase their frequency, and they were advised that research and clinical experience had established the value of pleasant experiences as consequences. At the initial training session subjects were given practice in completing the self-monitoring sheets.

A list of ten positive self-statements was produced according to the procedure employed with the single cases, with the statements being written on small cards that the subjects carried with them. In addition each subject was required to identify several pleasurable activities in which he characteristically engaged at least on a daily, and preferably more frequent basis. Typical chosen behaviors included: drinking coffee, listening to music,

smoking, eating, etc. Subjects were advised to take out their cards at least ten times each day and read one statement (a different one each time) three times immediately before engaging in one of the pleasant activities (these were randomly varied to avoid satiation). At the practice session subjects verbalized the statements and then pretended to engage in the pleasurable activity so that the experimenter was assured they understood the requirements of the procedure.

Subjects in the *Cueing* group followed exactly the same procedure except that their rationale and specific procedure stressed the value of preceding rather than following, the emission of their positive self-statements with a pleasurable activity. This, they were told, would induce a positive mood and make their self-statements more acceptable and believable.

The final group of subjects (*Practice*) were instructed to rehearse each of the ten positive self-statements at least three times each day, and they were told that such practice had been shown to enhance self-esteem. These subjects were not advised concerning the value of associating positive self-statements with overt behaviors, nor were they told to cue the emission of their statements by any events or time. Any advice on either of these points would have replicated important procedural aspects of the two treatments, thereby obscuring the aim of the Practice group which was to control for the repeated emission of the positive self-evaluations. Of course the failure of the laboratory-based version of this practice procedure with the two case studies does not encourage optimism concerning its likely value.

*Results.* Table 1 summarizes the data. Analyses of variance of the pretreatment data indicated that there were no significant differences between groups on any of the measures.

Table 1  
Summarized outcome data for the Group Study

Condition		Measures					
		SSEI		SD		SR	
		Pre	Post	Pre	Post	Pre	Post
Reinforcement	Mean	89.0	115.8	47.5	55.2	44.2	61.7
	Standard deviation	15.65	17.98	5.82	5.27	9.70	12.11
Cueing	Mean	95.5	129.7	48.3	60.7	45.0	70.8
	Standard deviation	10.71	12.08	7.15	5.28	14.84	13.20
Practice	Mean	91.7	102.2	47.2	48.2	48.3	55.8
	Standard deviation	12.74	15.0	6.15	5.38	12.11	11.58

Analyses of variance of derived difference scores (Myers, 1979) revealed significant treatment effects on the SSEI  $F(2,15) = 5.49$ ;  $p < 0.05$ , and the SD  $F(2,15) = 3.68$ ;  $p < 0.05$ , but no effects were apparent on the SR  $F(2,15) = 2.37$ . Further analyses based on nonorthogonal pre-planned comparisons (cf. Myers, 1979, p. 309; Winer, 1962, p. 69) revealed no differences between the two treatment procedures (Reinforcement and Cueing) on either the SSEI  $t(10) < 1$ , the SD  $t(10) = 1.12$  or the SR  $t(10) < 1$ . However, Reinforcement was more effective than Practice alone on both the SSEI  $t(10) = 2.51$ ;  $p < 0.05$ , and the SD  $t(10) = 2.24$ ;  $p < 0.05$ , but not on the SR  $t(10) = 1.67$ . The Cueing procedure also produced greater effects than did Practice alone on the SSEI  $t(10) = 3.43$ ;  $p < 0.01$ , and on the SD  $t(10) = 2.78$ ;  $p < 0.02$ ; but again there were no differences on the SR  $t(10) = 2.11$ .

*Discussion.* The absence of significant differences between the Reinforcement and Cueing procedures suggests that reinforcement is not the basis for the observed effects. Cueing factors may have been as important even for the Reinforcement group, since a number of these subjects reported that after practicing the procedure for a few days, just the preparatory behaviors to their pleasurable activities (e.g., making a cup of coffee) elicited positive self-evaluations.

### Conclusions

The main conclusion of these studies is that it is possible to enhance reported self-esteem by self-management procedures. Having subjects repeat a series of statements that represent realistic positive evaluations about themselves will apparently lead to increased feelings of self-worth. It appears however, to be necessary to spread the occurrence of these self-evaluations throughout the day in various situations. The Practice subjects reported that they rehearsed the positive statements only in the morning or evening, and even though they repeated the appropriate number of such statements, they did not improve. In addition to this observation, the failure of the laboratory-based procedure with the two single-case studies further confirmed the need to have the practice of positive self-evaluations occur across daily situations and times.

Arranging the contingencies so that the requirements of a reinforcement paradigm are met does not appear to be essential. Despite

popular theory to the contrary (Cautela, 1970; Homme, 1965), both the empirical data and the reports of the subjects in the present series, suggest that cueing effects are just as important as reinforcing effects. These findings are consistent with those of Hannum *et al.*, (1974), and Lawson and May (1970). Given the failure with the single-cases to demonstrate a relationship between practice with the Reinforcement procedure and an increase in treatment-independent positive self-appraisals, we cannot, in fact, maintain that the procedure involves reinforcement.

It is, perhaps, of some value and theoretical interest to consider why cueing was so effective. The reports of subjects in the group study may clarify this issue. Both Practice and Reinforcement subjects reported that on many occasions when they were about to carry out the procedure, they would be in such a low mood state that the repetition of positive self-evaluations seemed ridiculous and they were consequently unable to make the statements with any conviction. They nevertheless followed instructions and repeated the statements. Cueing subjects, on the other hand, pointed out that engaging in the cueing (pleasurable) activity raised their mood so that they enjoyed their self-complimenting task, and these pleasant feelings gave conviction to the repetition of the statements. However it remains possible that we did not provide our subjects with optimal reinforcers and this may have reduced the effectiveness of such a procedure. Studies are under way to examine this possibility more carefully.

### References

- Bandura, A. Psychotherapy based on modeling principles. In A.E. Bergin & S.L. Garfield (Eds.), *Handbook of psychotherapy and behavior change: An empirical analysis*. New York: Wiley, 1971.
- Beck, A.T. *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania Press, 1967.
- Beck, A. Cognitive therapy: Nature and relation to behavior therapy. *Behavior Therapy*, 1970, 1, 184-200.
- Butler, J.M., & Haigh, B.V. Changes in the relation between self-concepts and ideal concepts consequent upon client-centered counseling. In C.R. Rogers & R.F. Dymond (Eds.) *Psychotherapy and personality change*. Chicago: University of Chicago Press, 1954.
- Cautela, J.R. Covert reinforcement. *Behavior Therapy*, 1970, 1, 33-50.

*The enhancement of social self-esteem*

- Cautela, J.R. Covert conditioning. In A. Jacobs & L.B. Sachs (Eds.) *The psychology of private events*. New York: Academic Press, 1971.
- Coopersmith, S. *The antecedents of self-esteem*. San Francisco: W.H. Freedman, 1967.
- Goldfried, M.R., & Merbaum, M. *Behavior change through self-control*. New York: Holt, Rinehart and Winston, 1973.
- Hannum, J.W., Thoresen, C.E., & Hubbard, D.R. A behavioral study of self-esteem with elementary teachers. In M.J. Mahoney & C.E. Thoresen (Eds.), *Self-control: Power to the person*. Monterey, California: Brooks/Cole, 1974.
- Homme, L.E. Perspectives in psychology: XXIV. Control of coverants, the operants of the mind. *Psychological Record*, 1965, 15, 501-511.
- Kanfer, F.H. Self-management methods. In F.H. Kanfer & A.P. Goldstein (Eds) *Helping people change: A textbook of methods*. New York: Pergamon Press, 1975.
- Krop, H., Calhoun, B., & Verrier, R. Modification of the "self-concept" of emotionally disturbed children by covert reinforcement. *Behavior Therapy*, 1971, 2, 201-204.
- Lawson, D.M., & May, R.B. Three procedures for the extinction of smoking behavior. *Psychological Record*, 1970, 20, 151-157.
- Lawson, J.S., Marshall, W.L., & McGrath, P. The Social Self-esteem Inventory. *Educational and Psychological Measurement*, 1979, 39, 803-811.
- Mahoney, M.J. Toward an experimental analysis of covert control. *Behavior Therapy*, 1970, 1, 510-512.
- Mahoney, M.J. Self-management of covert behaviors: A case study. *Behavior Therapy*, 1971, 2, 575-578.
- Mahoney, M.J. *Cognition and behavior modification*. Cambridge, Mass.: Ballinger, 1975.
- Mahoney, M.J., & Thoresen, C.E. *Self-control: Power to the person*. Monterey, Calif.: Brooks/Cole, 1974.
- Myers, J.L. *Fundamentals of experimental design*. Boston: Allyn & Bacon, 1979.
- Osgood, C.E., Suci, G.J., & Tannenbaum, P.H. *The measurement of meaning*. Urbana, Ill.: University of Illinois Press, 1957.
- Rogers, C.R. *Client-centered therapy: Its current practice, implications and theory*. Boston: Houghton Mifflin, 1951.
- Seitz, F.C. A behavior modification approach to depression: A case study. *Psychology*, 1971, 8, 58-63.
- Thoresen, C.E., & Mahoney, M.J. *Behavioral self-control*. New York: Holt, Rinehart and Winston, 1974.
- Todd, F.J. Covert control of self-evaluative responses in the treatment of depression: A new use for an old principle. *Behavior Therapy*, 1972, 3, 91-94.
- Winer, B.J. *Statistical principles in experimental designs*. New York: McGraw-Hill, 1962.
- Wylie, R. *The self-concept: A critical survey of pertinent research literature*. Lincoln, Neb.: University of Nebraska Press, 1961.
- Wylie, R. The present status of self theory. In E. Borgatta & W. Lambert (Eds.) *Handbook of personality theory and research*. Chicago: Rand McNally, 1968.
- Wylie, R. *The self-concept. Vol. 1: A review of methodological considerations and measuring instruments*. Lincoln, Neb.: University of Nebraska Press, 1974.

Reference Notes:

1. Gauthier, J., Marshall, W.L., & Hoaken, P. Social competence and depression in a psychiatric population. Unpublished manuscript, Queen's University, 1978.
2. Marshall, W.L., Christie, M.M., & Lanthier, R. Social competence, sexual experience and attitudes toward sex in incarcerated rapists and pedophiles. Report to the Solicitor General of Canada, 1978.
3. Grinter, P.J. Modification of self-esteem through covert and overt self-reinforcement of positive self-evaluative thoughts. Unpublished master's thesis, Queen's University, 1974.

*ABOUT THE AUTHORS*

W.L. Marshall, Ph.D. is a Professor of Psychology and an Assistant Professor of Psychiatry at Queen's University, Kingston, Ontario. He has worked for several years in various clinical settings including psychiatric hospitals and federal penitentiaries, and he is presently a consultant to the Ontario Probation and Parole Services. Dr. Marshall's current research interests focus on the treatment and assessment of sexual offenders and an analysis of anxiety management procedures.

M.M. Christie, M.A. is a doctoral student in clinical psychology at Queen's University, Kingston, Ontario. She has worked in various hospital and penitentiary settings in both Canada and Britain. Ms. Christie's current interests are concerned with the role of alcohol in the commission of sexual crimes.