

APPLICATION OF SELF-AS-A-MODEL
IN GRADUATE AND UNDERGRADUATE COUNSELLOR TRAINING

GERALD SKLARE
NANCY J. CUNNINGHAM
University of Louisville, Kentucky

Abstract

Training counsellors in empathetic responding with the self-as-a-model paradigm was examined. Graduate and undergraduate counsellor trainees were randomly assigned to three treatment conditions. A written response exercise and a performance interview were administered to the trainees as pretest, posttest, and follow-up measures. Differences among treatment groups although in the expected direction were not significant. Graduate students, however, did perform significantly higher on both measures.

Résumé

Cette étude traite de la formation à l'empathie chez des conseillers et prend appui sur le paradigme du soi-en-tant-que-modèle. Des conseillers en formation, de premier et de deuxième cycle universitaire, sont assignés à trois conditions expérimentales distinctes. Des mesures sous forme d'un exercice avec réponses écrites, d'une part, et de rendement en entrevue, d'autre part, leur sont appliquées à trois moments différents (prétest, posttest, relance). Les différences entre les groupes, bien que dans la direction attendue, ne s'avèrent pas significatives. Il est toutefois à noter que les étudiants de deuxième cycle sont ceux qui enregistrent la meilleure performance, et ce, pour les deux genres de mesures.

Recent investigations have indicated that clients can replace self-defeating behaviours

with self-enhancing ones by viewing videotapes of themselves that show only positive behaviours related to problem areas (Hosford & Brown, 1975; Hosford & de Visser, 1974; Hosford, Moss & Morrell, 1976). The critical variables in such training are both the self-modelling and the exposure to only positive

Application of Self-as-a-Model

or self-enhancing behaviours. This self-as-a-model approach developed by Hosford is supported by Bandura's research (1969) which shows that the most effective model is that model perceived as being most similar to the subject.

Hosford's model has been adapted for use in counsellor training. Research conducted by Vance (1978) showed that graduate counsellor trainees exposed to edited self-as-a-model videotapes were more effective ($p < .016$) in the reflection of affect than were trainees who observed unedited self-model videotapes. Warner and Valine (1979) found that graduate counselling students trained using the self-model approach were significantly more effective ($p < .05$) in their written responses to hypothetical client statements than were control students. However, Warner and Valine (1979) and Wilson (1975) also indicated that self-modelling training methods did not significantly improve graduate counselling students' interviewing skills when compared to controls who underwent traditional training. The trend in both studies, however, supported the self-modelling approach.

For this investigation, it was hypothesized that undergraduate and graduate counsellor trainees who viewed and edited videotape of their own performance demonstrating effective use of a particular counselling behaviour would perform that behaviour more effectively in a counselling interview than undergraduate and graduate counsellor trainees who viewed a similarly edited videotape of an expert model or who viewed an unedited videotape of their own performance. Since reflection of client feeling is an important and basic skill for counsellor trainees to develop (Pallone and Grande, 1965; Carkhuff, 1969; Shoemaker and Splitter, 1976; Boyd, 1978) and because it is customarily taught in counselling techniques courses, it was chosen as the focal counselling behaviour in the study. As a secondary question of interest, the performance of undergraduate and master's level students in the three treatment groups was compared.

Method

Subjects

The subjects were 21 undergraduate and 25 graduate students enrolled in two counselling techniques courses required for bachelor's and master's degree candidates in counselling at the University of Louisville. The students in each class were randomly assigned

to one of the three treatment groups (edited self-model, expert model, and unedited self-model).

Coached Clients

The five role-play clients used for the videotape counselling sessions were students from the Theater Arts Department at the University of Louisville. Standard client roles were developed and rehearsed to ensure uniformity of presentation.

Reviewers and Raters

Six recent graduates from the Masters Degree Program in Guidance and Counselling at the University of Louisville were trained and served as reviewers and raters. Reviewers met with trainees immediately after completion of their initial videotape session and provided feedback on performance.

Raters scored trainees on their written response exercises and videotape sessions using a modified Carkhuff (1969) scale. The rating continuum included six levels for rating counsellor responses according to whether content and feeling components were present/absent and accurate/inaccurate. The levels included (0.0) content and feeling inaccurate or counsellor statement is not a reflective response, (1.0) content accurate/feeling inaccurate, (1.5) feeling accurate/content inaccurate, (2.0) content accurate/feeling absent, (2.5) feeling accurate/content absent, (3.0) content accurate/feeling accurate. Written response exercises and videotape interviews were scored independently by two raters. Responses scored differently by the two raters were then scored by a third rater.

Procedure

All subjects received training in reflective responding during three - 2 1/2 hour class sessions. Training included cognitive explanation of the skill, written exercises, and limited role-playing. Two written pretests were administered before and after training to ensure that there were no significant differences among treatment groups after classroom instruction in reflective responding (Response Exercises I and II).

In addition to the second written pretest, each subject videotaped a 30-minute counselling interview with a coached client. These videotapes served as both a performance pretest (Videotape Interview I) and a source of counsellor responses for the self-as-a-model

edited tapes. Immediately following the interview, subjects met with a reviewer for one hour to rate and receive feedback on their performance.

Two weeks later subjects received one of three treatment procedures depending upon group assignment. Subjects then conducted a ten-minute counselling session with a coached client (Videotape Interview II) and completed a third written response exercise (Response Exercise III). These two measures served as performance and written posttests. At the conclusion of the course (seven weeks later) subjects conducted another ten-minute counselling session with a coached client (Videotape Interview III) and completed a fourth written response exercise (Response Exercise IV). These served as follow-up measures.

Self-as-a-Model Group. Subjects in the self-as-a-model group observed a ten-minute videotape of their most effective reflective responses edited from their original 30-minute counselling interview. After viewing the edited tape a second time, trainees spent ten minutes imagining themselves responding to a client as they had observed themselves responding on the videotape. Subjects then responded to the posttest measures.

Expert Model Group. Subjects in the expert model group observed a ten-minute videotape of an expert counsellor which had been edited from a 30-minute role-play counselling session to illustrate effective reflective responding. The expert model was a doctoral-level counselling psychologist with eight years of clinical experience. The excerpted portions of the taped interview were those in which the expert model demonstrated 3.0 reflective responses as measured by the modified Carkhuff scales. After viewing the tape a second time, trainees spent ten minutes imagining themselves responding as the expert had responded. Subjects then responded to the posttest measures.

Control Group. Subjects in the control group watched their original 30-minute interview and then imagined themselves making effective reflective responses. They then responded to the posttest measures.

Dependent Measures

The purpose of the treatment was to increase both the number and quality of

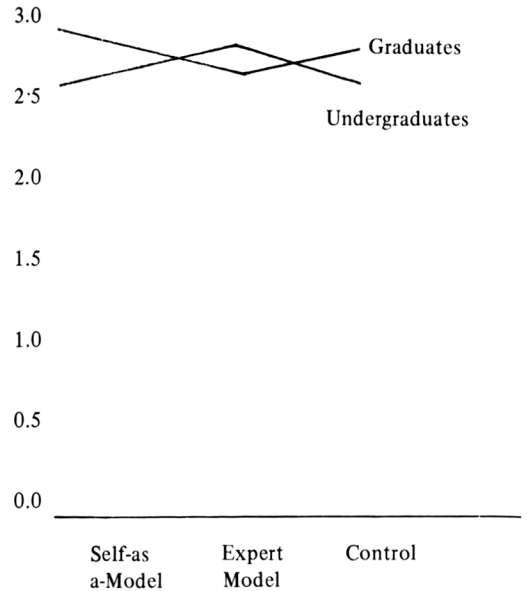


Figure 1. Interaction between treatment and class on Response Exercise IV

reflection of feeling responses. This increase was measured by using two instruments developed for this investigation.

Written Response Exercise. Trainees were required to produce appropriate counsellor responses to a series of client statements. Each statement either explicitly or implicitly conveyed an affective message which trainees could reflect in their responses. Four forms of the instrument were developed for use as the pretest, posttest, and follow-up measures. Subject responses were evaluated by six raters using a modified Carkhuff scale. Raters were trained in evaluating counsellor responses using this scale and interrater reliability was calculated. The average correlation between pairs of raters completed for a random sample of three items across twenty subjects was .69 indicating a fairly high degree of agreement between raters in classifying responses.

Videotape Interview. Trainees conducted three videotaped counselling interviews with a coached client. The interviews served as pretest, posttest, and follow-up measures of actual counsellor performance. Standard client roles were developed and rehearsed by the coached clients to ensure uniformity of presentation. Trainer responses were evaluated by the six raters using the same modified Carkhuff scale used in evaluating responses to the Written Response Exercises. Raters were trained in evaluating videotaped counsellor

Application of Self-as-a-Model

responses using this scale, and interrater reliability was calculated. The average correlation between pairs of raters for a sample tape of 15 responses was .80 indicating a high degree of agreement between raters in evaluating responses.

Design and Analysis

Because of the lack of written pretest and follow-up data on eleven subjects and the malfunctioning of the videotape equipment on the posttest, data was not available on all

Table 1
Correlations Between the Pretest, Posttest, and Follow-up
Response Exercises and Videotape Interviews

	Response Exercise I	Response Exercise II	Response Exercise III	Response Exercise IV	Videotape Interview I	Videotape Interview II
Response Exercise II	.23					
Response Exercise III	.41	.50				
Response Exercise IV	.29	.50	.51			
Videotape Interview I	.20	.54	.19	.09		
Videotape Interview II	.14	.59	.60	.79	.09	
Videotape Interview III	.36	.72	.63	.62	.33	.72

Table 2
Means and Standard Deviations on the Pretest, Posttest
and Follow-up Response Exercises and Videotape Interviews for All Groups

Dependent Measure	Self-as-a-Model		Expert Model		Control		
	Undergraduate	Graduate	Undergraduate	Graduate	Undergraduate	Graduate	
Response Exercise I	M	1.60	1.85	1.37	1.60	1.10	1.65
	Sd	1.10	.93	1.12	.92	.81	.98
	n	(7)	(7)	(4)	(6)	(5)	(7)
Response Exercise II	M	2.38	2.81	2.21	2.59	2.09	2.88
	Sd	.86	.21	.53	.40	.61	.14
	n	(7)	(9)	(7)	(8)	(7)	(8)
Response Exercise III	M	2.08	2.75	2.28	2.52	1.68	2.75
	Sd	.75	.17	.65	.49	.63	.21
	n	(7)	(9)	(7)	(8)	(7)	(8)
Response Exercise IV	M	2.47	2.92	2.57	2.54	2.16	2.87
	Sd	.49	.10	.41	.49	.55	.12
	n	(7)	(9)	(6)	(8)	(7)	(8)
Videotape Interview I	M	1.97	2.27	1.86	2.07	2.04	2.28
	Sd	.83	.33	.66	.54	.39	.16
	n	(7)	(9)	(7)	(8)	(7)	(8)
Videotape Interview II	M	2.46	2.81	1.88	2.76	1.29	2.74
	Sd	.53	.19	.59	.23	1.22	.29
	n	(5)	(8)	(4)	(5)	(4)	(5)
Videotape Interview III	M	2.08	2.74	1.79	2.54	1.61	2.56
	Sd	.92	.12	.70	.36	.67	.44
	n	(7)	(9)	(6)	(7)	(6)	(8)

subjects for all measures. Consequently, the number of subjects is not consistent across all analyses. Data loss precluded the use of a repeated measures design since such a procedure would have required that a trainee missing any single piece of data be eliminated from the analysis. In order to make full use of the available data, a two-way analysis of variance (ANOVA) was computed for each dependent variable. The research design for the investigation was a 3 x 2 design matrix with two independent variables: treatment with three levels (edited self-model, expert model, and unedited model) and class with two levels (undergraduate and graduate students). Means and standard deviations for all groups and correlations between all pre-, post-, and follow-up measures were calculated. All analyses were computed using SPSS (Statistical Package for the Social Sciences). Level of significance was set at .05.

Results

Correlations between the pre-, post-, and follow-up measures are reported in Table 1. Generally, Response Exercise I (The first written pretest) and Videotape Interview I (pretest) show little relationship to the other measures. Response Exercise II (the second written pretest given after classroom training in reflective responding) and all the post- and follow-up measures (Response Exercise III and IV and Videotape Interview II and III) show a high degree of relationship to each other.

Means and standard deviations for all groups on the pre-, post-, and follow-up measures are reported in Table 2.

Pretesting. Analysis of the data on Response Exercise I administered before classroom training in reflective responding indicated

Table 3
Analysis of Variance Results for the Pretest, Posttest and Follow-up Response Exercises and Videotape Interviews

Dependent Measure		MS	df	F	p
Response Exercise I	Treatment	.38	2	.39	.68
	Class	1.05	1	1.09	.31
	TXC	.10	2	.10	.91
Response Exercise II	Treatment	.14	2	.58	.57
	Class	3.23	1	12.99	.001
	TXC	.18	2	.74	.48
Response Exercise III	Treatment	.15	2	.58	.57
	Class	5.00	1	18.99	.0001*
	TXC	.64	2	2.43	.10
Response Exercise IV	Treatment	.16	2	1.02	.37
	Class	1.65	1	10.89	.002*
	TXC	.51	2	3.35	.05*
Videotape Interview I	Treatment	.17	2	.63	.54
	Class	.73	1	2.73	.11
	TXC	.01	2	.03	.97
Videotape Interview II	Treatment	.75	2	2.53	.10
	Class	5.14	1	17.38	.0001*
	TXC	.79	2	2.68	.09
Videotape Interview III	Treatment	.39	2	1.20	.31
	Class	6.46	1	19.85	.0001*
	TXC	.08	2	.23	.79

*Significant at the .05 level

Application of Self-as-a-Model

no differences in level of performance among treatment groups ($F_{2,30} = .39, p < .68$) or between class levels ($F_{1,30} = 1.09, p < .31$). Analysis of the scores on Response Exercise II given after classroom training shows no differences among treatment groups ($F_{2,40} = .58, p < .57$). However, there was a significant difference between class levels ($F_{1,40} = 12.99, p < .001$). Inspection of cell means given in Table 2 shows that graduate students were performing at a higher level on the written exercise at this point than were the undergraduate students. Analysis of the data for Videotape Interview I indicates no differences among treatment groups ($F_{2,40} = .63, p < .54$) or between classes ($F_{1,40} = 2.73, p < .11$) in level of reflective responding.

Posttesting. Results of the ANOVA indicate no differences among treatment groups on Response Exercise III given after treatment was administered ($F_{2,40} = .58, p < .57$). Again, there was a significant difference in level of performance between the graduate and undergraduate students ($F_{1,40} = 18.99, p < .0001$). Means reported in Table 2 indicate that the graduate students scored significantly higher than the undergraduate students on this measure. Similarly, there were no differences in level of performance among the treatment groups on Videotape Interview II made directly after completion of treatment ($F_{2,25} = 2.53, p < .10$). There was, however, a significant difference between the performance of the undergraduate and graduate students ($F_{1,25} = 17.38, p < .0001$). Means (Table 2) indicate that graduate students were rated as demonstrating a higher level of reflective responding on the posttest interview than were the undergraduates.

Follow-up testing. There were no significant differences among treatment groups on Response Exercise IV administered seven weeks after the conclusion of treatment ($F_{2,39} = 1.02, p < .37$). Graduate students, however, scored significantly higher on the instrument than undergraduate students ($F_{1,39} = 10.89, p < .002$). Means for these groups on this measure are reported in Table 2. There was also a significant interaction between treatment and class on Response Exercise IV ($F_{2,39} = 3.35, p < .05$). The meaning of this interaction can best be understood by inspecting individual cell means for Response Exercise IV (Table 2). It appears that both undergraduate and graduate students performed at approximately the same level on this measure while graduate students in the other two treatment groups scored significantly higher than the under-

graduates. This interaction is pictorially displayed in Figure 1.

Results from Videotape Interview III were similar. There were no significant differences among treatment groups on the follow-up measure ($F_{2,37} = 1.20, p < .31$). However, the graduate students performed significantly better on the follow-up interview than the undergraduate students ($F_{1,37} = 19.85, p < .0001$) as the mean scores in Table 2 indicate.

DISCUSSION

It was hypothesized that counsellor trainees who received the edited self-model treatment would show a higher level of reflective responding than trainees who received either the unedited self-model or expert model treatment. Results from the ANOVAS did not support this hypothesis. There are several reasons which may account for this finding.

1. Counsellor trainees may have been overtrained in formulating written reflective responses during the three weeks of classroom instruction. All groups showed a substantial increase in level of reflective responding from Response Exercise I (given before classroom instruction) to Response Exercise II (given after classroom instruction and prior to treatment). The overall mean for all trainees moved from 1.56 to 2.52 on a 3-point scale indicating that the average student was performing at a fairly high level before treatment was administered. The graduate students as a group appeared to be responding at an optimal level on all measures by the completion of the study (all means = 2.5 +).

2. All three treatments (employing both videotaping and feedback session with lab instructor) appeared to improve the performance of the graduate students on the Videotape Interviews. Although there were no significant differences among treatment groups, the graduate students as a group improved in level of performance from the time of the pretest interview. It appears that some exposure to videotaping plus the opportunity to receive feedback from a trained reviewer improved the level of actual counselling performance for the graduate-level trainees.

3. Undergraduate counsellor trainees performed in the expected direction according to treatment group on both Videotape Interviews II and III. Undergraduates in the edited self-modelling group scored highest followed

by undergraduates in the edited expert-modelling group, and lastly by the undergraduates in the unedited self-modelling group. From the trend in the data it appears that for undergraduate students (who did not reach the same high level of responding as the graduate students by the end of the investigation) the self-as-a-model approach which cued in on positive behaviours was the most effective for increasing actual level of counselling performance. The undergraduate students as a group were generally younger, more heterogeneous in terms of academic ability and job experience, and appear to have begun training at a lower level of functioning (see Pretest scores in Table 2) than the graduate students. In view of the findings, perhaps the self-as-a-model treatment is a more potent training model for this population. If this is supported in future research, such a finding would have implications for the training of paraprofessional and peer counsellors.

4. It is possible that the scoring of the responses on the videotape interviews was not sensitive enough to pick up actual differences between the treatment groups. Reflective responses were considered the optimal response for each client-counsellor exchange even though another response type (e.g., question, suggestion, information statement) might have been just as or more appropriate. If only those counsellor responses were rated where a reflection was judged appropriate in the context of the counselling interview, differences might have been found between treatment groups. In addition, the rating system appeared to create a ceiling effect with many graduate students scoring at the $2.5 \pm$ level. An expanded Likert rating system might have been more sensitive to treatment group differences.

5. Perhaps the treatment was not potent enough to cause differences between the groups. Imagery which takes place after watching the edited videotape is important to self-as-a-model approach. Trainees were left on their own with only taped instructions to engage in the imagery portion of the treatment package. It is possible that if a lab instructor had been available to process the videotape and guide the trainees through the imagery, the self-as-a-model treatment may have been more effective. In addition, Cormier and Cormier (1979) suggest that the effectiveness of the self-as-a-model approach can be increased with practice outside the interview. These changes, however, may also have increased the effectiveness of the other two treatments.

6. It is unclear why there was a significant interaction effect for response exercise four. Students in the graduate level expert model group appear to be responding differently than those in the self-as-a-model and control treatment. The higher standard deviation in this group indicates more variability among individuals making them more similar to the undergraduates than graduate students. This might account for the interaction effect and may be more related to the original assignment of subjects to groups than to the treatment itself.

In summary, the results of the investigation are inconclusive. It appears that classroom instruction is sufficient for raising the level of written responses for both graduate and undergraduate counselling students but has little effect on actual counselling performance in a roleplay situation. Videotape interviewing plus feedback appeared to raise the level of reflective responding for graduate students (regardless of treatment group) but not for undergraduate students (whose overall level of performance was lower than that of the graduate students). Looking only at the undergraduate trainees, those receiving the edited self-model treatment appeared to perform better in a roleplay situation than those who received either the expert model or unedited self-model treatment.

Despite the limitations of the study and in light of the points enumerated above, the investigators would encourage further research and training using the self-as-a-model approach. Of particular interest for further investigation is the finding that such training might have differential effectiveness with different-level training groups. With a growing emphasis on the role of paraprofessional and peer counsellors, counsellor educators must develop effective methods for training the non-graduate school counselling practitioner.

References

- Bandura, A. *Principles of behavior modification*. New York: Holt, Rinehart and Winston, Inc., 1969.
- Boyd, J. *Counselor supervision*. Muncie: Accelerated Development, Inc., 1978.
- Carkhuff, R.R. *Helping and human relations: A primer for lay and professional helpers*. (Vols. I & II) New York: Holt, Rinehart and Winston, 1969.
- Cormier, W.H. & Cormier, L.S. *Interviewing strategies for helpers: A guide to assessment, treatment, and evaluation*. Monterey, California: Brooks/Cole Publishing Co., 1979.

Application of Self-as-a-Model

- Hosford, R.E., & Brown, S.D. Innovations in behavioral approaches to counseling. *Focus on Guidance*. 8 (2), 1975.
- Hosford, R.E., & de Visser, A.J.M. *Behavioral approaches to counseling: An introduction*. Washington, D.C.: APGA Press, 1974.
- Hosford, R.E., Moss, C.S., & Morrell, G. The self-as-a-model technique: Helping prison inmates change. In J.D. Krumboltz & C.E. Thoresen (Eds.), *Counseling methods*. New York: Holt, Rinehart & Winston, 1976.
- Pallone, N.J., & Grande, P.P. Counselor verbal mode, problem relevant communication and client rapport. *Journal of Counseling Psychology*. 1965, 4, 359-365.
- oemaker, J.T. & Splitter, J.L. A competency-based model for counselor certification. *Counselor Education and Supervision*. 1976, 15, 267-274.
- Vance, P.A. A study of the effects of self-modeling techniques by videotape feedback upon the acquisition of counseling skills by counselor trainees. Unpublished doctoral dissertation, University of Tennessee, 1978.
- Warner, R.W., & Valine, W.J. An investigation of two approaches to pre-practicum training for counselors. Paper presented at American Personnel and Guidance Association Convention, Las Vegas, Nevada, April 5, 1979.
- Wilson, S.H. Determining the effect of two differential self-modeling techniques on the acquisition of appropriate counseling behaviors of counselor trainees. Unpublished doctoral dissertation, University of Tennessee, 1975.

ABOUT THE AUTHORS

Gerald B Sklare, Ed. D. and Nancy J. Cunningham, Ph.D. are associate professors in the Education Psychology and Counseling Department at the University of Louisville in Louisville, Kentucky. Both received their background in training counsellors in the state of Michigan. Dr. Sklare received his Ed.D. in counsellor education at Wayne State University in Detroit and Dr. Cunningham received her Ph.D. in counsellor education at Michigan State University in East Lansing.