

## DOCUMENT RESUME

ED 091 648

CG 008 981

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TITLE The Effects of Group Size and Training Duration on the Development of Interpersonal Communication Skills.  
PUB DATE Apr 74  
NOTE 8p.; Presented at the American Personnel and Guidance Association Convention (New Orleans, Louisiana, April, 1974)  
EDRS PRICE MF-\$0.75 HC-\$1.50 PLUS POSTAGE  
DESCRIPTORS Counseling Effectiveness; \*Counselor Training; \*Empathy; \*Group Dynamics; \*Interaction Process Analysis; \*Interpersonal Relationship; Research Projects  
IDENTIFIERS \*Carkhuffs Scale

## ABSTRACT

The influence of group size and training duration on the development of empathic understanding in beginning counseling procedures students was examined. Nine-five master's level students grouped into four groups representing long and short duration, large and small size, were evaluated on the basis of taped counseling sessions. A team of expert raters determined each student's level of functioning, using a modified Carkhuff scale of empathy. A two-way analysis of variance revealed a significant main effect for group size and no significance for training duration. These findings were interpreted in terms of group dynamics. It was proposed that larger groups provided more positive counseling experiences for modeling and/or smaller groups produced more inhibition due to greater peer influence. The lack of significant main effect for training duration suggests that shorter sessions are equally effective in screening and identifying potential skills. Implications for counselor education and future research were discussed. (Author)

ED 091648

TITLE: THE EFFECTS OF GROUP SIZE AND TRAINING DURATION  
ON THE DEVELOPMENT OF INTERPERSONAL COMMUNICATION SKILLS

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ON THE DEVELOPMENT OF INTERPERSONAL COMMUNICATION SKILLS

Abstract

The influence of group size and training duration on the development of empathic understanding in beginning counseling procedures students was examined. Nine-five master's level students grouped into four groups representing long and short duration, large and small size, were evaluated on the basis of taped counseling sessions. A team of expert raters determined each student's level of functioning, using a modified Carkhuff scale of empathy. A two-way analysis of variance revealed a significant main effect for group size and no significance for training duration. These findings were interpreted in terms of group dynamics. It was proposed that larger groups provided more positive counseling experiences for modeling and/or smaller groups produced more inhibition due to greater peer influence. The lack of significant main effect for training duration suggested that shorter sessions are equally effective in screening and identifying potential skills. Implications for counselor education and future research were discussed.

## The Effects of Group Size and Training Duration on the Development of Interpersonal Communication Skills

Recent research in the field of counseling has indicated that the development of interpersonal skills such as the communication of empathic understanding, forms a basis for therapeutic change (Truax and Carkhuff, 1967; Carkhuff and Truax, 1965). Additional research (Truax, Carkhuff, and Douds, 1964) has suggested that it is possible to improve significantly the levels of functioning in the counselor-trainee's interpersonal skills through a didactic approach. Although such gains in interpersonal skills have been demonstrated, research has not clearly demonstrated the most effective parameter in applying such experiential-didactic procedures. The purpose of this investigation was to examine the effectiveness of interpersonal skill training as a function of group size and training duration. More specifically, the research investigated the relationship between and among small and large groups, short and long training periods.

### Methodology

Ninty-five students enrolled in four beginning counseling procedures classes served as the subjects for this study. Two classes, one containing 28 trainees, a second 43, were designated as large groups. The remaining two classes contained 12 trainees each and were designated as small groups. All trainees were regularly enrolled students who registered for the class during a given registration period. All trainees held undergraduate degrees and were enrolled in their first six hours of guidance and counseling courses. One large and one small group received training during summer semesters and were designated as short duration groups. The remaining large and small groups were trained during regular fall semesters and were designated as long duration groups.

The summer sessions were six weeks and the fall semesters were eighteen weeks in length. During the course of training (six weeks for two groups and eighteen weeks for the other two groups) each trainee was required to conduct an equal number of recorded counseling sessions. The final counseling session tapes served as a basis for determining that trainee's level of skill in communicating the dimension of empathic understanding. All 95 trainees received instruction from the same individual.

The final tapes from each group were randomly assigned a number and presented such that the raters were unaware of each tape's group identity.

#### Raters

Three graduate students in counselor education were trained in the use of rating scales according to modified procedures described by Truax and Carkhuff (1967). Training on recordings demonstrating high and low levels of empathic understanding continued until the three raters, using a twenty interval revised Carkhuff scale (Carkhuff, 1970), gave identical ratings on three consecutive taped sessions. Upon completion of training, the raters, working as a team, rated each of the recorded sessions.

#### Results

Statistical analysis was made by means of a two-way analysis of variance (Senter, 1969) with group size and training duration treated as main effects. Since membership in classes had been established prior to the beginning of the study, it was necessary to make adjustments for unequal class sizes in the analysis of the data. A least-squares method of adjusting for unequal cell frequencies was used in computing the analysis of variance (Winer, 1962).

The only significant effect shown by the analysis of variance was the main effect for group size. The main effect for training duration was nonsignificant.

The interaction between group size and training duration was also nonsignificant. A summary of the adjusted analysis of variance is presented in Table I.

An examination of mean scores of the four groups revealed that highest level of functioning was achieved by the group of large size and short training duration (Mean = 2.15). The next highest level was again a large group trained over a long duration (Mean = 2.05). These groups were followed in mean level of functioning by the small-long duration (Mean = 1.89) and finally small-short duration groups (Mean = 1.75).

TABLE I  
Analysis of Variance Summary Table

Source	Sum of Squares	df	Mean Squares	F
A: (Duration of Training)	.0614	1	.0614	.2245
B: (Group Size)	1.3149	1	1.3149	4.8094*
A x B	.2553	1	.2553	.9337
Within Treatments	24.8806	91	.2734	
Total	26.5272	94		

\*With 1/91 df, p. less than .05, two-tailed

### Discussion

The findings of this study indicate that the factor of group size has a significant effect on the level of functioning of counselor trainees on the dimension of empathic understanding. Examination of the data reveals that the two larger groups showed the highest overall level of functioning. These

findings seem to be in contradiction to the usual experiences in which smaller groups receiving more individualized instruction, tend to show the largest gains. In accounting for the present findings, it is suggested that several factors may be operating either together or individually. In larger groups, learning may be facilitated as a result of members receiving exposure to a wider variety of potential counseling pitfalls and a larger number of positive counseling behaviors for modeling. An alternative accounting for the unusual findings is based upon the idea that the personality dynamics of a small group may have an inhibitory effect on the members. The presence of close acquaintances may exert external pressures on the trainees when functioning in either the counselor or client role resulting in an inability to retain counselor-client congruency during counseling sessions.

Further examination of the data indicates that although there is separation in the size of the two large groups ( $N = 28$  and  $N = 43$ ), members of both groups had significantly higher levels of functioning than the smaller groups.

In explaining the nonsignificant effect of training duration, it is proposed that the dynamics of the group overshadow the importance of the usual learning phenomena associated with training duration, or interval.

More specifically, the spacing or organization of class intervals appears not to be a significant factor in revealing or screening potential skills in empathic understanding. It is suggested that either of the two training durations involved in this investigation was a sufficient period to allow progress in those trainees who possessed the prerequisite skills necessary for adequate counselor growth. Findings of this investigation would suggest the following considerations: 1) beginning counseling procedures classes of 30 or more will result in more growth than smaller classes; 2) larger beginning

counseling procedures classes may provide a more economical opportunity, in terms of personnel and operations, for effectively screening those with the prerequisite or potential interpersonal skills.

Future investigations might more clearly pinpoint the upper limits or optimum size for such pre-practicum or introductory procedures classes. In addition, the effectiveness of large classes in screening for potential skills as a counselor might be compared to other existing screening devices.



do and that meditators' nervous systems displayed greater autonomic stability (Orme-Johnson, 1972). This evidence, together with the decrease of blood lactate levels, which are believed to be related to anxiety, seems to suggest that TM may act to reduce psychophysiological stress while simultaneously reducing the likelihood of further stress accumulation.

The main purpose of the present study was to determine if the practice of TM for a two-month period would change a subject's psychological characteristics as measured by the POI, Jourard's Self-Disclosure Index (SDI), the Social Survey in Life Satisfaction, and the Happiness Index. Thirty subjects were randomly assigned to three groups: an experimental, placebo, and control. The experimental group received instruction on TM and practiced it daily for two months. The placebo group received neither information nor instruction. The measures were administered twice to all three groups. The first administration occurred two days before the experimental (meditation) group began their instruction on TM. The second administration was two months later.

By comparing mean difference scores of the three groups, it was found that the practice of TM does not seem to be effective in changing subjects' psychological characteristics as measured by the POI, the SDI, the Social Survey into Life Satisfaction, and the Happiness Index. Implications for further research are discussed.

## MEETING No. 277.

### The Effects of Size and Duration on Interpersonal Skills Development.

Don W. Locke.

Recent research in the field of counseling has indicated that the development of interpersonal skills, such as the communication of empathetic understanding, forms a basis for therapeutic change (Carkhuff and Truax, 1965; Truax and Carkhuff, 1967). Additional research (Truax, Carkhuff, and Douds, 1964) has suggested that it is possible to improve significantly the levels of functioning in the counselor trainee's interpersonal skills through a didactic approach. Although such gains in interpersonal skills have been demonstrated, research has not clearly demonstrated the most effective parameters in applying such experiential-didactic procedures. The purpose of this investigation was to examine the effectiveness of interpersonal skill training as a function of group size and training duration. More specifically, the research investigated the relationship between and among small and large groups, short and long training periods.

**Method.** Ninety-five students who were enrolled in four beginning counseling procedures classes served as the subjects for this study. Two classes, one containing 28 trainees and the other, 43, were designated as large groups. The remaining two classes each contained 12 trainees and were designated as small groups. One large and one small group received training during summer semesters and were designated as short duration groups. The remaining large and small groups were trained during regular fall semesters and were designated as long duration groups. During the course of training, all trainees were required to conduct an equal number of recorded counseling sessions. The final counseling session tapes served as a basis for determining that trainee's level of skill in communicating the dimension of empathetic understanding. All 95 trainees received instruction from the same individual.

Three graduate students in counselor education were trained in the use of rating scales according to modified procedures described by Truax and Carkhuff (1967). Training on recordings demonstrating high and low levels of empathetic understanding continued until the three raters, using a 20-interval revised Carkhuff scale (Carkhuff, 1970), gave identical ratings on three consecutive taped sessions. Upon completion of training, the raters, working as a team, rated each of the recorded sessions.

**Results.** Statistical analysis was made by means of a two-way analysis of variance (Senter, 1969) with group size and training duration treated as main effects. Since membership in classes had been established prior to the beginning of the study, it was necessary to make adjustments for unequal class sizes in the analysis of the data. A least-squares method of adjusting for unequal cell frequencies was used in computing the analysis of variance (Winer, 1962).

The only significant effect shown by the analysis of variance was the main effect for group size ( $F = 4.8645$ ,  $df = 1/91$ ,  $p < .05$  two-tailed). The main effect for training duration was nonsignificant. The interaction between group size and training duration was also nonsignificant. A summary of the adjusted analysis of variance is presented in Table 1.

An examination of mean scores of the four groups shows that the highest level of functioning was achieved by the group of large size and short training duration. The next highest level was again a large

group trained over a long duration. These groups were followed in mean level of functioning by the small-long duration and finally small-short duration groups.

The findings of this study indicate that the factor of group size has a significant effect on the level of functioning of counselor trainees on the dimension of empathetic understanding. Examination of the data reveals that the two larger groups showed the highest overall level of functioning. These findings seem to contradict the usual experiences in which smaller groups receiving more individualized instruction tend to show the largest gains. In accounting for the present findings, it is suggested that several factors may be operating either together or individually. In larger groups, learning may be facilitated as a result of members receiving exposure to a wider variety of potential counseling pitfalls and a larger number of positive counseling behaviors for modeling. An alternative accounting for the unusual findings is based upon the ideal that the personality dynamics of a small group may have an inhibitory effect on the members. The presence of close acquaintances may exert external pressures on the trainees when functioning in either the counselor or client role resulting in an inability to retain counselor-client congruency during counseling sessions.

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The spacing or organization of class intervals appears not to be a significant factor in revealing or screening potential skills in empathetic understanding. It is suggested that either of the two training durations involved in this investigation was a sufficient period to allow progress in those trainees who possessed the prerequisite skills necessary for adequate counselor growth. Findings of this investigation would suggest the following considerations: Beginning counseling procedures classes of 30 or more will result in more growth than smaller classes; and larger beginning counseling procedures classes may provide a more economical opportunity, in terms of personnel and operations, for effectively screening those with the prerequisite or potential interpersonal skills.

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#### Validation of Diverse Measures of Counseling Process.

Michael J. Lambert, Brigham Young University, and Steven S. DeJulio, State University of New York-Oswego.

Recent attempts to ascertain the effectiveness of psychotherapy have led to the construction of rating scales to measure dimensions assumed to be of major importance to any successful helping relationship. Attempts to validate such scales have taken many forms. The present research investigated the relationship of two commonly used but diverse methods of measuring human interaction and counseling process. It was assumed that since both are purported to be related to positive therapeutic outcome, a significant relationship could be expected and that this relationship could be taken as evidence of convergent validity.

Standard rating scales developed by Truax (Truax and Carkhuff, 1967) and modified by Carkhuff (Carkhuff and Berenson, 1967) were used. The scales used assessed the dimensions of empathy, respect, genuineness, and specificity. These scales have been frequently used in so-called facilitative conditions research and have been related to a variety of client therapeutic outcome measures (Truax and Carkhuff, 1967). These scales enjoy continued and frequent experimental use.

The Hill Interaction Matrix (HIM), developed by Coppleno and Hill in 1959, was the comparison process measure. It has been used less frequently than the facilitative conditions rating scales, but