The effect, if any, of Peer Paraprofessional Counseling (PPC) training on the transactive behavior of individuals was examined by studying the PPC program at Marquette University's Counseling Center. Subjects (N=38) were 8 students selected for the PPC program, 8 selected as alternates, 10 who did not pass selection criteria but were trained as a control group, and 12 who were neither selected nor trained as a second control group. Training lasted for five months, and emphasized human relations helping skills and group dynamics. After completion of training, all subjects participated in a study of transactive communication consisting of written tests of formal operational reasoning and within-group moral dialogue. Trained students were less likely to use operational transacts than non-trained students, indicating the PPC training procedures need to be supplemented with operational transactive communication skills.
Transactive communication in peer paraprofessional counseling

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Paraprofessional counseling has become quite popular recently. One of the reasons cited for this trend is "mental health's third revolution" (Hobbs, 1964), i.e., the movement away from medical, remedial models to preventive, developmental public health models. Gartner and Riessman (1974) make a parallel analysis noting the new "activist, sociological emphasis on the one hand and the more traditional, internally oriented medical model on the other" (p. 253). The issue at hand is basically that the more traditional medical model relies on post hoc "fire fighting" strategies while there is a growing concern for more preventive methods. This preventive philosophy entails a concern with providing adequate bases to insure optimal development as a means of avoiding the crises that the traditional method can only "treat" or remediate after the fact.

Peer paraprofessional counseling (hereafter referred to as PPC) seems uniquely suited to the goals of the new counseling philosophy. Hoffman (1976) points out that there are two main reasons for the growing utilization of such programs: (1) the increased personnel available as a result of paraprofessional counseling, and (2) that peers may be better at relating to and empathizing with the concerns of clients (cf. Carkhuff, 1969). Brand (1979) points out further that PPC allows for access to client populations that may have been underrepresented previously, e.g., certain minorities. These populations may then be availed of the public health strategies that Hobbs called for 16 years ago.

While the call for PPC and the new counseling philosophy is not new, and while some authors note that the trend is already a reality in the field of counseling (Gartner & Riessman, 1974; Hoffman, 1976), it is not readily apparent that the methods of training or assessing PPC are consonant with the new philosophy. Indeed, D'Augelli and Danish (1976) have recently called for
the assessment of such programs. The design they suggest is utilized in the present study.

In terms of training, it is our contention that traditional methods have been applied to a non-traditional enterprise. That is, while the goal of the new counseling is preventive and developmental, the methods employed and trained in PPC are remedial. It seems that if we are to heed Hobbs' plea, we must look to new arenas to find the tools that would complement an emphasis on development and prevention. One obvious place to look to is developmental psychology. Developmental psychology entails the study of the normative development of an individual. To foment such development is the goal of the new counseling.

One way that developmental psychology may offer solutions to PPC is in its study of peer communication and its relationship to individual development. PPC, indeed all counseling, is a communication process. PPC is a peer communication process. The development that we are concerned with here is multifaceted and complex. Carkhuff (1969) refers to a trichotomy of the emotional, physical and intellectual. Even that is overly general and simplistic. Hoffman (1976) and Brand (1979) review a number of studies demonstrating varying positive effects of PPC training and practice. It is important to note that one clear emphasis in the literature is on the effects of such training on the counselors themselves. For instance, Zahner and McDavis (1980) studied the effects of PPC and professional counselor training on moral development. Carothers and Inslee (1974) report on the effects of volunteer training on empathic skills. Insofar as the "therapist" in PPC is a peer of the "client", both may lay equal claim to the developmental, preventive benefits of their relationship.
The empirical study of developmental communication is very new. In the area of cognitive-developmental stage psychology (cf. Kohlberg, 1969), an interest in the processes of development has resulted in a recent trend toward the investigation of peer communication as a developmental catalyst. Miller and Brownell (1975) have looked at peer communication in the context of child cognitive development. Forman, Parrish and Hom (1980) have done similar work with adolescents. Selman and his colleagues (Jaquette, 1978; Selman, Jaquette & Lavin, 1977; Stone, 1979) have investigated peer communication as it relates to the development of social understanding. Berkowitz and his colleagues (Berkowitz, 1980a, 1980b; Berkowitz, Gibbs & Broughton, 1980) and Damon (1980) have studied the relationship of peer communication processes to moral development in undergraduates and young children, respectively.

The study focuses specifically on the work of Berkowitz and his colleagues in the study of what they term "transactive" communication. Berkowitz (1980a) defines such communication as "discussion in which each (discussant) engages the reasoning of his/her discussion partners with his/her own reasoning. Rather than merely providing consecutive assertions, discussants 'operate' on each other's reasoning. In a very dialectical sense, one's own reasoning confronts the other's antithetical reasoning in an ongoing dialogic dynamic" (p. 13). This form of peer communication has been elaborated (Berkowitz, 1980b; Berkowitz & Gibbs, 1979) and has been demonstrated to relate to individual growth in moral reasoning as measured by Kohlberg's (1976) stages. It is further hypothesized that these forms of communication relate as well to other areas of socio-cognitive development (cf. Damon, 1977; Shantz, 1975).
Berkowitz (1980b) defines three types of transactive behaviors (called transacts). The ideal type of transact is termed operational. In these instances the individual is transformationally operating on the discussion partner's reasoning. An example would be an inference, extension or logical critique. The two lower order forms of transacts are termed representational and elicitational. The former closely parallels some reflective counseling skills. It refers to transacts where the individual re-presents the partner's reasoning, such as in a paraphrase. The latter type of transact refers to cases where the individual elicits clarification, justification or other information from the partner. Berkowitz and Gibbs (1979) elaborate all cases of these three transact types.

While moral development has been cited as a goal of counselor training, it has not been shown to be a result of such training (Zahner & McDavis, 1980). We may explain this finding by looking at the traditional training methods of counseling, especially PPC. The most prevalent type of counselor training in PPC programs is human relations helping (Carkhuff, 1969). While Carkhuff makes it clear that empathic, insightful analysis of the client's feelings and thoughts is an important goal of such techniques, there are still two problems with this model. First, the interaction in such therapeutic relationships is unidirectional, i.e., the client reveals and the therapist reflects back. In the transactive model, it is assumed that the more interpenetrative the interaction, the more developmentally fruitful it will be. It is the sharing and contrasting of feelings and thoughts that is the food for growth. Unidirectionality will therefore lessen the beneficial developmental impact of the PPC relationship. This is certainly not a condemnation of client-centered counseling in total. Rather this critique is specific to the developmental orientation of PPC.

The second problem centers around the degree to which PPC trainees
actually employ the helping skills they are taught. There is a growing body of literature to demonstrate that training is effective (Hoffman, 1976), but the issue remains to what degree it is effective. Typically, the increase is in reflective behavior. It should be recalled that while reflective behavior is transactive and would be predicted to lead to the generally positive developmental gains in the literature (see review by Hoffman, 1976), it is still a lower order form of transactive behavior, and greater gains would be predicted if operational transactive behavior was included in PPC. Furthermore, developmental gains have been demonstrated for the clients but only skill acquisition for the paraprofessionals.

This study is intended to test whether PPC training, in a traditional sense, has an effect on the transactive behavior of individuals. To do so, the PPC program at Marquette University's Counseling Center was studied. This program (Dotson-Hassin, 1980) trains undergraduates in human relations helping skills and group facilitation techniques (Carkhuff, 1969; Danish & Hauer, 1973; Ivey, 1971). D'Augelli and Danish's (1976) suggested 2 x 2 design for studying such programs was adopted. It is hypothesized that PPC training will suppress the higher order Operational transaction of paraprofessionals and increase the lower order Representational forms.

**Method**

**Subjects.** The subjects were 38 undergraduates at Marquette University in Milwaukee, Wisconsin. There were 8 students selected to participate in a PPC program, 8 selected as alternates, 10 who did not pass the selection criteria but were trained as a control group, and 12 who were not selected and were not trained as a second control group (cf. Brand, 1979, for selection criteria).
Training. The training of the PPC and Training Control groups was administered by the staff of Marquette University's Counseling Center (Dotson-Hassin, 1980). It essentially consisted of applications of the work of Robert Carkhuff (1969), Alan Ivey (1971) and Steven Danish & Hauer, 1973). The skills trained were human relations helping skills and group dynamics, e.g., attending, reflecting, and empathizing. The training lasted for approximately five months.

Assessment. After the training was completed, all subjects from all four groups (PPC, Alternates, Training Control, Control) were asked to participate in the study of transactive communication. The four groups represent the four cells in a 2 x 2 design of selected/non-selected vs. trained/non-trained individuals. The PPC groups was selected and trained. The Alternates were selected and non-trained. The Training Controls were non-selected and trained. The Controls were non-selected and non-trained.

All subjects were administered the Sociomoral Reflection-Measure (Gibbs, Widaman & Colby, 1980) and the Butch and Slim Test (Ward, 1972). The former was used to assess the moral choices each individual made in order to pair subjects within groups while maximizing opinion differences for subsequent discussion. The latter was employed as a measure of formal operational reasoning. It has been hypothesized that some transactive skills may require formal operational development (Berkowitz, 1980b). This test also was intended to uncover group differences in intellectual functioning. The two tests were administered in written forms.

Once the forms were completed the subjects were paired within groups with the intention of maximizing moral opinion differences. All dyads then engaged in a discussion of a moral dilemma presented by the experimenter with the instructions to try to agree on both the choices and the justifications.
for the choices. The dialogues were tape-recorded and later transcribed. This procedure was adopted from Berkowitz, Gibbs & Broughton (in press).

**Scoring.** The Butch and Slim Tests were scored objectively using the answer key in Ward (1972). The sum of correct responses on the Negation and Identity scales was used as the dependent measure.

The transcripts of the dialogues were scored using the coding manual written by Berkowitz and Gibbs (1979). Both of the present authors scored a subset of the transcripts as an estimate of interrater reliability. The scorers agreed 93% of the time on whether a statement was transactive or not. Whenever either or both classified a statement as transactive, there was 53% agreement on the exact transact (there are 18 transacts). For further analyses see Prestby (1980).

**Results.**

Analysis of formal operational reasoning. A 2 x 2 ANOVA was calculated on the total number of correct responses on the Butch and Slim Test of formal operational reasoning for the Selection (Selected, Non-selected) vs. Training (Trained, Non-trained) variables. As noted previously, the four cells in the design represent the four subject groups. The group means were 49.14, 44.75, 51.9 and 46.67 for the PPC Alternate, Training Control, and Control groups, respectively. There were no significant effects in the analysis, but the effect of training approached significance, $F(1,30) = 3.37, p = .081$. The means for the combined trained and non-trained subjects were 50.78 and 45.77, respectively. These data are presented in Table 1.

Analysis of transactive communication. The dependent variable selected for this analysis was the mean number of transacts per page of the transcribed
discussion. This measure was analyzed in a 3 X 2 X 2 ANOVA for the Transact Type (Representational, Elicitational, Operational), Selection (Selected, Non-selected) and Training (Trained, Non-trained) variables. The Transact Type variable is a within subjects variable. The means on the Representational, Elicitational and Operational scores, respectively, for the PPC group were .51, .48 and 1.01. The means for the Alternates were .24, .46 and 1.58. The means for the Trained Controls were .38, .20 and 1.22. The means for the Controls were .46, .40 and 1.49. These are graphically represented in Figure 1.

There were two significant effects in the analysis. The main effect for Transact Type was significant, $F(2,32)=67.7, p < .001$. The means for the Representational, Elicitational and Operational transaction, respectively, were .40, .38, and 1.34. The Transact Type by Training interaction effect was also significant, $F(2,32)=3.99, p < .05$. The means for the trained groups on the Representational, Elicitational and Operational scores were .44, .32 and 1.13, respectively. The means for the non-trained groups were .37, .42 and 1.53. These data are graphically represented in Figure 2.

**Discussion**

The results support the hypotheses that PPC training suppresses higher order Operational transaction and increases the usage of lower order Representational transaction. There were no effects attributable to group differences in intellectual development. There was a suggestion, however, that the training experience may have increased the level of formal operational reasoning of the subjects.

There were two significant effects in the communication analysis. The finding that all groups engage in more Operational than either Representational or Elicitational transaction is not surprising or conceptually informative.
It is due to the fact that 11 of the 18 transacts are operational transacts (Berkowitz & Gibbs, 1979). The second finding, that trained students were less likely to use operational transacts than non-trained students, is more informative. This finding held regardless of selection criteria (cf. Brand, 1979). In fact, selection was not a variable of interest in either analysis. Training seems to suppress operational transaction. This fits the intuitive observation of PPC trainers that regimenting specific micro-skills seems to stifle the natural sophisticated communication styles of trainees. It should also be noted that the PPC group used the most Representational and Elicitational transacts and the least Operational transacts of the four groups. This suggests that the training may have also enhanced the tendency to utilize lower order Representational transaction.

The implication of these findings for PPC are that training procedures need to be supplemented with Operational transactive communication skills. The reason that Zahner and McDavis (1980) did not find moral development as a result of either professional or paraprofessional counsel or training programs and that Berkowitz, Gibbs and Broughton (in press) did for undergraduate non-counselor discussions may be that the training employed for counselors suppressed the operational transaction that naturally occurs and would cause the subsequent development of moral reasoning.

It should be further noted that it is clear that PPC does have a wide variety of beneficial effects. Nevertheless, if the new counseling philosophy of development and prevention is to be taken seriously, the goals of such a philosophy need to be insured by the methods employed in training and implementing such programs. One way to do that is to look to developmental psychology and more specifically to the model of transactive communication for insight and methods.
References


TABLE 1
ANALYSIS OF FORMAL OPERATIONAL REASONING

TABLE 1A: GROUP MEANS ON "BUTCH & SLIM TEST" OF FORMAL OPERATIONAL REASONING SELECTION

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<th>NON-SELECTED</th>
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<td>(TRAINED CONTROLS)</td>
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<tr>
<td>NON-TRAIN</td>
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<td>46.67</td>
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<tr>
<td>(ALTERNATES)</td>
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<td>(CONTROLS)</td>
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TABLE 1B: ANOVA SUMMARY TABLE

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<td>1.47</td>
<td>.03</td>
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FIGURE 1

Mean Transacts Per Page by Group and Transact Type
FIGURE 2

Mean Transacts Per Page for Significant Training by Transact Type Effect