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INTERPERSONAL BEHAVIORS AND THEIR RELATIONSHIP TO THE ANDRAGOGICAL AND PEDAGOGICAL ORIENTATIONS OF ADULT EDUCATORS

MEL R. HOLMES

ABSTRACT

The objectives of the study were: (a) to determine the andragogical and pedagogical orientations of a selected group of adult educators; (b) to identify selected interpersonal behaviors of the adult educator sample and determine the relationship of these behaviors to andragogical and pedagogical orientations; and (c) to determine if the relationship between interpersonal behaviors and an andragogical orientation differed from the relationship between interpersonal behaviors and a pedagogical orientation.

The sample consisted of 197 Auburn University faculty and 103 Alabama Cooperative Extension personnel identified as experienced adult educators. The Educational Orientation Questionnaire was administered to determine the andragogical or pedagogical nature of the adult educator's orientations. The Fundamental Interpersonal Relationship Orientation Behavior Scale was administered to identify interpersonal behaviors of the adult educators. Questionnaires were returned by 167 subjects (55.7%).

Results of the study indicated that: beliefs and attitudes about adult education were significantly different for the andragogical and pedagogical groups; a significant relationship existed between interpersonal behaviors and the orientations of adult educators categorized as andragogical; the relationship between interpersonal behaviors and the orientations of adult educators categorized as pedagogical was not significant.

Though the terms andragogy and pedagogy have frequented recent literature in adult education, few studies have been reported which dichotomize the source traits of educators identifying with either of these attitudes. Such studies have not been conducted for several reasons. First, the concepts of andragogy and pedagogy as defined by Knowles (3) are comparatively new and have primarily evolved out of subjective observations rather than a research base. Second, there has only recently been available a validated instrument designed to measure educational orientations in terms of andragogical and pedagogical constructs. Intuitive approaches to understanding the differences between andragogical and pedagogical adult educators must be supported by research if andragogical theory and practice are to attain the viability required of a field of study.

Identifying the potential contributors to the development of an adult educator's orientation has several advantages. Adult educators must understand themselves in the context of their professional belief system in order to select those strategies necessary for meeting effectively the needs of the adult public they serve. A professional's beliefs and attitudes about philosophical issues in adult education are an important part of the educational process and knowledge about what sources influence them should have implications for

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the selecting of strategies for the professional development of adult educators. It then becomes essential that some systematic effort be made to determine what criterion variables influence an educator's orientation toward working with adults. The intent of this study was to investigate the relationship of selected interpersonal behaviors to the andragogical and pedagogical orientations of adult educators.

Three null hypotheses were tested:

1.) There will be no significant relationship between selected interpersonal behaviors and the educational orientation of adult educators categorized as andragogical.

2.) There will be no significant relationship between selected interpersonal behaviors and the educational orientation of adult educators categorized as pedagogical.

3.) There will be no significant difference between the andragogically-inclined adult educators and the pedagogically-inclined adult educators with regard to the relationship of selected interpersonal behaviors to their educational orientation.

METHODS AND PROCEDURES

The study population (N = 300) used for testing the hypotheses consisted of Auburn University Continuing Education Faculty and Alabama Cooperative Extension personnel identified as experienced adult educators. Two instruments were used to collect the data: The Fundamental Interpersonal Relation Orientation Behavior Scale (5) and the Educational Orientation Questionnaire (2).

The Fundamental Interpersonal Relation Orientation Behavior Scale (FIRO-B) was chosen for the following reasons: (a) it measures how an individual acts in interpersonal situations; (b) since the appearance of FIRO-B in 1958 there has been a steady increase in the publication of articles and dissertations testing the Fundamental Interpersonal Relation Orientation Behavior concepts in a wide variety of fields; and (c) recent test reviews (1) indicated reasonable internal consistency and test-retest stability. The reproducibility index is high for all subscales and all test-retest correlations are adequate (over .70). Validity studies on the Fundamental Interpersonal Relation Orientation Behavior Scale suggest that its subscales are related to non-test interpersonal behavior as well as to other personality measures.

FIRO-B is designed to measure the individual behavior towards others and the behavior the individual wants from others in the three areas of interpersonal interaction. This measure leads to six behavioral scores:

1.) *Expressed Inclusion*: the need to actively establish and maintain a satisfactory relationship with people with respect to interaction and association.

- 2.) *Wanted Inclusion*: the need to belong and be accepted by others.
- 3.) *Expressed Control*: the need to actively establish and maintain a satisfactory relationship with people by controlling their behavior.
- 4.) *Wanted Control*: the need to be dependent or controlled by others.
- 5.) *Expressed Affection*: the need to actively initiate close intimate relationships.
- 6.) *Wanted Affection*: the need for close intimate relationships to be initiated by others.

The Educational Orientation Questionnaire (EOQ) was selected since to date it is the only instrument designed to measure andragogical-pedagogical constructs in educational orientations. Review of major validation concerns are presented by Hadley as support for its use:

Reliability of the instrument was measured by test-retest reliability and coefficient alpha. Test-retest reliability measured 0.89, and coefficient alpha was 0.94. The use-validity measure of the Educational Orientation Questionnaire was its effectiveness in discriminating among adult educators. Analysis of variance demonstrated that the Educational Orientation Questionnaire detected differences in orientation (significant at the 0.05 level or less) with respect to variables of: Sex, Subject Matter, Area of Specialty, Level of Position and Type of Organization. (2:7)

The EOQ instrument categorizes along an andragogical-pedagogical continuum the educational orientation of the adult educator. The more "andragogical" the EOQ score, the more likely the adult educator stresses free choice of alternative goals for learning, with interdependent decision and action among students and between students and educator as a basis of effective learning. The andragogical educator perceives his/her relationship to students as that of helper, resource, consultant and co-learner. The goal is to increase effectiveness of learning by encouraging situations which increase cooperative interaction among learners and to increase their participation in and direction of their learning.

The more "pedagogical" the EOQ score the greater the tendency for the adult to emphasize learners' acquiring knowledge and skills that the adult educator judges as true and effective. The pedagogical adult educator, therefore, sees his/her primary relationship to learners as that of an authority, technical expert, director of their learning and judge of their achievement. The goal is to maintain control of what is learned.

T-tests were employed to determine if adult educators categorized as andragogical differed significantly from adult educators categorized as pedagogical in educational orientation. Stepwise multiple regression was applied to the data which related to the hypotheses regarding the relationship of selected interpersonal behaviors to educational orientation. This statistical procedure allows for studying the influence of several independent variables (interpersonal behaviors) on a dependent variable (educational orientation).

RESULTS OF THE STUDY

One hundred and sixty-seven (55.7%) of the 300 identified adult educators completed and returned the EOQ and FIRO-B instruments. The t ratios obtained from computational procedures applied to the andragogical and pedagogical groups are found in Table 1. An analysis of the mean overall

TABLE 1
T RATIOS OBTAINED FROM COMPUTATIONAL PROCEDURES
APPLIED TO EDUCATIONAL ORIENTATION SCORE DATA

Andragogical Group Mean (N = 83)	Pedagogical Group Mean (N = 84)	t Value
202.00	165.51	16.32***

***p < .001

EOQ scores of the two groups shows a difference of 36.49 (t = 16.32, df = 165). Hence, this sample of adult educators were found to be considerably heterogeneous with respect to their educational orientation towards adult education.

There is a significant difference between the educational orientation scores of adult educators categorized as andragogical and the educational orientation scores of adult educators categorized as pedagogical. There was a comparable mean in the overall educational orientation scores of the two groups. The mean of the andragogical group was 202.00 and the mean of the pedagogical group was 165.51. The resulting t value (16.32) was significant at the .001 level.

Tables 2 and 3 present the stepwise regression analysis of Educational Orientation score data for the pedagogical and andragogical groups, respectively.

For the pedagogical group, the independent variables were entered into the regression equation in the following order: (1) expressed control, (2) wanted control, (3) wanted inclusion, (4) expressed inclusion, (5) expressed affection, and (6) wanted affection. For the andragogical group, the independent variables were entered into the equation in the following order: (1) expressed affection, (2) wanted inclusion, (3) expressed inclusion, (4) expressed control, (5) wanted control, and (6) wanted affection. Thus, expressed control and wanted control were selected as the best interpersonal behaviors for predicting a pedagogical orientation, and expressed affection and wanted inclusion the best predictors for an andragogical orientation.

TABLE 2
STEPWISE REGRESSION ANALYSIS OF EDUCATIONAL
ORIENTATION SCORE DATA FOR PEDAGOGICAL GROUP

Variables	Simple R	Multiple R	R Square	R Square Increment	F
Expressed Control	-.222	.222	.049	.049	2.41
Wanted Control	.150	.275	.076	.027	3.73**
Wanted Inclusion	-.161	.312	.097	.027	4.81**
Expressed Inclusion	.030	.356	.127	.030	1.52
Expressed Affection	.008	.374	.140	.013	0.66
Wanted Affection	-.047	.374	.140	.000	0.04

**· $p < .01$

The items of greatest interest in Tables 2 and 3 are the moderate multiple R's (0.37-pedagogical, 0.44-andragogical) and R squares (0.14-pedagogical, 0.20-andragogical). Multiple R's indicate the strength of all the variables of interpersonal behavior as they relate to Educational Orientation scores. R squares indicate the percentage of contribution the interpersonal behaviors make to explaining variance in the andragogical and pedagogical orientations. The variance in the educational orientation scores of adults categorized as pedagogical is only moderately accounted for by interpersonal behavior variables in the equation. The interpersonal behavior variables only account for six percent more of the variance in the andragogical group than in the pedagogical group. Therefore, these selected interpersonal behaviors are only somewhat better predictors of an andragogical orientation than they are of a pedagogical orientation.

Also to be noted in Tables 2 and 3 is that only two interpersonal behaviors (wanted control and wanted inclusion) contributed significantly ($p < .01$) to the variance in the educational orientation scores for the pedagogical group and two interpersonal behaviors (expressed affection and wanted inclusion)

TABLE 3
STEPWISE REGRESSION ANALYSIS OF EDUCATIONAL
ORIENTATION SCORE DATA FOR ANDRAGOGICAL GROUP

Variables	Simple R	Multiple R	R Square	R Square Increment	F
Expressed Affection	.370	.370	.137	.137	3.67**
Wanted Inclusion	.342	.401	.160	.024	3.40**
Expressed Inclusion	.080	.422	.179	.018	1.58
Expressed Control	.173	.433	.188	.009	0.97
Wanted Control	-.070	.442	.196	.008	0.69
Wanted Affection	.247	.444	.197	.001	0.10

**· $p < .01$

for the andragogical group. Although expressed control was selected first by the computer as the best predictor for a pedagogical orientation, when all interpersonal behavior variables had entered the pedagogical regression equation, expressed control was not statistically significant.

Neither regression equation yielded a large R square increment for any one independent personality variable. The implications are that no one interpersonal behavior adequately describes either an andragogical orientation or a pedagogical orientation. This is probably due to the intercorrelation between the independent variables.

A notable aspect concerning the ordering of variables for the pedagogical regression equation (Table 2) is that the interpersonal behavior variables are grouped by areas of interpersonal needs. That is, the two forms of control were entered at the first and second steps, the two forms of inclusion were entered at the third and fourth steps, and the two forms of affection were entered at the fifth and sixth steps. This implies that a pedagogical orientation as related to personality may be better understood in terms of these three areas of interpersonal need rather than six expressions of these needs. From

this point of view, the need to control others would be the most important interpersonal behavior index for predicting a pedagogical orientation.

For the andragogical group (Table 3), the two forms of control and inclusion were entered similarly to the pedagogical group, that is, together as areas of interpersonal need. However, the two forms of affection were entered at the first (expressed affection) and the last (wanted affection) step. The implications are that the expressed form of this interpersonal behavior variable is a key factor which differentiates the andragogical adult educator from the pedagogical adult educator, since the wanted form of affection was entered last in both equations. Apparently, the initiating of close personal contacts is an important aspect of the interpersonal behavior of adult educators who hold an andragogical orientation.

A summary of the overall regression analysis for the educational orientation score data for the andragogical group is presented in Table 4. The F ratio of 3.10 is significant at the .01 level. Thus, the first null hypothesis—that there is no significant relationship between the educational orientation and selected interpersonal behaviors of adult educators categorized as andragogical—was rejected. Therefore, these interpersonal behaviors are related to the andragogical orientation of an adult educator.

TABLE 4
SUMMARY OF STEPWISE REGRESSION FOR
EQO SCORE DATA FOR ANDRAGOGICAL GROUP

Source	df	SS	MS	POV	F
Regression	6	3942.42	657.07	.20	3.10**
Residual	76	16103.58	211.89		
Total		20046.00			

Multiple R = 0.44
** - $p < .01$

The F ratio for the overall regression analysis for the pedagogical group is presented in Table 5. This F value (2.08) was not statistically significant and the second null hypothesis—that there is no significant relationship between the educational orientation and selected interpersonal behaviors of adult educators categorized as pedagogical—was accepted. The relationship between interpersonal behavior and a pedagogical orientation may have occurred by chance. Therefore these selected interpersonal behaviors may not accurately predict a pedagogical orientation.

Table 6 presents the results of the test for equality of slopes for the two equations. This test was applied to determine whether or not the regressions of educational orientation scores on interpersonal behavior variables were dif-

TABLE 5
SUMMARY OF STEPWISE REGRESSION FOR
EQO SCORE DATA FOR PEDAGOGICAL GROUP

Source	df	SS	MS	POV	F
Regression	6	1990.00	331.67	.14	2.08
Residual	77	12204.98	185.51		
Total		14194.98			

Multiple R = 0.37

TABLE 6
REGRESSION EQUATIONS AND RESULTS OF TESTS OF
DIFFERENCES BETWEEN EQUATIONS

Groups	Regression Equations				X	Test of Slopes
	Y	=	a	+ b		F
Andragogical	196.00		1.845	EA		3.71*
			1.244	WI		
			-1.014	EI		
			0.734	EC		
			-0.739	WC		
Pedagogical	159.11		0.684	EA		df = 6, 159
			-1.588	WI		
			1.023	EI		
			-0.870	EC		
			1.555	WC		
		0.173	WA			

* = $p < .05$

ferent for the adult educators within each of the two categories of andragogical and pedagogical groups. The F value of 3.71 was significant at the .05 level and the null hypothesis—that there is no significant difference between the andragogical and the pedagogical adult educators with regard to relationship of selected interpersonal behaviors to their educational orientation—was rejected. Differences exist in the interpersonal behaviors of adult educators which can differentiate their educational orientations along an andragogical-pedagogical continuum.

CONCLUSIONS

That differences in beliefs and attitudes about education and effective learning situations for adults can distinguish adult educators one from another is supported by the findings of this study. These findings also help provide a research base for the contentions of Knowles (3) and Hadley (2) that this difference in beliefs and practices among adult educators can be characterized as either being andragogically inclined or pedagogically inclined. However, it is best to conceptualize andragogical and pedagogical orientations as the extremes of a continuum.

Although this study's findings indicated there were significant differences between the means of the andragogical and pedagogical groups of adult educators, the categorizing of the continuous scores of the Educational Orientation Questionnaire should not be interpreted as meaning that the differences in andragogy and pedagogy are as night from day. The issues of purpose of education, nature of learners, characteristics of the learning process, and the relationship of the educator to the learner, which usually differentiate educational orientations, may in themselves become sources of a peculiar blend of andragogical and pedagogical attitudes within any given educational orientation.

THE ANDRAGOGICAL ADULT EDUCATOR

Interpreting the regression equation for the andragogical group indicates that expressed affection is the most important dimension of interpersonal behavior related to an andragogical orientation. Expressed affection is defined by Schutz (4) as a "psychologically comfortable relation with others somewhere on a dimension ranging from initiating close, personal relations with everyone to originating close personal relations with no one" (20). It is important to note that Schutz's definition of expressed affection is in terms of interpersonal behavior rather than feeling. In terms of interaction in a group other terms which might be used to describe expressed affection behavior would be "praising" and "approving".

The relationship of expressed affection to an andragogical orientation appears to be psychologically sound. The adult educator who tends to feel com-

fortable in initiating close relationships should tend to place faith in the responsibility of students to guide their own learning.

In contrast to expressed affection, it is interesting that wanted affection was entered last in the regression equation for the andragogical group. Wanted affection as defined by Schutz (4) is "a psychologically comfortable relation with people with respect to eliciting behavior from them on a dimension ranging from always originating close personal relations toward the self to never originating close personal relations toward the self" (20). The desire to direct the attention of others to center on the self is apparently an incongruent interpersonal behavior for the andragogical adult educator who sees his/her relationship to students to be non-directive in nature.

The other interpersonal behavior related to an andragogical orientation according to the findings of this study was wanted inclusion. Wanted inclusion as defined by Schutz (4) is "a psychologically comfortable relation with people with respect to eliciting behavior from them somewhere on a dimension ranging from always initiating interaction with the self to never initiating interaction with the self" (20). The difference between inclusion and affection is that inclusion behavior is concerned with the problem of in or out, and affection behavior is concerned with close or far. It is logical that the andragogical adult educator would seek to elicit behaviors from the students which would assure his/her being a member of the group rather than an outsider.

Expressed inclusion, the desire to initiate interaction with others, had a similar relationship to an andragogical orientation as did wanted inclusion behavior. This indicates that how the andragogical adult educators express themselves in the inclusion area is similar to how they would like to be acted towards by their students. This is congruent with the goal of an andragogical approach to education: "to increase effectiveness of learning by encouraging situations which increase cooperative interaction among learners and increase their participation in and direction of their learning" (3.7).

THE PEDAGOGICAL ADULT EDUCATOR

Interpreting the pedagogical regression equation, the most important variables of interpersonal behavior which explain a pedagogical orientation were expressed control and wanted control. Schutz (4) defines expressed control as a "psychologically comfortable relation with people somewhere on a dimension ranging from controlling all behavior of other people to not controlling any behavior of others" (p. 19). Generally speaking, Schutz conceptualizes control as being concerned with the problem of top or bottom, i.e., power and authority. In terms of interaction within a group, some synonyms which describe the two extremes of control are "dominance" and "submissiveness." The direction of the relationship of expressed control to a

pedagogical orientation was negative. This might be expected. As educational orientation scores increased in value, expressed control scores decreased in value. The higher an adult educator's score in the pedagogical group, the less pedagogically oriented is such an adult educator. Likewise, the lower an adult educator's score on expressed control, the less tendency he/she will have to dominate others. The implications are that the more an adult educator tends to dominate in interpersonal behavior, the more pedagogically oriented he/she is likely to be in a learning situation.

With regard to wanted control Schutz (4) stresses that such interpersonal behavior ranges from always being controlled by others to never being controlled by others. Unlike expressed control, wanted control has a positive relationship with a pedagogical orientation. This indicates that as wanted control scores increased EOQ scores in the pedagogical group increased (became less pedagogical). The implications are that adult educators who demonstrate by their interpersonal behavior that they are less willing to be controlled by behaviors of others will be more pedagogically oriented in their attitude toward the learning process.

Finally, the following precautions should be kept in mind with regard to the above conclusions. The size of the multiple R's indicate that the relationship is moderate in nature for both the andragogical and pedagogical groups. The two regression equations for each group are simultaneous in nature. In other words, the relationship of any given subscore of the Fundamental Interpersonal Relation Orientation Behavior Scale to either educational orientation can only explain the relationship of that particular variable to educational orientation in conjunction with the presence of the other interpersonal behavior variables.

And finally, the interpretation of the relationship of Fundamental Interpersonal Relation Orientation Behavior Scale subscores to a pedagogical orientation should be especially guarded since the probability is greater than .05 that this relationship has occurred by chance. Further research is recommended utilizing different personality measures. Perhaps other personality delineating instruments could be useful in providing a better description of this relationship.

REFERENCES

1. Buros, Oscar K. *Mental Measurement Yearbook*. New Brunswick, NJ: Rutgers University Press, 1975.
2. Hadley, Herschel N. "Development of an Instrument to Determine Adult Educators' Orientation - Andragogical or Pedagogical." Doctoral Dissertation, Boston University, 1975. *Dissertation Abstracts International*, 1975, 35, 7595A. (University Microfilm No. 75-12, 228)
3. Knowles; Malcolm S. *Self-directed Learning*. New York: Association

4. Schutz, William C. *The Interpersonal Underworld*. Palo Alto, CA: Science and Behavior Books, Inc., 1966.
5. Schutz, William C. *The FIRO Scales Manual*. Palo Alto, CA: Consulting Psychologists, Inc., 1967.