DOCUMENT RESUME

ED 042 674 95 SO 000 224

AUTHOR Harvey, O. J.; King, Edith W.
TITLE External Evaluation of the EPDA Worldmindedness Institute.
INSTITUTION Denver Univ., Colo.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 69
GRANT OEG-0-9-151186-1759-725
NOTE 17p.

EDRS PRICE EDRS Price MF-$0.25 HC-$0.95
DESCRIPTORS Administrator Attitudes, Adoption (Ideas), Attitude Tests, Behavior Change, Beliefs, *Changing Attitudes, *Elementary Schools, *Institutes (Training Programs), *Program Evaluation, *School Personnel, Social Attitudes, Teacher Attitudes, Values
IDENTIFIERS Brown (Bob B), Conceptual Systems Inventory

ABSTRACT

The summer phase of the Worldmindedness Institute at the University of Denver from June 23 to August 8, 1969 brought together 34 principals, supervisors, coordinators, and teachers of the elementary school level. The program included study in the social sciences and the arts with the ultimate objective being the incorporation of worldmindedness concepts within the elementary school program. This paper reported on an objective evaluation of the effects of the Institute on the values, beliefs and practices of the participants. Participants were pre- and posttested with a battery of instruments to "measure change in values and attitudes, as well as change in 'beliefs-practices' gap." A control group of graduate students were similarly tested. O. J. Harvey's This I Believe Test measured openness or closedness of belief structure and openness to change. B. B. Brown's Philosophical Beliefs Inventory measured endorsement of Dewey's basic philosophy; his Teacher Practices Inventory measured accord with Dewey's recommended teaching practices. Differences between the results of these two tests provided the belief-practices gap measure. It was found that "the Institute program stimulated participants to question and evaluate their beliefs and values, as well as their educational practices." (DJB)

EXTERNAL EVALUATION OF THE EPDA

WORLDMINDEDNESS INSTITUTE*

Principle Investigators:
Dr. O. J. Harvey
University of Colorado

Dr. Edith W. King
University of Denver

Assistants:
Troy Bledsoe
John Hellerstein
University of Denver

Introduction

The Summer Phase of the Worldmindedness Institute at the University of Denver from June 23, 1969 to August 8, 1969, brought together thirty-four participants from all over the United States. The participants included principals, coordinators, supervisors, and teachers of elementary school level. The Institute program included study in the disciplines of sociology, anthropology, social psychology, history, and education, as well as the cultural arts of music, art, and drama. Outstanding nationally recognized educators served as speakers and consultants for the Institute. Field trips during the program included: touring Mesa Verde National Park, Navajo reservation school and village areas, the museums of Santa Fe, New Mexico, and the pueblo ruins of Puye, New Mexico; seminars at the Aspen Institute of Humanistic Studies, attendance at the Aspen Music Festival, Santa Fe Opera and Central City Opera; tour of the U.S. Air Force Academy library, Instructional Technology Department, and Planetarium, visitations to the Denver Public Schools Cultural Arts Program, and the Colorado State Historical Museums. Culmination of the Institute program was the creation and development of models for curricular designs to stimulate the concepts of worldmindedness

*Supported by OEG-0-9-151185-1759-725

within the elementary school program.

An external evaluation was designed for the 1969 Worldmindedness Institute to assess the far-reaching effectiveness of the Institute's program, by attempting to measure the change in the gap between the individual participant's beliefs and his description of his actual practices (actions). It has been determined that when there is a discrepancy between a teacher's expressed educational beliefs and his or her actual classroom practices it is likely to be accompanied by beliefs which are supportive of educational practices advocated by John Dewey, famous educational philosopher, but not supportive of the beliefs that underlie Dewey's philosophy. This implies that classroom practices are more closely related to the teacher's underlying beliefs and values than to what has been promulgated in schools and colleges of education as sound teaching methodology. The result of this "belief gap," according to Brown and Vickery (1967), is that, "Teachers rarely teach the way they were taught to teach; instead, they seem to revert to the very practices their education professors condemn." (p. 417)[1]

The external evaluation of the Institute program consisted of administering a specifically designed series of instruments developed by Dr. O. J. Harvey, Professor of Social Psychology, University of Colorado, to the participants. The test-retest design of this evaluation was administered by Dr. Harvey during the Summer, 1969 seven weeks session. It attempted to measure change in values and attitudes, as well as change in the "belief-practices" gap. Four different instruments were used. Participants filled out the tests during the first week of the Summer Phase and during the last week of the activities.

---

[1]Jack White, Carolie Coates, O.J. Harvey, "Personality and the Belief Gap in Teachers" mimeographed, 1969, p. 1.

Each test was designed to measure an individual's conceptual system of values and beliefs from a different vantage point. A scale of concreteness-abstractness, openness-closedness has been postulated by O. J. Harvey and associates for evaluating systems of values and beliefs in personality constellations.

A control group consisting of graduate students in the School of Education, University of Denver, was given three instruments, the Conceptual Systems Inventory, The Philsophic Beliefs Inventory and The Teacher's Practices Inventory.

The Conceptual Systems of Values and Beliefs

Harvey et al. posit four principal conceptual systems which, as a result of different developmental histories, are assumed to vary both in concreteness-abstractness and in the referents or guidelines around which they are organized.

System 1 functioning, the most concrete mode of construing and responding to the world is assumed to evolve from a training history in which the developing individual has been restricted in exploration of his environment and in which his reward has been contingent on his thoughts and actions conforming to the omnipotently and omnisciently imposed standards of the training agent. As an assumed consequence, System 1 representatives manifest such characteristics as: high absolutism and closedness of thought and belief; high evaluativeness; high positive dependence on, or cathexis with, representatives of institutional authority; high identification with social roles and status positions; high conventionality; and high ethnocentrism or strong beliefs in American superiority. Except in response to guides from formal or institutional authority, System 1 individuals appear to rely upon their own internal

standards to a greater extent than representatives of some of the other systems, especially System 3. It is thought, however, that System 1 individuals, more than representatives of the other systems, particularly System 4, maintain their measure of independence from non-authority cures through conceptual closedness and contrast, which tend to prevent potentially conflicting inputs from entering their conceptual or interpretative matrix.

System 2 functioning, immediately above System 1 in abstractness, is assumed to result from capricious and arbitrary child-rearing practices which, owing to failure to provide stable and predictable referent points, present the developing child with more diversity and uncertainty than his system at the time can assimilate. Representatives of System 2 thus become distrustful of authority-related cures, but at the same time are devoid of any other reliable and stable guidelines. They, more than persons of any of the other systems, seem to be in a psychological vacuum, guided more by rebellion against the formal norms of society and perceived social pressure than by positive adherence to personally derived standards.

System 3 functioning, the next to highest level of abstractness, is assumed to result from childhood over-indulgence and over-protection which, with one or both parents serving as a buffer between the individual and environmental demands, restricts the developing child to explorations centering around social intercourse and manipulation of people. From his experience of inordinate influence on one or both parents the System 3 individual develops the generally inflated notion of himself as a causal agent in effecting desired outcomes in his world. While attributing greater causality to himself than do individuals from Systems 1 and 2, the representative of System 3, owing to

restricted experience in solving his own problems, develops at the same time a more generalized dependency upon others than do persons from any of the other systems. With the exception of the conformity of System 1 individuals to authority-related cures, System 3 representatives are thought to be the most acquiescent of the four systems to conflicting opinions from the generalized other. This kind of social accomodation and seeking of a large number of friendships are only some of the techniques used by System 3 person to avoid being thrust upon his own resources in the solution of problems in his everyday world.

System 4 functioning, the more abstract end of the continuum, is viewed as the consequence of childhood freedom to explore both the social and the physical worlds, to solve problems and evolve solutions without fear of punishment for deviating from the beliefs and standards of adult authorities. The recipient of diversity of experience along with stability as a developing child, the System 4 representative comes to have a highly differentiated and integrated conceptual system and, consequently, to be more information oriented, more relative in thought and action, more open and sensitive to minimal cues in his environment, but at the same time more reliant upon his own opinions and perceptions as valid criteria for decision and action than are persons of the other systems. Faced with new or deviant imputs, System 4 individuals appear more capable of admitting the impingements into their cognitive matrix, of examining and entertaining them, and of accepting or rejecting them in terms of consonance with their own standards than persons from the other systems. Such individuals, therefore, are neither indiscriminate yielders to, nor invariant rebels against, the prescriptions and suggestions perceived as coming from authority.

The Tests Administered To Institute Participants

(a) "This I Believe" Test, developed by O. J. Harvey.

Theoretical Background: The THIS I BELIEVE (TIB) sentence completion test is designed to measure concreteness-abstractness which refers to a general, and presumably more or less standardized way an individual articulates and organizes his concepts of relevant aspects of his environment (Harvey, Hunt & Schroder, 1961). From a series of studies they have found greater concreteness of the individual's view of the world in contrast to greater abstractness, to be manifested in several ways, including: (1) a simpler cognitive structure, comprised of fewer differentiations and more incomplete integrations of certain concept domains (Harvey, Wyer & Hautaluoma, 1963; Harvey, Reich and Wyer, 1965); (2) a greater tendency toward polarized evaluations, viz., good-bad, right-wrong, etc. (White & Harvey, 1965); (3) a greater dependence on authority-related cues as guidelines to belief and action (Harvey, 1964; Tiemann, 1965); (4) a greater intolerance of ambiguity, expressed in higher scores on authoritarianism and dogmatism scales and in the tendency to form judgments of a novel situation more quickly (Harvey, 1966); (5) a greater need for or tendency toward cognitive consistency and greater arousal and change from the experience of cognitive dissonance (Harvey, 1965; Ware & Harvey, 1965); (6) a greater inability to change set and hence greater sterotypy and less creativity in the solution of more complex and changing problems (Felknor & Harvey, 1963; Harvey, 1966); (7) a poorer delineation between means and ends and hence a paucity of different methods of solving a problem or achieving a goal (Harvey, 1966); (8) a poorer capacity to "act as if," to assume the role of the other or to think and act in terms of a hypothetical situation (Harvey, 1963; Harvey & Kline, 1965); and (9) holding opinions with greater strength and with greater certainly that

the opinions will not change with time (Hoffmeister, 1965).

The "This I Believe" Test was scored for (1) Belief System - (categorized as System 1 through 4) for degree of openness or closedness of belief structure, and (2) openness to change which theoretically, not statistically, is independant of the individual's overall belief system.

(b) B. Brown's Philosophical Beliefs Inventory, a measure of endorsement of John Dewey's basic philosophy.

(c) Brown's Teacher Practice's Inventory, a measure of accord with teaching practices recommended by Dewey.

The discrepancy or difference between these two provide a belief-practices gap which has been found to relate to concreteness, abstractness and openmindedness-closemindedness. Thus, change, that is, before and after the Institute's training experience, could be assessed on testing first and second time, as would change in belief-practices gap from Time 1 to Time 2.

Results

In order to be more meaningful, the results of the tests administered to the Worldmindedness Institute participants, as well as the results from the control group of graduate education students, will be compared to normative samples. It is to be noted that the control group did not take the This I Believe Test, although they did fill out the other instruments, the TPI, the PBI, and the Conceptual System Tests, objectified, multiple choice forms of the TIB.

This I Believe Test. Harvey (1966) has published norms based on a sample of 1400 TIBs obtained, primarily, from college students. His sample yielded 30% System 1s; 15% System 2s, 20% System 3s, 7% System 4s, and 28% mixed systems. In another study, Harvey et al (1968), using a sample of 67 teachers: 75% were System 1s; 0% were System 2s; 6% were System 3s, 12% were weak instances of System 4, and 7% were mixtures of Systems 1 and 3.

The Institute participant sample (N = 33) yielded 53% System 1s; 2½% (one individual) System 2s; 12% System 3s; 30% mixed systems (1-3, 1-4, 3-1) and 2½% (one individual) that was predominately System 4. The 53% System 1 results for the Institute group, when compared with Harvey's data, is about 20% greater than the college student sample, but about 20% smaller than Harvey's teacher sample of System 1s. In the Institute sample, the identification of a System 2 individual possibly indicated that today the public schools can tolerate a teacher with a high degree of rebelliousness in his makeup. Harvey found no teachers in his sample classified as System 2.

The Philosophical Beliefs Inventory (PBI) and the Teacher Practices Inventory (TPI)

Norms for teachers' scores on the PBI and TPI are available from the

work of Brown and Vickery (1967). The mean for the PBI among teachers in this study was 142.61. Worldmindedness Institute participants scored 149.94 at Session I's administration and 155.97 at Session II's administration of the Inventory. Institute participants' scores both times were higher than the normative sample, showing stronger agreement with Dewey's philosophy of education the last week of the Program than the first, and a stronger agreement originally than that expressed by teachers in the Brown and Vickery study.

For the Teachers Practices Inventory, the normative sample had a mean = 168.50 Worldmindedness Institute participants rated 182.94 at Session I; and 190.22 at Session II, indicating stronger beliefs in the continuity of subject matter and method than did the normative sample and stronger beliefs after seven weeks of the Program than at the beginning of the Worldmindedness Institute.

The Belief-Practices Gap. The difference between the mean scores on the TPI and the PBI indicate the beliefs-practices gap. At Session I, Institute participants revealed a gap of 33.00 points and at Session II, the gap was 34.25 points. This compared with the norms in Brown and Vickery's study of 25.98 points.

TABLE I

Indications of Change from Session 1 to Session 2 of Beliefs and Values

Worldmindedness Institute Participants

1. This I Believe Test scored for openness on 7-point scale:

   6 became more open

   6 became less open

   others same

2. Belief Gap — 14 less in Session 1 than Session 2

   (TPI-PBI) — 18 larger in Session 1 than Session 2

3. Conceptual Systems Test Measures (Time 1 - Time 2)

   (1) Divine Fate Control — 16 decreased from Time 1 to Time 2; 12 increased from Time 1 to Time 2; 2 unchanged

   (2) Need for Structural Order — 22 decreased; 9 increased

   (3) Need to Help People — 24 decreased, 7 increased, 1 unchanged

   (4) Need for People (Sociability) — 18 increased, 12 decreased, 1 unchanged

   (5) Interpersonal Aggression — 18 decreased, 9 increased, 4 unchanged

   (6) Anomic — 11 decreased, 18 increased, 2 unchanged

   (7) Moral Absolutism — 14 decreased, 14 increased, 3 unchanged

TPI — 24 increased, 5 decreased, 2 unchanged

PBI — 22 increased, 9 decreased

The Control Group. (N=27) Graduate students in a course in Educational Sociology, School of Education, University of Denver were administered the three instruments noted earlier -- Teacher Practices Inventory, Philosophical Beliefs Inventory, and the Conceptual Systems Inventory (an objective form of the This I Believe Test). These inventories were administered to the control group of subjects in the Fall of 1969. The graduate students closely resembled in background, teaching experiences, and maturity the members of the Worldmindedness Institute. Both groups were composed of experienced teachers and administrators, possessing B. A. degrees and advanced credits in education, with diversity of interests and talents. Although the Institute participants were drawn mainly from elementary school personnel, the control group of subjects represented both elementary and secondary school personnel.

The control group of subjects recored a mean score on the Teacher Practices Inventory of 173.67 for Session I and 172.82 for Session II, indicating a very small degree of change (mean difference .85; t= .423, not significant). These mean scores (173.67 and 172.82) were both higher than the normative sample mean of 168.50; but lower than the Worldmindedness Institute participants sample means of 182.94 and 190.22.

The control group of subjects recorded means on the Philosophical Beliefs Inventory of 151.29 and 146.63 respectively, (mean difference = 4.66, t = 1.93, not significant). Both these means were higher than the norm for the teacher sample, 142.61; but close to the means of the Worldmindedness Institute sample, 149.94 and 155.97, Session I and Session II.

The Belief-Practices Gap. It is in the measurement of the Belief-Practices Gap that the control group sample exhibits disparities from the Worldmindedness Institute participant group. The control sample manifested a Belief-Practices Gap of 22.41 points, Session I and 26.20 points, Session II. This compares closely to the gap of 25.89 for the normative sample and contrasts with the much larger gap of 33.00 and 34.25 (Session I and Session II) of the Worldmindedness Institute sample. In other words, the subjects of the control group of graduate students exhibited a much higher degree of consistency between beliefs and practices than did the Institute participants at the beginning of the training period and at the end, as well.

TABLE II - Belief-Practices Gap
(TPI - BPI)

Subjects	Instrument	Session I $\bar{X}$	Session II $\bar{X}$
WM Institute N = 33	TPI	182.94	190.22: $\bar{X}$ Diff. = 7.28 t = 4.52 (significant)
	PBI	149.94	155.97; $\bar{X}$ Diff. = 5.93 t = 2.81 (significant)
	Belief Gap	33.00	34.25
Control Group Grad. Students N = 27	TPI	173.67	172.82; $\bar{X}$ Diff. = .85 t = .423 (not significant)
	PBI	151.29	146.63; $\bar{X}$ Diff. = 4.66 t - 1.93 (not significant)
	Belief Gap	22.41	26.20

Components of the TIB and CST Inventories. It has already been stated that the Conceptual Systems Tests (Personal Opinion Survey, Form A and Form B - POS a, POS b) are objectified, multiple-choice forms of the This I Believe Test, which was described with some detail in the first part of this paper. Harvey has delineated a number of distinct components in the individual's belief and value systems that can be assessed by the instruments, the TIB and CST Inventories. These measures include: Divine Fate Control (DFC); Need For Structure Order (NSO); Need to Help People (NHP); Need For People, Sociability (NFP); Interpersonal Aggression (IA); Anomie; and Moral Integration (MA). Table III presents the results of the mean scores of the Institute participants and the control group on these measures of the Conceptual Systems Tests.

TABLE III -- Mean Scores of Subjects on Components of the CST

Measure	DFC	NSO	NHP	NFP	IA	ANomic	MA
WM Institute Participants Session I N = 33	3.53	4.06	4.62	4.24	2.60	2.84	3.76
Session II N = 31	3.24	3.38	4.25	4.28	2.62	3.10	3.80
Control Group Session I N = 34	3.29	3.97	4.65	4.26	2.94	3.04	3.49
Session II N = 27	3.63	3.75	4.29	4.37	3.08	3.21	3.82

Discussion

It was the purpose of this external evaluation of the Worldmindedness Institute to develop objective techniques and criteria for assessing the effectiveness of the Institute's program and training upon the values, beliefs and practices of the participants. For too long, programs in teacher training have relied upon subjective measures, the rhetoric of praise and accolades, the "everybody-said-it-was-wonderful" verbalizations to prove the meaningfulness and success of the program or project.

Although the results of the batteries of inventories administered to the Worldmindedness Institute participants did not dramatically demonstrate an overwhelming effectiveness, we feel the assessment did demonstrate that the Institute program stimulated participants to question and evaluate their beliefs and values, as well as their educational practices. Further, the unique design and the significance of this research study to evaluate the program of a teacher training institute in the area of values and valuing, has important implications. First of all, to attempt an assessment of the individual's beliefs and values system, to assess components of personality, requires a high degree of social scientific expertise. The Worldmindedness Institute participants as a group varied widely from the control group of graduate students even in the initial session of the assessment of beliefs and values, indicating the diversity between groups of people. Next, the degree of change from Session I testing to Session II testing was much greater with the Institute participants than with the control group, indicating that the Institute experiences (the training session) did make a difference in the beliefs and values of the participants.

Thirdly, it is to be stressed that attempts to change the value systems and belief structures of adults, particularly in the brief time span of seven weeks, is a tremendously difficult task. That the World-mindedness Institute participants test scores revealed numerous shifts and changes in attitudes and values indicates that the experiences and activities of the Institute must have been highly significant to those involved.

References

Catherine Felknor and O. J. Harvey, Cognitive determinants of concept formation and attainment. Technical Report 710-10 Contract Nonr 1147(07), University of Colorado, 1963.

O. J. Harvey, Cognitive determinants of role playing. Technical Report No. 3, Contract Nonr 1147)07), University of Colorado, 1963.

O. J. Harvey. Some cognitive determinants of influencibility, Sociometry, 1964, 27, 208-221.

O. J. Harvey. Some situational and cognitive determinants of dissonance resolution. I. pers. soc. Psychol., 1965, 1, 349-355.

O. J. Harvey. System structure, flexibility and creativity. In O. J. Harvey (edit.). Experience and Adaptability. New York: Springer Press, 1966. (In press).

O. J. Harvey, D. E. Hunt & H. M. Schroder. Conceptual Systems and Personality Organization. New York: Wiley, 1961.

O. J. Harvey and J. A. Kline. Some situational and cognitive determinants of role playing: a replication and an extension. Technical Report No. 15, Contract Nonr 1147(07). University of Colorado, 1965.

O. J. Harvey, B. J. White, Misha Prather, R. D. Alter & J. K. Hoffmeister. Teacher personality and classroom atmosphere. Technical Report No. 1, Contract OEO-517, University of Colorado, 1965.

O. J. Harvey, R. S. Wyer, Jr. & J. E. Hautaluoma. Some cognitive and affective determinants of differentiation and integration. Technical Report No. 8, Contract Nonr 1147(07), University of Colorado, 1963.

J. K. Hoffmeister. Some personality determinants of certainty of beliefs and probability of change. Unpublished manuscript, University of Colorado, 1965.

H. A. Tiemann. Concreteness-abstractness and reaction to authority. M. A. Thesis, University of Colorado, 1965.

R. Ware & O. J. Harvey. A cognitive determinant of impression formation. Technical Report No. 17, Contract Nonr 1147(07), University of Colorado, 1965.

B. J. White & O. J. Harvey. Effects of personality and own stand on judgment and production of statements about a central issue. I. exp. soc. Psychol., 1965 (in press).

B. J. White, C. Coates & O. J. Harvey, "Personality and the Belief Gap in Teachers," (to be published) 1969.