Teachers in three California public schools were educated in the use of values clarification. Their experimental class groups were matched with other sixth-grade groups in the same schools. The teachers used selected value clarifying strategies for three months in their regular classes, adapting them as necessary to the health education content area. No changes in the health education curriculum were made, so that applicability of values clarification to health education could be explored in a range of content areas, which included mental health, safety and first aid, preparation for disaster, and nutrition. Evaluation was achieved through three approaches: (a) teacher assessment of success of value clarifying strategies by recording adaptations and use of strategies; (b) the random selection of students for interviews to determine their use of the steps in the valuing process in relation to given problem situations; and (c) administration of pre- and post-tests designed to determine value clarity. The findings indicate that teachers react enthusiastically to the use of this teaching methodology, even to the extent of using the strategies in other areas of the curriculum and in individual counseling. The students who initially have unclear values demonstrate the greatest change in value clarity following values clarification emphasis. (Author/JA)
THE APPLICABILITY OF VALUE CLARIFYING STRATEGIES IN HEALTH EDUCATION AT THE SIXTH GRADE LEVEL

by

Joyce W. Hopp, Ph.D., M.P.H.
Assistant Professor, Health Education

David Abbey, Ph.D.
Assistant Professor, Biostatistics and Epidemiology

School of Health
Loma Linda University
Loma Linda, California

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Health behavior change is one of the prime objectives of health education. Individuals involved in health education are continually searching for more effective means of influencing behavior change. Research in the past twenty years appears to indicate that behavior change is related to the values a person holds. Thus, the area of values clarification is of great interest to health educators today.

Sixth grade students already have an established pattern of health behavior, and are continuously involved in decision-making relative to that behavior. The use of value clarifying strategies appears to offer promise in assisting a student in decision-making and behavior change.

The purpose of this study was to determine the applicability of value clarifying strategies as a method of teaching health education at the sixth grade level. The study was further designed to develop, modify and evaluate selected value-clarifying strategies. The sixth grade level was chosen for this study for the following reasons:

(a) sixth graders in the educational system common to the United States are completing their elementary school career, and facing a new experience in another school setting. This frequently calls for more individual decision making on the part of the student, without as much parental or teacher influence;

(b) sixth graders are approaching their most rapid period of value growth; according to Raths et al (1:223), the period of rapid growth in values is between the ages of ten and sixteen, and
(c) Research by Sidney Simon indicates that elementary teachers are more effective in the use of value clarifying strategies than their high school colleagues (1:207).

The hypothesis chosen for the study was that value clarifying strategies could be applied in health education at a selected grade level in the elementary school to increase the student's utilization of the steps in the valuing process, with a consequent higher level of awareness of the values he held in health.

The study was built on an acceptance of the theoretical model developed by Louis Raths and associates, in which they define the process of valuing as the collective result of the following seven sub-processes (6:19):

**Prizing one's beliefs and behaviors**
1. prizing and cherishing
2. publicly affirming, when appropriate

**Choosing one's beliefs and behaviors**
3. choosing from alternatives
4. choosing after consideration of consequences
5. choosing freely

**Acting on one's beliefs**
6. acting
7. acting with a pattern, consistency and repetition

Prior to the beginning of this study, values clarification had been applied in a rather limited way to school health education. Primarily, it had been in the two conceptual areas of family life education, and drug abuse education. The investigator felt there was room for a much broader application, that values clarification could prove effective in all the conceptual areas identified by the School Health Education Study in 1963 (2:20). Thus, no specific selection of health content was made, but the regular course content as taught in the sixth grade served for the purpose of this study.
Secondly, methodology in the area of health education has not always lent itself to evaluation. New ways of teaching health education are constantly being introduced, but their effectiveness may be open to question. Evaluation of values clarification, while this approach appears to offer much promise in the areas of health education, has remained largely subjective.

Thus, the significance of this study lay in two areas, that of an endeavor for greater objectivity in measuring the results of values clarification, and the application of values clarification to a wider range of health education conceptual areas.

**Selection of Subjects, Schools and Teachers**

The San Bernardino (California) Unified School District was selected for the purposes of this study because its curricular offerings included a well-defined emphasis in health education. All sixth grade students in the schools selected for the study were included in the study group.

Schools were selected from the school district on the basis of the following criteria:

1. two sixth grades taught in the same school, with random assignment of students to both classrooms;
2. no team teaching, so that each teacher taught only in his own classroom;
3. no combination with any other grade;
4. availability of teachers willing to participate in the study.

The last criterion was especially important, for previous researchers had indicated that the classroom climate was critical to values clarification. No school or teacher was selected without this voluntary participation.
A total of three schools were selected, with six teachers involved as experiment and control participants. An experimental teacher and classroom were matched with a control teacher and classroom in each of the three schools.

Subjects for the case-study type of interviewing at the close of the study were selected randomly from the experimental classes. Two students from each room were selected, for a total of six students.

Pre-and Post-Test

The literature search revealed no instrument available for the purpose of measuring a change in value clarity in elementary school students. In fact, Raths, Harmin, and Simon stated that they doubted such a test could be constructed (1:221):

To us, values are a part of a person's behavior pattern and it seems extremely difficult to obtain a measure of such attributes on a paper-and-pencil test. A pencil-and-paper instrument validated on behavior would, of course, be at least as useful as it would be difficult to perfect; the problem of determining the outcome of any approach to value development rests upon the adequacy of measurement.

Yet, six years after this doubting statement, Simon, Kirschenbaum and Hartwell called for the development of just such a test, when they were posing questions which needed answers from research (5).

#15 Develop a paper and pencil test to examine a student's value clarity. 7 criteria buried in test items.

For the purposes of this study, the investigator proceeded to develop a paper-and-pencil test, incorporating the seven steps in the valuing process, using situations taken from the health education content at the sixth grade level. The test was modeled after the Seiders-Sanford instrument (3), with short statements or ques-
tions followed by four multiple-choice items.

Scoring was based on the Likert scale (4:24) with assigned weights given for each of the four possible choices in each statement. Each statement had a possible score of 4; 1 was the lowest score available; 4 the greatest. Weights were assigned by judges on the basis of the use of the steps in the valuing process indicated by the choice made. Twenty-six test items were finally chosen by the judges for inclusion in the instrument. Thus a student with a high score in the possible 104 points could be said to be using more of the steps in the valuing process than a student with a low score.

Reliability was determined by the split-half method (4:17). This method estimates reliability by treating each of two or more parts of the attitude scale as a separate scale. The Spearman-Brown prophecy formula is applied to the obtained correlation to estimate the reliability of the total scale. It provides a measure of internal consistency of the items composing the scale. The only type of validity sought for the instrument was face validity: did it appear to be measuring what it purported to measure? A panel of judges familiar with both health education and values clarification was chosen; these judges selected items for inclusion, as well as weighting the four choice items.

The content areas chosen were made from the textbook currently used in California public schools, the teachers indicating which areas they intended to teach in the fall of 1973. These were (a) mental health; (b) safety and first aid; (c) preparation for
disaster, and (d) nutrition.

The same instrument was used for both pre- and post-test. Pre-
tests were done in September, 1973; post-tests in January, 1974.
The tests were administered by the investigator, with every effort
made to secure complete anonymity for the student, in order to
gain as true a picture of what his actions would really be as
possible. Questions were read aloud, so as not to penalize
students with low reading ability.

**Values Clarification Emphasis**

Intervention, in the form of the use of value clarifying
strategies by the teachers in their regular health education
classes, occurred between October 1, 1973, and January 1, 1974,
for the experimental group. No information on values clarifica-
tion was given to the control class teachers. Experimental class
teachers were given the book *Values and Teaching* (1), in July,
1973. A one-day session on the use of value-clarifying strategies
was conducted by the investigator in August for these same teachers.
The teachers at that time selected nineteen strategies from the
volume *Values Clarification* (6) that they were willing to try in
their health education classes. Each teacher was encouraged to
adapt the strategies as necessary to fit both his grade level and
the health education content. Prior to the opening of school,
each teacher was provided with a portfolio of the strategies
selected, in which he was to keep an account of the way in which
the strategy was used, the student response or an actual recording
of the student remarks.
Student Interviews

In addition to the post-test as a means of evaluation, two students were interviewed from each experimental room in an attempt to determine their use of the steps in the valuing process when confronted with a problem situation. The interview utilized a situation in one of the areas of health education. The results of these interviews were taped, transcribed and submitted to the same judges for analysis.

Findings

Fourteen of the strategies were actually put to use by the teachers. The most popular proved to be:

- Values Voting
- Rank Order
- I Wonder Statements
- Unfinished Sentences

One teacher found the Public Interview most successful, with students asking for it to be repeated. All of the teachers found that strategies involving writing were more difficult to use, although the written papers were most interesting and revealing to the teachers. Some of these were shared with the investigator, but many were considered too private by the students for sharing.

The Three Characters strategy resulted in a fashion show during Black History Week. The sister of one of the students, a clerk-model in a big department store in Los Angeles, responded to a request to model for the students, whipping together a remarkable program for the class.

One of the teachers reported he felt more at ease with the
strategies if he used them with small groups, rather than the entire class at one time. He often used role-playing as a setting for values clarification. This same teacher also indicated he worked with small groups of students whom he knew to have special problems in health, such as smoking. Using values clarification, he attempted to assist them with a definition of their own values.

All three teachers indicated that the values clarification approach should not be limited to the health education curriculum. Indeed, they admitted that it had spilled over into other areas of their teaching, and would continue to do so.

The interviews with randomly selected students from the experimental classrooms proved a disappointment in some ways. Two of the students were very shy, and virtually refused to participate in the interview. It was obvious from the analysis of the interviews that the students at this grade level still identify very strongly with their parents' values ("If my mother said not to, I wouldn't"). However, in many instances it was possible to identify the use of several of the steps in the valuing process being utilized by the interviewees.

A general linear hypothesis was conducted to determine whether or not there was a significant difference in change in score between experimental and control groups, when the effects of sex, race, school, interaction between group and school, I.Q., and initial or prescore were adjusted. This hypothesis revealed significant results in the area of sex, but not in that of I.Q., race, or age. This would tend to indicate that there is little difference in the
applicability of values clarification in the standard classroom. The other area of significance appeared in the effect of the initial pre-test score. Here a negative coefficient (-.3657) indicated that the lower a student's pre-test score, the greater his change in score tended to be. The F statistic for this effect was 21.40, highly significant, far beyond the 1 percent level of significance.

The instrument, as developed for use in this study, appears to offer promise as a means of a paper-and-pencil test to determine clarity of values. Its predictive value lies in the fact that it can assist in ascertaining which students are using fewer of the steps in the valuing process, as related to health education, and thus identify those for whom the values clarification methodology will be most meaningful. A teacher could also use this type of instrument as a baseline of information on clarity of values, then as a post-test to determine the effectiveness of the use of values clarification in the classroom.

The validity of the instrument relies wholly upon the intent of the student: in a given situation, will he do what he says he will do? A stronger basis of validity would be that of support by observation of behavior. However, such observation is limited by the hours a student is available for observation, by the subjective bias of the observer, and by the time-consuming nature of this type of observation.

The reliability of the test, as determined by the split-half method comparing total scores for first and last halves, demonstrated
that there was a remarkable degree of reliability in the instrument. The correlation coefficients for the scores on matched questions on the split halves of the test are shown in Table 1. The correlation coefficients were computed for both the pre-tests and the post-tests. It can be seen that the correlation in total scores totaled over all questions in each half on both the pre- and post-tests between the two halves is highly significant. (See Table 1, page 11)

Several matched pairs of questions should be eliminated, however, from future copies of this instrument because of the low degree of reliability. Since the bulk of these lie in the area of mental health, it is apparent that further development of questions in this area must be done.

Conclusions

The response of the teachers involved in the experimental design indicates that they felt value clarifying strategies were indeed applicable in health education. They demonstrated the use of these strategies in their classroom teaching, adapting the strategies to fit health education content areas, and indicated that they felt many of their students achieved a heightened awareness of the values they held. In some instances, the teachers actually noted a greatered consonance of belief and behavior on the part of their students.

On the basis of the pre- and post-test results, the investigator accepts the hypothesis as valid, primarily with those students who indicate initially the use of fewer of the steps in
Reliability of test items, according to matched questions taken from first and last halves of the pre-test.

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Reliability of test items, according to matched questions taken from first and last halves of the post-test.

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**TABLE 1**

CORRELATION COEFFICIENTS "r" TO DETERMINE RELIABILITY OF SPLIT-HALVES, PRE-TEST AND POST-TEST. ELEVEN OF THE QUESTIONS IN THE FIRST HALF OF THE TEST WERE MATCHED WITH ELEVEN IN THE LAST HALF. CORRELATION COEFFICIENTS WERE ALSO DETERMINED FOR TOTAL SCORE ON FIRST HALF AS COMPARED TO TOTAL SCORE ON THE LAST HALF OF THE TEST.
the valuing process.

The investigator further concludes that a paper-and-pencil test can be used as objective means of evaluating the clarity of values held in relation to health. No such instrument had been developed prior to this study. The instrument utilized for this study can serve as a model for the development of similar evaluative tools for values clarification, both in other areas of health education, and of the curriculum. The investigator is reminded, through the results of this study, of the value of pre- and post-testing to determine the effectiveness of a particular methodology in education. It proved the most effective tool in assessing the outcomes of this study.
Bibliography


Copies of the instrument used in this study may be obtained by contacting Joyce W. Hopp, Ph.D., at Loma Linda University School of Health, Loma Linda, California.
Instrument used in THE APPLICABILITY OF VALUE CLARIFYING STRATEGIES IN HEALTH EDUCATION AT THE EIGHTH GRADE LEVEL, a doctoral dissertation by Norma Joyce Hopp, Ph.D.

CHOICES IN HEALTH

INSTRUCTIONS:
Read each question carefully. Choose one answer for each question. Mark your answer with a check mark (  ). Please put down the answer you would choose, not an answer which you think will please the teacher. There are no grades in this test!

Tests Steps

1. If I could learn ways to control my temper, I would
   1 (a) not bother to use them, as it isn't important
   4 (b) try to use them whenever I needed to
   3 (c) use them most of the time when something upset me
   2 (d) be pleased with myself and use them whenever I needed to

2. At home, I
   4 (a) like to be known as a person with good manners, so I ask permission to use someone else’s things
   1 (b) use anyone's things I want to, without asking permission
   2 (c) usually figure anything at home is okay for me to use anytime I want to
   3 (d) ask permission to use someone else’s things if I think about it

3. When I disagree with my parents, I
   1 (a) shut up and leave the room
   4 (b) try to tell them why I think as I do
   2 (c) do what they want, but don't change my mind
   3 (d) quarrel with them

4. When I feel strongly about something, I
   1 (a) rarely say anything about it
   3 (b) discuss it with my friends
   2 (c) speak about it when I am asked
   4 (d) speak about it whenever the subject comes up

5. If foods from the Basic Four Food Groups are available, I
   4 (a) choose them because I know they are what my body needs
   2 (b) eat them because my mother fixes them
1. (c) eat anything I want and don't worry about it  
3. (d) choose them because I learned about them in class

6. I choose foods to eat mostly because  
1. (a) I like their taste  
3. (b) I think about what they will do for me  
2. (c) they are all that is available  
4. (d) a good choice of food can make me healthier

7. If I learned that some of the snacks I eat hurt my body, I would  
3. (a) quit eating the harmful ones  
2. (b) cut down on the snacks I eat  
4. (c) quit, and tell my friends to quit eating such junk  
1. (d) pay no attention to the information

8. If there is some orange juice, I drink it whether I like it or not because  
4. (a) it is one of the best sources of Vitamin C  
1. (b) my mother makes me  
2. (c) the book says it is good for you  
3. (d) I think it is good for my health

9. When I think other kids get more things than I do, I usually  
4. (a) count what I am glad I have  
3. (b) stop to think if it is really true  
1. (c) complain to the teacher or my parents  
2. (d) tell everyone it's not fair

10. When we are lining up for a special treat, I  
2. (a) push to be one of the first ones  
1. (b) run to be at the head of the line, because I like to be first  
4. (c) like to be known as a person thoughtful of others, and I get in line carefully  
3. (d) remember it's nice to be courteous and not push my way in

11. When I get a small cut, I  
3. (a) stick a Bandaid on it  
1. (b) usually pay no attention to it  
4. (c) realize it could be infected so wash it out and put on a Bandaid  
2. (d) wipe off the blood so it won't look so messy

12. When I tell my friends I will do something with them, I  
2. (a) am usually late because something always comes up  
1. (b) frequently forget about it  
3. (c) I rarely forget about it  
4. (d) I do it if I can, because I like them to know they can count on me
13. When I do something well, I
   2 (a) never say anything about it
   4 (b) am pleased and try to do other things as well
   3 (c) I feel good all over
   1 (d) I bore everyone telling them about it

14. When I want something very much, most of the time I
   2 (a) try to figure out a way to get it
   1 (b) pester my folks until I get it
   3 (c) try to accept the fact I can't always get what I want
   4 (d) try to stop and think if it would be good for me

15. If I get upset about something I
   2 (a) explore all the possible ways of handling the problem
   4 (b) can think of only one way out
   1 (c) try to stop thinking about it
   2 (d) ask a friend to solve it for me

16. I try to eat healthy foods because
   3 (a) I usually do what I found out is good for me
   4 (b) I want to be healthy
   1 (c) the teacher told me to
   2 (d) you're supposed to

17. If I found out that candy was not good for snacks, I would
   3-7 (a) eat it anyway because I like it
   1 (b) eat it less often because I want to be healthy
   4 (c) substitute other foods for snacks because I want
   2 (d) eat it anyway because I am not that interested
       in my health

18. If I learned that eating a good breakfast would give me
   energy to keep going all morning, I
   6,7 (a) would try to eat a good breakfast more often
   because it is good for me
   1 (b) wouldn't eat breakfast because it isn't that important
   2 (c) would probably think the information was correct,
       but eat little or no breakfast anyway
   4 (d) would try to eat a good breakfast every day because
       I need energy to do lots of things

19. When someone shoves me, I
   6 (a) shove right back; it's the only way you can get
       along in this school
   3 (b) try to keep from shoving because I want to treat
       others the way I want to be treated
   1 (c) shove back harder without thinking
   4 (d) try to keep from shoving because I want to be known
       as a polite and thoughtful person
20. When I feel lonely, I
   2 (a) go somewhere alone and cry
   4 (b) try to figure out something to do about it
   3 (c) know everyone feels this way once in awhile
   1 (d) sit around feeling sorry for myself

21. I study First Aid because
   1 (a) it's in the textbook and I have to study it
   2 (b) it's part of the health class at school
   4 (c) I'd feel good if I knew what to do when someone
       got hurt
   3 (d) I need to know what to do in an emergency

22. I try to do what I have promised because
   4 (a) I want people to know I'm dependable
   1 (b) it's the thing to do
   2 (c) others won't trust me if I fail
   3 (d) I like to be someone people can count on

23. I say "please" and "thank you" most of the time because
   3 (a) it makes me feel good to be polite
   2 (b) the teacher or my parents insist upon it
   1 (c) everybody expects you to say such things
   4 (d) I have thought about it and I like to be known
       as a polite person

24. When I see a kid at school who is too fat, I
   4 (a) try to encourage him to see his doctor and do
       something about it
   1 (b) think he looks awful, and make fun of him
   2 (c) pay no attention because I really don't
       care
   3 (d) realize he has a problem and wonder if I could
       help him any

25. If I learned what to do after a big disaster, like an
    earthquake that destroyed part of my city, I would
    1 (a) forget it, because I'll never be in an earth-
        quake anyway
    3 (b) try to remember it, because I'd like to know what
        to do to help myself and my family
    4 (c) practice it ahead of time, so I could help myself
        and my family if there is an earthquake
    2 (d) forget it, because it isn't important to know what
        to do in an earthquake

26. If I learned that carbohydrates gave me energy, I would
    4 (a) want to learn what were good carbohydrate foods
        so I could eat them
    3 (b) eat them so I could have more energy
    1 (c) probably think it was too much trouble to bother
        about them
    2 (d) eat them only because my parents said to