Unexpected Findings in an Alternative High School: New Implications for Values Education

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Abstract

It has been well documented that today's adolescents are at great risk for health-compromising behaviors. Researchers have identified values orientation and values education as important change agents in reducing these "risky" behaviors. It has also been suggested that an individual's values orientation that is focused on the future and in a societal view of life is associated with protective and resilience factors with fewer health-compromising behaviors. This study examined adolescents' values orientation and the occurrence of health-compromising behaviors. Health-compromising behaviors for this study included substance abuse, unsafe sexual practices, violence, and sensation-seeking activities. Results indicated that participants were not at risk for health-compromising behaviors related to a present, self-interest value orientation. Contrary to conventional wisdom about the health-compromising behaviors of students determined to be at "higher risk," the students in this sample did not exhibit the traditional high-risk behaviors or the value orientations. Health-compromising behaviors of adolescents continue to be a priority for health educators, school administrators, as well as parents and other community members. It is imperative that further research explore the relationship between adolescent participation in "risky" behavior as well as the protective factors related to healthier choices.

Keywords: Risky Behaviors, Adolescents, Values, and Alternative High School

Introduction
Values Orientation
Since the early 20th century, the intentional teaching of morals and values has been popular with the American public (Kirschenbaum, 2000). Schools are often utilized as a vehicle to teach the values of their community in the form of programs labeled character education. A vast majority of parents surveyed expressed a desire for the school systems to incorporate values education into their children's curriculum (Lickona, 1991). Character Counts is one example of a contemporary value-based curriculum that teaches children and adolescents about honesty, respect, and other personal characteristics through role play, discussions, guest speakers, and specific lesson plans that incorporate the teaching of value-laden decision

making skills. Wynn and Ryan (1993) suggested that character and values education is an "educational responsibility," and an effective method to prevent violent and antisocial behaviors among youth. Research indicates that these value-based curricula decrease school dropout rates, acts of violence, and other anti-social behaviors in some adolescents (Adler & Foster, 1997; Yuan & Shen, 1998).

Rokeach (1979) described values systems as a core concept in understanding and predicting human behavior within a society. Values hierarchies or orientations are described as the differences and similarities of an individual's specific attitudes and beliefs toward certain behaviors (McWhirter, McWhirter, McWhirter, & McWhirter 1998; Rokeach & Regan, 1980).

Values have also been defined as a culture's opinions, policies, or actions. Values clarifications or orientations are described as methods of understanding that an individual makes decisions or choices based on the values they hold. Value differences have been shown to predict important attitudes relating to social, environmental, and behavioral attitudes. Rath, Merrill, and Sidney (1978) were the "founders" of the values clarification model and their model includes three components: 1) knowing one's beliefs 2) choosing the beliefs, and 3) carrying out actions based on these values. Values clarifications or orientations can better help individuals understand themselves, their choices, and their futures. Nagel, Mayton, and Walner (1995) suggest that through an increased awareness of their own values orientation, adolescents can develop the power to change those values. Thusly, if adolescents can change their values orientation, they can also reduce or eliminate their health-compromising behaviors.

There is literature to support the importance of programs that focus on skill building, coping skills, and reducing health-compromising behaviors. Understanding values orientation is often utilized as a strategy to promote certain values or constructs in an effort to prevent health-compromising behaviors. Nagel et al. (1995) used this framework in a study reporting drug abuse prevention using the following assumptions about value orientations: values can guide or direct one's behaviors, an increase in one's awareness of personal values increases the likelihood that values can change, and lastly, one must want to change their values or behaviors in order for them to change.

Values orientation and clarification can be infused into programs that focus on decision-making and resistance skills in peer relationships. The most utilized values education programs utilize role playing as well as media images and vignettes that assist the students to better understand their own values in terms of substance abuse and other health-compromising behaviors (Adler & Foster, 1997; Nagel et al., 1995; Rokeach & Regan, 1980). The current study examined both values orientation and health-compromising behaviors among adolescents at an alternative high school in a rural New Mexican community.

Health-Compromising Behaviors of Adolescents

Health-compromising behaviors are defined as behaviors which an individual elects to engage in that increases the risk of a negative consequence and/or that are potentially dangerous to his or her health and well-being (McWhirter et al., 1998; Trad, 1993). The current study examined four specific health-compromising behaviors that were indicated as the most prevalent in the sample population; 1) violent behaviors, 2) sensation-seeking behaviors, 3) substance abuse, and 4) unsafe sexual practices.

Johnson, O'Malley, and Bachman (1995) indicated that approximately 80-85% of high school students have used alcohol. In Quay County, New Mexico, a survey of 9th through 12th grade students determined that 76% of 9th and 10th graders and 92% of 11th and 12th grade students have used alcohol (Tri-Ethnic Center for Prevention Research, 1997). The researchers also reported that 39% of 9th and 10th grade students and 57% of 11th and 12th graders have used marijuana. Based on this survey, the prevalence of substance use is similar, and in some cases, higher than the national averages for 12th grade students. Other substances used by high school students in Quay County were cigarettes, inhalants, stimulants, cocaine, and hallucinogens.

The four main health-compromising categories (substance abuse, unsafe sexual practices, violence, and sensation-seeking behaviors) have been linked to one's risk factors, attitudes, and beliefs. Research has indicated that values orientation can be an important predictor of attitudes and behaviors (Trad, 1993). It has been demonstrated that individuals who have a future, societal-based values orientation tend to have the ability to utilize positive coping skills when confronted with health-compromising situations (Dubow, Schmidt, McBride, Edwards, & Mark 1993; Trad, 1993).

There is a lack of prospective research examining the relationship of value orientations and health-compromising behaviors among adolescents. Given that values orientations have been used to predict certain behaviors or attitudes in non-risk taking situations, it may also be useful for educators, parents, and communities to understand the value orientations of at-risk adolescents. The understanding of values orientations may help to estimate the likelihood of an adolescent participating in certain risky behaviors. The purpose of this retrospective study was to investigate the differences between value orientations and health-compromising behaviors of high-risk adolescents.

Methodology
Setting and Participants
Data were collected at an alternative high school in a rural community in New Mexico. The community population is 6,694 and is located in Quay County with a population of 10,863. (New Mexico Vital Records and Health Statistics, 1997). Students attending the alternative high school were doing so on their own volition, by recommendation from administration, or by their parent or guardian's urging.

Procedures and Instrumentation
A written questionnaire that combined the Youth Risk Behavior Survey (YRBS) and the Rokeach Values Survey (RVS) was administered to the students during the first class period of a school day. The participants were informed that the information they provided was confidential.

The instrument used to survey the participants included six demographic questions, a modified YRBS, and the RVS. The YRBS was developed by the Center for Disease Control, and has been used biennially since 1990 to measure health-compromising behaviors of high-school students across the United States (Brener, Collins, Kann, Warren, & Williams, 1995). The YRBS was modified for this particular population and queried the participants about sensation-seeking, substance abuse, unsafe sexual practices, and violent behaviors.

The original YRBS survey has been widely used among adolescent populations across the United States in both rural and urban settings. It has been administered in many different ethnic groups, both genders, and various adolescent age groupings. The YRBS is best used with participants above the 7th grade. The CDC reports that the questionnaire has well-established reliability scores, as the test-retest reliability scores after a 12-month period are .73 for adolescent populations (CDC, 1998). The validity of the YRBS is still being identified (Brener et al., 1995). Brener et al. (1995) reported that with the difficulty of measuring validity in the field of health behaviors and setting "gold standards," the validity measures are ongoing. The modified YRBS included 22 questions to determine the prevalence of specific risk-behaviors.

All of the questions contained multiple response categories for each health-compromising behavior. These multiple response categories were collapsed and reported using a nominal scale with values of 0-8, with a 0 representing the least risk and an 8 representing the highest risk. Each of the categories and the overall instrument was given a total score between 0 and 106. The classifications of 'low,' 'medium,' or 'high' were then given based on the participants' overall risk score. A participant would be classified as low, medium, or high risk in each of the four individual health-compromising behaviors. They were also given an overall classification of low, medium, or high risk based on combined behaviors.

The Rokeach Value Survey (RVS) is composed of two sets of 18 alphabetically arranged values. There are 18 instrumental values and 18 terminal values. The 18 terminal, or end-state values, were assessed in this study. The RVS had the participants rank the 18 terminal values that reflected the importance of selected life principles to the participant. The highest value was assigned a '1,' and the lowest value was assigned an '18.' The ranking method assumes that it is not the absolute presence or absence of a value that is of interest or importance, but that the relative ordering of the values is what is important. Each value was printed on the right

side of the page, and the participants were asked to study the list and select the one value which was the most important to them, the value which was second most important, and so on until they had given all values a number. The value that was least important to them should have had the number 18 assigned to it.

The RVS has been used in over 300 studies, varying in ethnicity, age, and other demographics (Diessner & Mayton, 1993). The RVS has been utilized for participants ranging in ages from 11 to 90 years (Rokeach, 1973). The reliability of the RVS has been established (Rokeach & Regan, 1980; Yuan and Shen, 1998). The test-retest reliabilities for terminal values range from .51 to .88, with an average of .65. All 18 terminal values have been tested as one unit and Rokeach (1973) reported a test-retest reliability of .69 after a 14 to 16-month interval between tests. Rokeach (1973) reported that with shorter time intervals between testing, the reliability increases. The validity of the RVS has been measured in terms of the specific value rankings. It has been correlated and found to be related to individuals' attitudes, behaviors, and personalities (Ball-Rokeach, 1973; Rokeach, 1979).

Research Approach and Statistical Analysis

The present study used descriptive and inferential statistical methods. The threats to an inferential design are related to the validity and reliability of the instruments, the participants' understanding of the instruments, and how the participants chose to answer the items. A Cronbach's alpha was utilized to determine internal consistency and reliability of the YRBS.

one-way analysis of variance (ANOVA) was utilized to determine whether there was a significant difference between the values orientation and the overall risk classification of the health-compromising behaviors. The selected probability level used was .05.

Results
Participant Demographics

There were forty total participants involved in the study, ranging in age from 15 to 20 years of age. A response rate of 81.6% was obtained. Participation in the study's sample population was made up of 50% males and 50% females. The male mean age was 16.9 years with a standard deviation of 1.45 years and the females mean age was 16.8 years with a standard deviation of 1.30 years. Nearly three-fourths of the participants (70%) claimed "Hispanic" or "Latino" as their ethnic background, while "White" participants accounted for 20% of the population. The remaining participants reported "American Indian" or "Alaska Native" (5%) and "Other" (5%) (see Table 1).

Values Orientation Descriptive Profile

The Rokeach Values Survey (RVS) was used to determine the values orientations of the participants. The participants ranked their terminal values from one to eighteen with one representing the idea or concept that they valued the most and eighteen the least valued concept. The values were classified into the three orientation categories based on previous research by Mayton and Nagel (1990) and are presented in Table 2. Each participant was assigned an orientation classification of either a future, present, or neutral values orientation.

Table 1
Demographic Profile

Variable	n	Percent
Gender		
Male	20	50
Female	20	50
Age (years)		
15	8	20
16	8	20

Variable	n	Percent
17	11	27.5
18	8	20
19	4	10
20	1	2.5
Ethnicity		
American Indian or Alaska Native	2	5
Hispanic or Latino	28	70
Non Hispanic white	8	20
Other	2	5
Grade in School		
9th	7	17.5
10th	14	35
11th	11	27.5
12th	8	20
With Whom Participants Live		
1 or more parents	26	65
1 or more guardians	8	20
1 or more friends	4	10
Other	2	5
Income Level		
Under $4000	5	12.5
$4,001-8,000	5	12.5
$8,001-12,000	6	15
$12,001-15,000	9	22.5
$15,001-18,000	4	10
Over $18,000	11	27.5

Table 2
Key for Values and the Related Orientations

Values Orientation	Terminal Values
Present, Self-Interest	Comfortable life Exciting life Inner harmony Pleasure Self-respect Social-recognition
Future, Societal-based	Equality Family security Freedom Peaceful world Health National security
Neutral	Sense of accomplishment A world of beauty Mature love Salvation True friendship Wisdom

Of the forty participants who completed the RVS section of the survey, 17 participants (42.5%) were determined to have a present, self-interest values orientation, 15 participants (37.5%) were determined to have a future, societal-based values orientation, and 8 participants (20%) were determined to possess a neutral orientation. These frequencies and cross-tabulations are presented in Tables 3 and 4.

Table 3
Descriptive Data for Values Orientation

Variables	Frequency	%
Values Orientation		
Present, Self-Interest	15	35.7
Future, Societal-Based	17	42.5
Neutral	8	20

Table 4
Descriptive Data for Values Orientation by Gender

Gender	Present n (%)	Future n (%)	Neutral n (%)	Total n
Male	7(35)	9(45)	4(20)	20
Female	8(40)	8(40)	4(20)	20
Total	15	17	8	40

Overall Risk Behavior Classification

An analysis of the degree of risk was determined by the modified Youth Risk Behavior Survey (YRBS). All participants completed all 22 items assessing their health-compromising behaviors. Scores for each of the four health-compromising behavior categories and an overall risk category were calculated as low, medium, or high-risk. This was completed by coding each response with a score of 0 (lowest risk) to 7 (highest risk). Each of the four health-compromising behavior category were labeled as low (lowest 1/3 of total points for the health-compromising behavior), medium (middle 1/3 of total points), or high risk (top 1/3 of total points) based on the values given to the categories. The range of the possible values was 0 to 106 for an overall risk score. An overall score was determined for each participant by summing all 22 items. If a participant total score was 1-35 they were classified as low risk, if they scored between 36-71, they were identified at medium risk, and if their score was 72-106 they were classified as high risk.

For risk classification within the four specific health-compromising behavior categories, the following results emerged. Sixty-two percent (n=25) of the participants were rated as 'low' risk participants, and 37.5% (n=15) were 'medium' risk. The violence category consisted of 85% (n=34) 'low' risk participants and 15% (n=6) were 'medium' risk. The substance abuse category included 85% (n=34) 'low' risk and 15% (n=6) 'medium' risk. Lastly, the unsafe sexual practices category was comprised of 60% (n=24) 'low' risk participants and 40% (n=16) 'medium' risk. No participants were rated as 'high' risk in any of the four health-compromising behavior categories. In the overall risk classification of the forty participants 67.5% (n=27) were classified as 'low' risk and 32.5% (n=13) classified as 'medium' risk. Of the 'low' risk participants, males represented 55% (n=11) and females represented 80% (n=16). The 'medium' risk participants were respectively 45% (n=9) males and 20% (n=4) females (see Tables 5 and 6).

Table 5
Risk Classification for Health Compromising Behaviors

Risk Behavior Category	Risk of Participant		
	Low n (%)	Medium n (%)	High n (%)
Sensation-seeking Behaviors	25(62)	15(37.5)	0(0)
Violent Behaviors	34(85)	6(15)	0(0)
Substance Abuse Behaviors	34(85)	6(15)	0(0)
Unsafe Sexual Practices	24(60)	16(40)	0(0)

Table 6
Overall Risk Category of Participants and Gender Stratification

	Overall Risk	
Risk	n	Percent
Low Risk	27	67.5
Males	11	55.0
Females	16	80.0
Medium Risk	13	32.5
Males	9	45.0
Females	4	20.0
High Risk	0	0

The primary data collected for this study were considered ordinal and nominal data. A one-way ANOVA was utilized to test the differences of the values orientation and health-compromising behaviors among the adolescents. This non-parametric analysis was appropriately utilized as this sample was not randomly selected. The research question from the larger study was as follows:

Will adolescents with a societal, future-based values orientation have reported participating in fewer health-compromising behaviors than those with a present, self-interest-based values orientation?

For the research question a one-way ANOVA was run on the values orientation of all the participants (future, present, and neutral) with the overall risk classification of the health-compromising behaviors (low risk, medium risk, and high risk). There were no significant differences discovered at the .05 probability level. The results of this study indicate that values orientation and health-compromising behaviors need to be further explored in similar populations. The data for the research question that was posed was not found to be significant for this sample, thus indicating that previous literature regarding values orientation and adolescents was not indicative for these rural, alternative high school students.

Discussion
The purpose of this study was to investigate the relationship of values orientation and health-compromising behaviors among adolescents at an alternative high school. Values orientations have been evaluated with adolescents in relation to alcohol, drug, and other substance use (Mayton & Nagel, 1990), indicating the need to further investigate the relationships between values orientation and health-compromising behaviors this population. Rokeach's (1979) work with end state values were used in this study in order to gain a better understanding of how adolescents make decisions about their health. The value-based literature and curricula

have been reported to decrease school dropout rates and other anti-social behaviors in some adolescents (Adler & Foster, 1997; Yuan & Shen, 1998). According to Wynn and Ryan (1993), teaching character or values is an "educational responsibility" and a way to slow or prevent the increase in violent and antisocial behaviors among youth. Thus, given the behavioral risk histories of this population, one would think they would be ideal candidates for a values orientation confrontation intervention. Mayton and Nagel's (1990) research regarding values differences among adolescents and alcohol use was key in developing the research questions and developing the survey format using the Rokeach Values Survey.

Based on the previous literature, however, the results of these adolescents' value orientations was not consistent with what others have hypothesized about 'high'-risk populations. The nature of this study's results may have interesting implications for future research with similar populations.

The research question investigated whether adolescents with a societal, future-based values orientation would report participating in fewer health-compromising behaviors than those with a present, self-interest-based values orientation. The participants who chose future, societal-based orientations were very similar in demographics as well as health-compromising behaviors to those who reported a present, self-interest orientation. Based on the literature, it was hypothesized that the students who have a more present, self-interest orientation would have taken part in more health-compromising behaviors. The students with a present, self-interest orientation participated in no more health-compromising behaviors that the students with a future, societal-based or neutral orientation. It can be inferred that this population's health-compromising behaviors and values were not different from each other at the time of this study.

Several issues need to be considered when interpreting the results of this research. The indicators of health-compromising behaviors and values orientation must be questioned.

Based on the past literature, it seemed reasonable to hypothesize that the students in this alternative high school would have reported taking part in more health-compromising behaviors than students at a traditional high school. The literature also indicated that adolescents tend to have a more present, self-interest orientation when it comes to making decisions and choices regarding themselves (Mayton & Nagel, 1990; Rokeach, 1979; Toler, 1993). It seemed that those taking part in more health-compromising behaviors would more likely have had a present, self-interest values orientation.

This study did not support the previous research and literature. Students attending this alternative high school, according to the data in this study, were not significantly at risk for health-compromising behaviors related to a present, self-interest value orientation. Contrary to conventional knowledge about the health-compromising behaviors of students in alternative schools, the students in this population did not follow the expected high-risk behaviors or the value orientations. The fact that 42.5% of the participants had a future, societal-based orientation and that 37.5% had a present, self- interest orientation is significant information about this population.

Values education has recently been incorporated into many schools and classrooms nationwide. States, communities, and their schools are exerting considerable effort, as well as monies, into these programs to prevent such health-compromising behaviors as violence, alcohol and drug use, and unsafe sexual practices. However, according to the findings of this research, there were no significant relationships or differences between the participants' values orientation and health-compromising behaviors. This is an area of research that deserves further inquiry to determine if these monies, efforts, and time are well spent on values and character education.

Conclusion

Health-compromising behaviors of adolescents will continue to be a priority for health educators, school administrators, as well as

parents and other community members. Therefore, it is important that research further explores the relationships of how and why certain adolescents participate in 'risky' behaviors and how and why other adolescents do not get involved with such health-compromising behaviors. Values education has returned to school curricula and communities and is a concept worthy of research on how it affects student behaviors. The research presented in this article is just one more step toward further expanding and the knowledge-base of values orientation and health-compromising behaviors among adolescents.

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