This study was designed to document the validity of the Teenage Nonviolence Test (TNT). In this study the concurrent validity of the TNT in various ways, the validity of the TNT using known groups, and the discriminant validity of the TNT by evaluating its relationships with other psychological constructs were assessed. The results showed that the TNT is a generally valid measure of nonviolent tendencies for adolescents. Significant relationships between the constructs measured were usually in the predicted directions. (Contains 17 references and 3 tables.) (Author/GCP)
The Teenage Nonviolence Test:
Concurrent and Discriminant Validity

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Abstract

This study was designed to document the validity of the Teenage Nonviolence Test (TNT). In this study we have assessed the concurrent validity of the TNT in various ways, the validity of the TNT using known groups, and the discriminant validity of the TNT by evaluating its relationships with other psychological constructs. The results showed that the TNT is a generally valid measure of nonviolent tendencies for adolescents. Significant relationships between the constructs measured were usually in the predicted directions.
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The Teenage Nonviolence Test:
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Why do adolescents resort to violent means and how can we implement violence prevention programs? Many unfortunate incidents involving teenage violence have raised these questions over the last few years. One of the most recent occurrences that exploded in the media and rocked the semi tranquil waters of the public education system was the killings in Littleton, Colorado. President Clinton may have phrased it best when he commented that the events which took place in Littleton "pierced the soul of America" (Seelye, 1999).

The shootings at Columbine High School in Littleton Colorado is hardly an isolated incident. In 1996 a Moses Lake, WA boy opened fire in a junior high school killing several people. Acts of violence by youths followed in Bethel, AK; Pearl, MS.; West Paducah, KY; Jonesboro, AR; Edinboro, PA; Pomona, CA; Fayetteville, TN; Johnston, RI; Onalaska, WA; St. Charles, MO; Springfield, OR; and Richmond, VA (ABC news, 1999). One month to the day after the Littleton tragedy a shooting spree in Georgia occurred in which six students were injured by a youth. While authorities described this Georgia youth as quite angry, there was nothing in his school records to give any warning for a violent action of this magnitude (Sack, 1999). With 15 instances of violent actions by youth in a mere 3 years it is safe to assume there is a definite danger of history repeating itself.

Other instances of terror occurred after the massacre in Littleton. Were these copycat shootings and threats a mere reaction to children's new enlightenment that they also had access
to guns? It is evident that many teenagers have access to weapons, but don’t use them in destructive ways with their fellow human beings. The problem of youth violence is obviously not as simple as who has access to guns. The question of "why" still exists. In response to these violent incidents the nation's schools are still looking for ways of determining the tendencies for violent and nonviolent behavior in youths. Holleman (1999) reports that schools are using counselors and psychologists in prevention efforts, but with large caseloads it is difficult task to handle.

It is important to realize that most adolescents do not behave violently but in fact are nonviolent most of the time. Often overlooked in prevention strategies are the nonviolent tendencies and beliefs some children possess (Mayton et al., 1998). An interest in the prevention of violence led Mayton and Palmer (1996) to determine that there were no measures of nonviolence which were specifically developed for adolescents. The Teenage Nonviolent Test (TNT) was created for the purpose of measuring nonviolent tendencies and beliefs in adolescents (Mayton et al., 1998). While early research with the TNT seems promising, more research is needed (Mayton et al., 1998). The purpose of this is to test the psychometric adequacy of the TNT. This will be accomplished by assessing the concurrent validity of the TNT in various ways, the validity of the TNT using known groups, and the discriminant validity of the TNT by evaluating its relationships with other psychological constructs.

**METHOD**

The concurrent validity of the TNT was assessed with three
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separate samples using four different comparison measures. A separate sample was used to assess the discriminant validity of the TNT using three different measures. In addition, the TNT was administered to a group which had a history of nonviolent activities and two groups which had a history of violent experiences.

**Instrumentation**

**Teenage Nonviolent Test (TNT)**

The TNT is a 55 item assessment which assesses (1) physical nonviolence, (2) psychological nonviolence, (3) active value orientation, (4) empathy and helping, (5) satyagraha (the discovery of truth), and (6) tapasya (self-suffering). (Mayton et al., 1998). In completing the TNT respondents are asked to indicate how they feel towards each statement using a four item Likert scale with alternatives ranging from “definitely true for me” to “definitely not true for me”.

**Nonviolence Test**

The Nonviolence Test (NVT) by Kool and Sen (1984) was developed to assess nonviolent predispositions of college students and adults. The scale contains 65 items and requests participants to respond using a forced choice format in selecting either a violent or a nonviolent response. A raw score is obtained by summing the number of nonviolent responses from 36 of the 65 items (29 of the items are filler items and omitted in the analysis). The NVT has reasonable reliability data and some validity data for adult samples only (Kool, 1990; Kool & Sen, 1984).

**The Aggression Questionnaire**

The Aggression Questionnaire (AQ) developed by Buss and Perry
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(1992) was used in this study. The AQ is a new questionnaire developed to improve upon the popular Hostility Inventory (Buss and Durkee, 1957). The AQ uses a five point Likert scale for respondents to rate how characteristic each statement is for them. The scale consists of 29 items divided between the four subscales. The four subscales are physical aggression, verbal aggression, anger, and hostility. Buss and Perry (1992) provide adequate evidence for the reliability and validity of the AQ. Higher total AQ scores and higher AQ subscale scores indicate higher levels of aggressive behaviors.

**BAMED Teacher Rating Form**

Three subscales of the English translation of the BAMED Teacher Rating form were used in this study (Baker, Mednick, & Hocevar, 1991). In the BAMED teachers indicate on a five point scale whether a student is above or below average on various behaviors. Higher scores indicate a student is above average on the behaviors as compared to normal same-aged peers. The subscales used in this study were aggression (3 items), adult relations (2 items), and peer relations (7 items).

**Self Assessment of Aggression**

Five questions were posed to determine the degree to which adolescents viewed themselves as aggressive. These were

1. Would you consider yourself aggressive?
2. Do you use any form of aggression such as hitting or pushing?
3. Are you verbally aggressive?
4. Do you debate every issue?
5. Do you yell when you are involved in an argument?
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Respondents rated themselves on a ten point scale with 1 being never and 10 being always.

**Children's Social Desirability Scale**

The Children's Social Desirability Scale (CSC) is a 16 item scale which assesses social desirability in adolescents (Crandall, Crandall, & Katkovsky, 1965). High scores indicate stronger tendencies to agree to social desirable statements. Crandall et al. (1965) and Allman et al. (1972) reported good test-retest reliability.

**Locus of Control**

The Multidimensional Measure of Children's Perceptions of Control (MMCPC; Connell, 1985) was used to assess locus of control. Twelve items from the general domain of the MMCPC were selected to measure the subscales of unknown control, powerful others control, and internal control. High subscale scores indicate higher levels of internal locus of control.

**Self-Efficacy**

The general self efficacy scale was a 10 item scale developed by Schwarzer and his colleagues. Respondents indicate whether each statement is true for them on a four point scale. Higher scores reflect more self efficacy.

**Participants**

**Sample 1**

The first sample was administered the TNT and the Nonviolence Test (Kool & Sen, 1984). This sample included 479 teenagers from 7th through 12th grade from a junior high and an alternative high school in the northern part of Idaho. Females were 51.6% of this sample and males were 48.4%. Ages ranged from 12 to 19 with a
this sample was Caucasian and 2.3% was Native American Indian. Ages ranged from 14 to 18 with a median age of 17.0 and a mean age of 16.65 (sd = 1.23).

Sample 4

The discriminant validity of the TNT was assessed using the Children's Social Desirability Scale (CSC; Crandall, Crandall, & Katkovsky, 1965), the Multidimensional Measure of Children's Perceptions of Control (MMCPC; Connell, 1995), and the general self-efficacy scale (Schwarzer, 1986).

The sample selected for the discriminant validity research consisted of 82 adolescents from a junior high and a senior high school in the Pacific Northwest. The ages ranged from 13 to 18 years with the median age of 16.0 and the mean age of 15.97 years and a standard deviation of 1.27. The ethnicity of the sample consisted of 90.7% Caucasian while Native Americans, Latino Americans, and African Americans each made up 1.3% of the sample. Male and female participants were 53.9% and 46.1% respectively. Grade level breakdowns were 7th (4.0%), 8th (2.7%), 9th (6.7%), 10th (33.3%), 11th (25.3%), and 12th (28.0%).

Sample 5

We also asked various groups of teenagers known to be either more violent or more nonviolent to complete the TNT. Small groups of adolescents in a residential facility for troubled youth (n = 8) and adolescents in a juvenile detention facility (n = 18) completed the TNT. These groups were expected to have lower average scores on the TNT than the public school samples. This total sample ranged in age from 13 to 17 with a median age of 15 and a mean age of 16.2. An equal number of males and females were
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in this sample.

In addition, a sample of a religious youth group completed the TNT. This group of 21 teenagers was expected to have higher than average scores on the TNT than the public school samples. This youth group was 52.4% female and 47.6% male. The mean age of this group was 15.4 with a standard deviation of 1.93. All of this group was Caucasian.

RESULTS

Concurrent Validity

We expected positive correlations between the TNT subscales and scores on the NVT. The correlations between the TNT subscales and the NVT total score are presented in Table 1. Five of the six correlations were significant at the .01 level.

We expected negative correlations between the TNT subscales and subscores on the Aggression Questionnaire. The correlations between the TNT subscales and the AQ subscores are also presented in Table 1. Three of the TNT subscales had significant correlations in the predicted direction at the .01 level. TNT physical nonviolence, psychological nonviolence, and satyagraha subscales were negatively correlated with all four AQ subscales.

We expected negative correlations between the TNT subscales with the self rating of aggression and the aggression scale on the BAMED teacher rating. The correlations between the TNT subscales and the self rating of aggression are presented in Table 2. Five
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of the six correlations were significant in the predicted direction at the .01 level. Only the active value orientation subscale did not follow the predictions. The correlations between the TNT subscales and the BAMED teacher rating scales are also presented in Table 2. TNT physical nonviolence, psychological nonviolence, and tapasya subscales were negatively correlated with the BAMED aggression scale.

Insert Table 2 About Here

Six independent t-tests were computed between the youth church group and the combined residential youth facility and the juvenile detention groups. Significant differences were found for three of the subscales of the TNT. The youth church group scored more nonviolent on the physical nonviolence and psychological nonviolence subscales at the .01 level. The youth church group also scored significantly higher on the helping/empathy subscale at the .05 level.

**Discriminant Validity**

We expected positive correlations between TNT subscales and social desirability, internal locus of control, and self efficacy. We also expected these correlations to be smaller than the ones reported in the section on concurrent validity. The correlations between the TNT subscales and Children's Social Desirability Scale, the subscales of the Multidimensional Measure of Children's Perceptions of Control, and the general self-efficacy scale. The correlations between the TNT subscales and Children's Social
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Desirability Scale, the subscales of the Multidimensional Measure of Children's Perceptions of Control, and the general self-efficacy scale are presented in Table 3. Four of the TNT subscales had significant correlations with social desirability and internal locus of control scores in the predicted direction. TNT physical nonviolence, psychological nonviolence, helping/empathy, and satyagraha subscales were positively correlated with both social desirability and internal locus of control, however, the TNT satyagraha correlation was higher with social desirability than expected. The TNT physical nonviolence, psychological nonviolence, active value orientation, helping/empathy, and satyagraha subscales were all positively correlated with self efficacy. As for social desirability, the TNT satyagraha correlation was higher with self efficacy than expected.

Insert Table 3 About Here

DISCUSSION

The overall results showed that the TNT is a generally valid measure of nonviolent tendencies for adolescents. Significant correlations between the constructs measured were usually in the predicted directions. The TNT subscales of physical nonviolence, psychological nonviolence, helping/empathy, satyagraha and tapasya appear to be the strongest. The TNT has potential use in determining nonviolent tendencies in teens across the country. Cross-cultural reliability and validity research is needed to substantiate the breadth of potential applications for the TNT.
Concurrent and Discriminant Validity

References


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* p < .05  ** p < .01

Table 2

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* p < .05  ** p < .01
### Concurrent and Discriminant Validity

Table 3

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* p < .05  ** p < .01

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