

Exploring the Relationship between Adolescents' Values and their Engagement in Nonviolent Behavior

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Abstract

This study examined the relations between values (Self-transcendence Values, [ST] and Self-enhancement Values, [SE]) and Nonviolent Behavior (NVB). The study employed a quantitatively driven mixed methods design and was conducted on Ethiopian adolescents attending their secondary schools in Addis Ababa. A total of 171 randomly selected adolescents (87 females and 84 males) from two randomly chosen schools participated in the study. Five of these adolescents (3 females and 2 males) participated in a qualitative study. Questionnaire and a semi-structured interview were used to collect data. To analyze the quantitative data, descriptive statistics, correlation, and structural equation modeling (SEM) were employed. Analysis of Moment Structures (AMOS) and Statistical Package for the Social Sciences (SPSS) were used for this purpose. Qualitative data were analyzed thematically using Open Code version 4.03. It was found that the two higher order values (i.e., ST and SE) accounted for a substantial amount of variance in NVB independently (50.30% for ST and 32.40% for SE) and jointly (70.60%). The study also found that the structural model that linked ST, SE and NVB fit the data adequately. Moreover, the relations found among these variables are in line with the pattern predicated by Shalom Schwartz's Basic Individual Values Theory. Implications of these findings are discussed.

Keywords: Nonviolent behavior, value priority, self-transcendence values, self-enhancement values, peace, peace psychology

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Introduction

There is an urgent need for peace in our current world. According to Institute for Economics and Peace ([IEP], 2023), in the last one and half decade a considerable number of countries encountered a steady decrease in peacefulness while the global economic impact of violence increased to \$17.5 trillion in 2022. This amount of money could feed, educate, rehabilitate and protect the environment of millions of impoverished people. Likewise, IEP indicated that Africa continued to be one of the world's least peaceful regions. From these observations, it seems that the Roman legacy, "*Si vis pacem, para bellum*," which translates to, "*If you want peace, prepare for war*" is at work (Galtung, 2001, p. 11135). Ethiopia is not an exception to this. Although Ethiopia is regarded as a symbol of pride and Pan Africanism as it is not colonized by foreign forces, the course of its history is characterized by incidents of internal conflict, oppression and violence (Pham et al., 2023). According to IEP's (2023) Global Peace Index, Ethiopia ranks 151st out of 163 countries with a deteriorating and low level of peacefulness. A pilot study conducted by the Ministry of Peace of the Federal Democratic Republic of Ethiopia (2023) also indicated that peace indicators at the community level were significantly lower. Moreover, Mitiku and Tilahun (2019) identified a number of impeding factors related to family, media, religion, educational institutions, and socio-cultural challenges that influence the development of nonviolent behavior (NVB) in the Ethiopian context.

What should we do to make individuals, interpersonal relationships, communities, nations and our world peaceful? One of the answers from the field of Peace Psychology would be developing peaceful personality. In line with Nelson

(2014), NVB (sometimes used as a synonym of nonviolence) is an aspect of peaceful personality. The term *nonviolence* is composed of *no* and *violence* both of which have negative connotations (Johansen, 2007). But these negative words together give rise to one of the qualities demanded from the citizens of the 21st century—saying no to violence. However, Johansen indicated that some scholars including peace activists regard the absence of a serious physical violence in human interactions as the distinguishing feature of nonviolence. In fact, nonviolence includes ending violence or resolving conflicts without committing further violence. But, can the mere carrying out of an activity without violence be regarded as nonviolence? Peace psychologists and other professionals in the field (e.g., Mayton, 2009; Nelson, 2014; Kool & Agrawal, 2020) answered *no* to this question. The reason is that nonviolence is not the mere absence of violence. Besides signifying the absence of violence, nonviolence should target abating or abolishing violence and oppression. Likewise, there is a difference between peace and nonviolence. According to Summy (2005), while peace is an ideal state of being and the goal that one strives for, nonviolence is the way or the method that leads to this goal. In this sense, pacifism represents a belief and nonviolence is related mainly with action. Mayton (2009) amalgamated behavioral connotations of nonviolence provided by different authors. In the behavioral sense, Mayton noted, nonviolence involves using power and influence without being violent even to the individuals who work actively to thwart one's goal achievement.

United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1949) contended that peace should begin from where war once began - the minds of human beings. After 62 years of UNESCO's contention, a new and comprehensive empirical model, the Diamond Model of Nonviolence ([DMN]; Mayton et al., 2011),

appears to suggest that the starting point for promoting world peace is promoting peace within the individual. . However, there is a remarkable gap in the empirical literature with regard to investigating conditions that promote or inhibit development of a nonviolent individual (Kool & Agrawal, 2020).

One of the factors that is claimed to influence NVB is value priority (VP). Social-psychological literature (e.g., Sagiv & Roccas, 2017; Schwartz, 1992) considered values as internalized principles that guide an individual's behavior across situations. A person's values form a system of hierarchically ordered structure according to their importance. The concept of the relative importance of values leads to the notion of VP. VPs help people identify things less important or more important in their lives. According to value researchers, it is the priority that they assign to values, not necessarily the actual values they hold, that distinguish among people (Cieciuch et al., 2014). While there are also group level values such as cultural values, the focus of the present study was individual level values. Schwartz (1992) developed his most influential and respected Basic Individual Values Theory and refined it further (Schwartz et al., 2012). The theory's core tenet is that values are arranged in a circular pattern according to their underlying motivations. The refined theory has 19 basic values grouped into four higher order values; that is, conservation, openness to change, self-enhancement (SE) and self-transcendence (ST) values. Schwartz et al. (2012) indicated that depending on the purpose of their study, researchers can select and use a large or a small set of values. Accordingly, ST and SE were selected to examine relations between VP and NVB in the current study. These higher order values were selected because, according to the Basic Individual Values Theory, they are incompatible values which are assumed to be related to NVB positively (ST) and

negatively (SE). Thus, this selection was made in line with one of the purposes of the present study, namely examining whether the relationship among NVB, ST and SE follow the pattern predicated by Shalom Schwartz's Basic Individual Values theory.

SE versus ST dimension aligns values according to their roles in motivating people to be concerned about and care for other people (high ST) or accentuate on personal outcomes (low ST). As components of the SE value, power and achievement focus on the tendency of an individual for personal success and exerting control on other people. ST values emphasize concern and care for those with whom one has frequent contact (benevolence) or displaying acceptance, tolerance, and concern for all people regardless of group membership (universalism) (Schwartz, 1992; Schwartz et al., 2012).

One of the several reasons for studying values is understanding their impacts on behavior. This is because if the relationship between behavior and values is not clear and meaningful, investments made to establish and change behaviors by influencing values (e.g., using formal education and media) will be of little importance. Scholars who accept the guiding role of values argue that acting is one of the ways through which people display the important values they hold and that value-consistent action is rewarding (Bardi & Schwartz, 2003).

In line with this contention, some studies have attested substantial associations between values and behaviors. Among the myriads of behaviors that empirical research found to be associated with personal values (Roccas & Sagiv, 2010) are violence and NVB. For instance, in a study conducted on Jewish and Arab high school adolescents in Israel, while SE values (power) correlated positively with self-reported violent behavior, ST (universalism and conformity) values correlated negatively with this

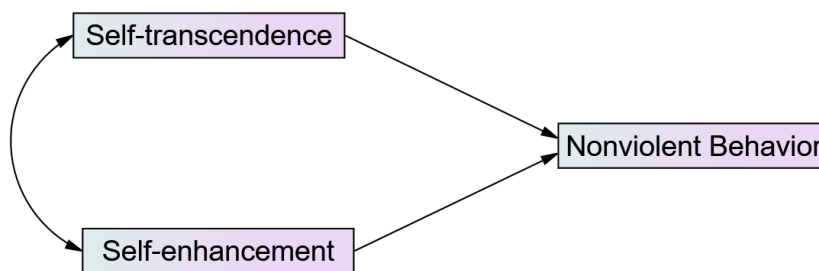
behavior (Knafo et al., 2008). These findings supported the researchers' hypothesis that lower power values and higher universalism values play protective roles against violent behavior. On the other side of the coin and including the higher order value dimensions, further hypothesis that SE values are negatively related to NVB whereas ST value is positively related to NVB can be formulated.

One of the mechanisms by which culture and society curb aggressive and killing potentials in human beings is by inculcating moral values in the individual members. Literature that relate values and nonviolence indicate that values play indispensable roles in maintaining social tranquility by bridling potentials of violence within individuals (Miklikowska & Fry, 2012). More to the point, in line with Miklikowska and Fry's idea, while ST value is antithetical to violence, aggression is related to the SE dimension of VP. Likewise, Mayton and his colleagues (Mayton, 2009; Mayton & Furnham, 1994; Mayton et al., 1999) report that nonviolent individuals place higher priorities on universalism and benevolent values. On the other hand, these researchers pointed out that peaceful persons place lower priorities on power, hedonism and stimulation values. These findings were replicated in a study conducted by Mayton et al. (2013) in such a way that SE values (achievement, power and hedonism) were negatively correlated with interpersonal and societal nonviolence subscales. ST values (universalism and benevolence) were positively correlated with interpersonal nonviolence. Even though Ethiopia's cultures have a plethora of pro-peace values (e.g., hospitality, cooperation, respectfulness, and tolerance), values and their relations with NVB were not given adequate empirical attention (Alagaw, 2012; Mitiku, 2024). Given that many studies were conducted in the Western culture and that DMN is a new model which needs to be substantiated in other cultures, examining relations between values

and NVB in the Ethiopian context (Figure 1) is reasonable. Likewise, the Basic Individual Values Theory suggests that ST and SE are conflicting (incompatible) values (Sagiv & Roccas, 2017; Schwartz et al., 2012), implying the need to examine the relation between these values (as depicted in Figure 1) in the Ethiopian context.

Figure 1

Conceptual Model that Guided the Study



Research Questions

1. Does the structural model (Figure 1), which relates ST, SE, and NVB, fit the data?
2. Do the relationships among NVB, ST and SE follow the pattern predicted by Shalom Schwartz's Basic Individual Values theory?
3. What proportion of the variance in NVB do ST and SE explain independently and jointly?
 - 3.1 What are the adolescents' experiences regarding the influence of their ST values on their NVB?
 - 3.2 What are the adolescents' experiences regarding the influence of their SE values on their NVB?

Operational Definitions of Constructs

- **Nonviolent Behavior (NVB):** NVB refers to interactions involving words, deeds, and experiences with others that are not intentionally harmful but geared towards peacefulness. In the context of the present study, NVB was assessed by items adapted from the Interpersonal Subscale of the Diamond Scale of Nonviolence (DSN) (Mayton et al., 2011).
- **Values:** Values are moral as well as social principles that are considered to be important and therefore guide one's life (Schwartz, 2017). VP is the importance of one value relative to other values. In this study, VP is measured by items adapted from the six-point scale Portrait Value Questionnaire (PVQ-RR) (Schwartz et al., 2012) pertinent to the following two bipolar higher-order values.
 - **Self-transcendence (ST) values** are the values that indicate the tendency of individuals to go beyond their selfish concerns so as to contribute to the welfare of others. They include benevolence (i.e., *preservation and enhancement of the welfare of people with whom one is in frequent personal contact*) and universalism (i.e., *understanding, appreciation, tolerance, and protection for the welfare of all people and nature*) values.
 - **Self-enhancement values (SE)** are the values that indicate the degree to which individuals strive to enhance personal interests. This dimension includes power resource (i.e., *power through control of material and social resources*) and power dominance (i.e., *power through exercising control over people*) values.

Methods

Design of the Study

This study employed a mixed research approach. Of the several types of mixed research designs discussed by Creswell (2012), the embedded design (QUAN + qual) was employed in the present study, where quantitative and qualitative data were collected concurrently. This design was preferred because it allows quantitative data to serve as the primary dataset, enhanced by qualitative data for additional depth and context..

Population, Sample and Sampling Techniques

This study was conducted in Addis Ababa city, which has been serving as the capital city and cultural hub of Ethiopia for about 130 years. Addis Ababa is also the home of people of diverse ethnicity, languages and religions. The study was conducted in two randomly selected (one government and one private) secondary schools in this City. The focus was on government and private schools because they encompassed majority of the total number of students who attended secondary schools in the city. While the selected government school was Woizero Kelemework (located in Arada Subcity) with 1,004 grade 11 and 12 students (Male = 368, Female = 636), the private school was Kegn Azimach Andarge W/Giorgis (located in Gullele Subcity) with 211 grade 11 and 12 students (Male = 100, Female = 111) . Thus, at the time of data collection, there was a total of 1,215 students (Male = 468, Female = 747) in the selected schools. Depending on this data, 1,215 was considered to be the accessible population of the study. Sideridis et al. (2014) suggest a sample size of 70 to 80 participants to be

adequate for structural model fit. Kline (2016) indicates that latent variable models which use multiple indicators for constructs (as in the present study) need smaller sample sizes. Moreover, Hair et al. (2019) suggest a minimum sample size of 150 for models with seven constructs or less. Depending on these suggestions and the number of constructs in the present study (i.e., three constructs (see Figure 1)), it was intended to use a minimum sample size of 150. Anticipating the number of students who may be unwilling or unable to participate in the study, and that some responses could be incomplete or inappropriate, and therefore discarded, 30 more participants were added to 150; as a result, 180 adolescents participated in the study.

. In order to decide the number of participants that was to be selected from each stratum of sex (Male or Female), Stream (Natural or Social Science) and school type (Government or Private), proportional stratified sampling was used. Then, online random number generator was used to select the participants as per the proportion of each stratum.

Although all of the participants (N= 180) were present, able, and willing to participate in the study, data screening indicated that 9 of the participants did not respond to the items appropriately and thus were excluded. Hoelter's Critical N (Byrne, 2010) for models in this study were greater than 200 at both 0.05 and 0.01 indicating that the present study's sample size (i.e., N = 171) was adequate. Table 1 shows the demographic characteristics of the 171 participants who remained in the analyses. Five of these adolescents (3 Females and 2 Males; 2 Females and 1 Male from Government School; 1 Female and 1 Male from Private School) were purposively selected and interviewed to generate qualitative data. Nearly half of the participants of the study were females (n = 87; 50.88%). The majority of the participants were grade eleven (n

=112; 65.50%), and natural science stream students (n = 135; 78.95%) from government school (n = 97; 56.73%). While the educational level of fathers or male guardians of the respondents varied from *No Education* (n = 4; 2.3%) through *Grades 11 or 12* (n = 39; 22.80%) to *PhD and above* (n = 2; 1.2%), that of the mothers or female guardians ranged from *No Education* (n = 10; 5.80%) through *Grades 11 or 12* (n = 41; 24%) to *Master's Degree* (n = 7; 4.1%).

Table 1

Demographic Characteristics of the Study Participants (N = 171)

School	School Type	Sex		Grade		Stream		Total
		Male	Female	11	12	Natural Science	Social Science	
W/ro Kelemework	Government	45	52	71	26	71	26	97
Kegn Azimach Andarge W/Giorgis	Private	39	35	41	33	64	10	74
<i>Total</i>		84	87	112	59	135	36	171

In a similar manner, the family's reported overall monthly income varied from *Less than 500 Birr* (n = 3; 1.80%) to *greater than 10, 000 Birr* (n = 55; 32.20%). (Note that *Birr* is the main unit of Ethiopian currency and that 1 USD = 53.7057 Birr at the time of data collection). The age of the participants ranged from 16 years (n = 26; 15.20%) to 22 years (n = 1; .6%) (Mean = 17.42; SD = .99). The implication is that the participants were mid and late adolescents who could provide adequate data for the study.

Data Gathering Tools

In this study, a questionnaire composed of two scales (Diamond Scale of Nonviolence, DSN and Portrait Value Questionnaire Revised, PVQ-RR), demographic items was used. The scales were adapted from previously developed instruments. Moreover, an individual, in-person semi-structured interview was used to gather qualitative data for the present study. The interview items were developed based on the literature and focused on the influence of ST values (e.g., How do you think that your ST values as benevolence influence your NVB. Explain your lived experiences in this aspect) and that of SE values on NVB (e.g., How do you think that your SE values as power dominance influence your NVB. Explain your lived experiences in this aspect.)

The instruments (Questionnaire and Interview Guide) were translated by the following procedures of forward and backward translation. Initially, the instruments were adapted in the English language. Then, these tools were translated into Amharic by a bilingual (English and Amharic) language expert. Upon completion, another bilingual (English and Amharic) language expert back translated the Amharic version into English. Moreover, the equivalence of both versions was checked by two other professionals. These professionals indicated that most of the Amharic version items were good representations of their corresponding English versions. However, depending on their suggestions, some Amharic items were modified in such a way that they represent their English versions more accurately.

The Diamond Scale of Nonviolence (DSN)

The DSN was used to measure the nonviolent behavioral tendency of the adolescents. Developed by Mayton et al. (2014), the short form of DSN has four levels (intrapersonal, interpersonal, societal, and world) with 10 items in each level and good

internal consistency reliabilities. The response categories of the DSN range from *definitely true for me* (4) to *definitely not true for me* (1). Mitiku (2024) adapted and used the DSN with Ethiopian school adolescents and reported adequate internal consistency reliability for the items. In the present study, 10 items in the interpersonal subscale (e.g., *Even though some people for whom I have done good things paid me back with evil, I will not stop doing good things for people*) were used.

The Revised Portrait Value Questionnaire (PVQ-RR)

In the present study, items that measure the ST and SE higher values were adapted from the PVQ-RR (Schwartz et al., 2012) and used to measure adolescents' VPs. ST and SE values are composed of specific values that are measured by three items each. Accordingly, 6 items that measure Universalism values (e.g., *It is important to him/her to be tolerant toward all kinds of people and groups*) and Benevolence values (e.g., *It is important to him/her to be a dependable and trustworthy friend*) and other 6 items that measure Power Dominance (e.g., *It is important to him/her to have the power to make people do what he/she wants*) and Power Resource (e.g., *It is important to him/her to have the power that money can bring*) values were used. In previous empirical studies, CFA confirmed the validity of these values (Schwartz & Butenko, 2014). Participants rate the extent to which the person that the items portray is like them on a scale that ranges from *not like me* (1) to *very much like me* (6). Depending on the intensity of the ratings, the values that the respondents hold are inferred from values of the person that they consider being like them.

The items were translated into Amharic (the working language of Ethiopia and one that the study participants can understand) by bilingual (English-Amharic)

language experts. The optimal number of items per subscale with the highest possible reliability coefficients obtained from reliability analysis using Cronbach alpha are indicated in Table 2. The commonly used lower limit for Cronbach's alpha is .70. However, due to its inherent limitations (e.g., reliability

Table 2

Reliabilities (Cronbach Alpha, α ; Index of Quality, IoQ) of the Subscales of Portrait Value Questionnaire Revised (PVQ-RR) and the Interpersonal Subscale of the Diamond Scale of Nonviolence (DSN) in the Present Study (n=171)

Scale	Subscale	K	α	IoQ
PVQ-RR	ST	4	.611	.76
	SE	5	.703	.75
DSN	Interpersonal	7	.705	.71

Notes: ST= Self-transcendence; SE=Self-enhancement; K = Number of items

varies dramatically with varying number of items, it does not use factor loadings to estimate reliability and it is not a very good indicator of whether a set of items measures a single factor) a reliability measure derived from factor loadings, index of quality (IoQ) (Saris & Gallhofer, 2014; Schwartz, et. al., 2012), was used for further examination of the reliability. It is evident from Table 2 that for two of the subscales, IoQ produced higher reliability coefficients than did Cronbach's alpha. This indicates that the lower Cronbach's alpha of the ST subscale was not only due to the problems inherent in the items but also to the approach used for estimating the reliability (Mitiku, 2024).

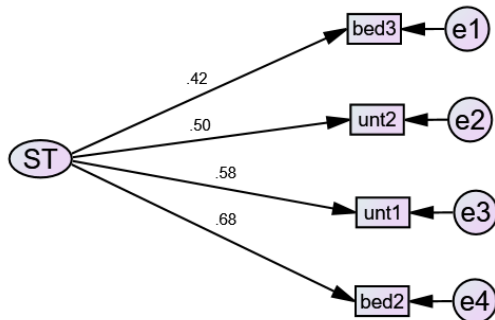
Data Analysis Techniques

In the present study, confirmatory factor analysis (CFA), descriptive statistics, correlational analysis and structural equation modeling (SEM) were used to analyze the data. For both CFA and SEM, Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA) were used to assess fitness of the models to the data. The recommended cutoff criterion for a good fitting model is: for RMSEA less than 0.06 to 0.08; for CFI, values close to .90 or .95 are considered as an acceptable level of fit (Schumacher & Lomax, 2010). CFA was used to examine the construct validity of the items, measuring the three latent factors (ST, SE, and NVB).

For ST, with the removal of 2 items (i.e., bed1 and unt3 out of a total of 6) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 2 was found to fit the data well [$\chi^2(2) = .875$, $p = .646$; CFI = 1.00; RMSEA = .000 (90% CI: (.000, .119), PCLOSE = .748)].

Figure 2

CFA Model of Items Measuring ST

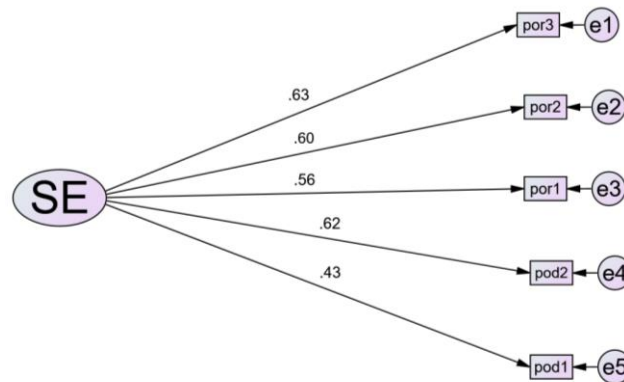


Similar procedures were followed in examining the construct validity of the items measuring SE. Accordingly, with the removal of 1 item (i.e., pod3 out of a total

of 6) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 3 was found to fit the data well [$\chi^2 (5) = 8.134$, $p = .149$; CFI = .975; RMSEA =.061 (90% CI: (.000, .133), PCLOSE = .339)].

Figure 3

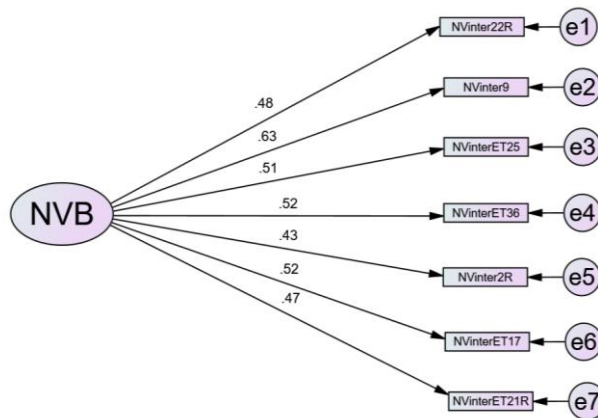
CFA Model of Items Measuring SE



For the Interpersonal Subscale of the DSN, with the removal of 3 items (i.e., NVinter3, NVinter4, NVinter10 out of a total of 10) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 4 was found to fit the data well [(14) = 25.226, $p = .032$; CFI = .927; RMSEA =.069 (90% CI: (.02, .111), PCLOSE = .215)].

Figure 4

CFA Model of Items Measuring the Interpersonal Subscale of the DSN



Thus, it is evident from results presented in Figures 2-4 that the fitness of the CFA models of the three latent factors is acceptable. Moreover, the standardized loadings ranged from .42 (bed3) to .68 (bed2) (see Figures 2-4) and all of them were statistically significant ($p < .001$). These results indicated the construct validity of the items selected to measure the three major variables of the present study.

Moreover, descriptive statistics (i.e., frequencies and percentages) were used to describe the demographic characteristic of the participants of the study. Pearson Product Moment Correlation Coefficient was used to examine the zero-order correlations among variables of the study. SEM was used to examine fitness of the model that guided the study (see Figures 1 & 5) and contributions of ST and SE values to NVB. In order to examine tenability of the assumptions of linearity and normality, graphical and scatterplot methods (Tabachnick & Fidell, 2013) were employed. Generally, these assumptions were found to be tenable.

Furthermore, thematic analysis was used to analyze qualitative data. OpenCode version 4.03 (Umea University, 2018) was used for this purpose. Initially, the transcripts were segmented and categorized into codes. These codes were further refined (by reexamining the transcripts and the segments) and finally reduced to themes. Considering that qualitative studies are more sensitive to participants' private concerns and therefore prone to ethical issues, only adolescents aged 18 years or older were interviewed. Written informed consents were obtained from the participants after giving them orientation on the study's overall purpose. Furthermore, participants were oriented about the expected duration and procedures of the study and that they can stop participating in the study once they begin without incurring any undesirable consequences. In order to maintain the ethical principle of confidentiality, pseudonyms (i.e., AY, AX, BK, BN, AB) were used in presenting qualitative results.

Results

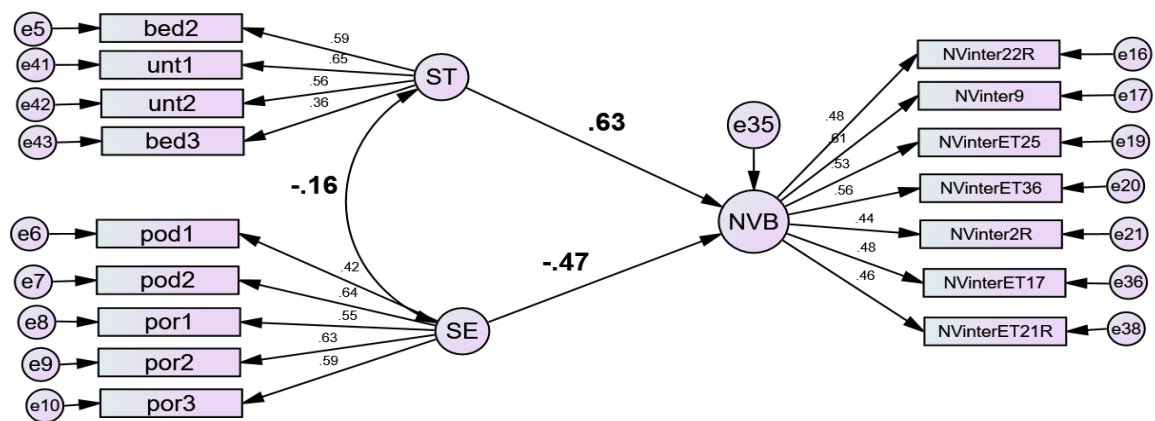
Fitness of the Model that Guided the Study

The first research question of the present study sought to examine fitness of the model that guided the study (Figure 1). Examining the fitness of the model before analyzing the structural relations was mandatory. This is because unless the fitness of the model to the data is adequate, estimates of the structural relations will not be reasonable (Byrne, 2010). Thus, at the outset, the structural model depicted in Figure 5 was tested. This model was found to fit the data well [$\chi^2(101) = 134.773$, $p = .014$; IFI = .926; CFI = .923; RMSEA = .044 (90% CI = (.021, .063), PCLOSE = .670)]. This implies that the model can be used to explain the relations among variables of the study (i.e., ST, SE and NVB).

Figure 5

The Structural Equation Model Output from AMOS

Notes. ST= Self-transcendence; SE = Self-enhancement; NVB = Nonviolent Behavior



Relationships among Values and Nonviolent Behavior

The second research question of the present study was intended to examine whether the relations among NVB, ST and SE follow the pattern predicated by Shalom Schwartz's Basic Individual Values theory. Results are presented in Table 3. Both ST and SE were found to relate to NVB moderately and significantly ($p < .01$). Likewise, in the direction predicted by Schwartz's theory, while ST was found to be related to NVB positively, SE was found to be related to NVB negatively.

Table 3

Correlations among ST, SE and NVB (N = 171)

	1. ST	2. SE	3. NVB
1	1		
2	-.073	1	
3	.441**	-.398**	1

Notes. *ST*= *Self-transcendence*; *SE* = *Self-enhancement*;
NVB = *Nonviolent Behavior*; ** $p < 0.01$

On the other hand, themes emerged from qualitative data analysis (i.e., the linkage between SE values and NVB and, ST values and NVB) supported quantitative results presented in Table 3. The adolescents illuminated that SE values hamper peacefulness. One of them, for example said, "... My self-focused values have harmed my relationship with people; they contributed to disagreements, not to agreements, with others. For example, when I tell my friends that I want to pursue something new, they distance themselves from me." (Interviewee AY). Similarly, Interviewee AX uttered, "My self-focused values hurt my peacefulness; if you are selfish, you get into conflict with people."

Likewise, the finding that ST is related positively to NVB is substantiated by the qualitative findings. Exemplar in this case is Interviewee BK's elucidation that other-focused values lead to peacefulness.

My values are concerned with helping people. Just because I help others, I sleep a peaceful sleep. Thus, my values help me to be a peaceful person. My values are my anchors; they support me to do good things for other people.

Similarly, Interviewee BN illustrated that ST values help one to live with other people peacefully.

Yes, my values have made me peaceful. I think more than prioritizing yourself, when you prioritize others, you live with others peacefully. Most people want you to do something for them. When you give priority to them, you will be likable; your relationship with others will be smooth.

Proportion of the Variance Explained in Nonviolent Behavior by Values

The third research question of the preset study sought to examine independent and joint contributions of ST and SE to NVB. Table 4 indicates that, although both higher order values explained statistically significant proportions of variance in NVB, the independent contribution of ST ($R^2 = 50.30\%$, $\beta = .71$, $p < .001$) exceeds that of SE ($R^2 = 32.40\%$, $\beta = -.57$, $p < .001$). Moreover, the joint contribution of ST and SE to NVB (i.e., $R^2 = 70.60\%$) was found to be greater than their independent contributions. R^2 can be converted to measures of effect size, notably Cohen's f^2 (Cohen, 1988). A common rule of thumb for f^2 is that .02 represents a small effect, .15 a medium effect, and .35 a large effect. Accordingly, the individual and joint contributions of ST and SE in the present study (see Table 4) ranged from .479 to 2.401 which imply that all of the effects are large.

Table 4

Contributions of ST and SE to NVB (N = 171)

Model	R ²	f ²	Standardized Coefficient (β)	Structural
ST	.503	1.012	.709***	
SE	.324	.479	-.569***	
ST and SE	.706	2.401	.630***; -.466**	

Notes. ST= Self-transcendence; SE = Self-enhancement;

NVB = Nonviolent Behavior; f² = Effect Size of R²; **p<0.01;

***p<0.001; R² = squared multiple correlation

Qualitative data also support results presented in Table 4. Interviewee AB elucidated that while ST values enhance NVB, SE values (power resources and dominance) can have a debilitating effect on NVB.

Giving priority to other people have helped me to live peacefully with them. If they are really interested in something, I leave it for them. Conflict will not be created. I do not want to be a manager and extremely rich person. I want to have resources that enable me to help others. If you are rich, fame comes, and this may not be good; even your behavior changes. You start worshipping your resources. Sometimes, I observe the rich and wish that I do not be like them. I pray to God that He gives me resources with which I live and help my family.

Furthermore, Interviewee AX explicates the debilitating role of SE values with the notion that it might be difficult for a person who engages in self-enhancement to be at peace with other people.

In the first place, a person who is led by self-enhancement values cannot be called a peaceful person. He is in a conflict with himself. When he gets one thing, he strives to get the other. Human need is not limited. Thus, because a self-centered person cannot be satisfied, he cannot be peaceful. He harms another person to get what he wants, to satisfy his own needs.

Moreover, Interviewee AY illuminated the idea that even physical trainings that aim at enhancing physical wellness (i.e., self-enhancement) can be an obstacle to peaceful relationships.

I participated in a weight lifting training for two months. But I understood that such trainings give you overconfidence and lead you in the wrong directions; I feared this and stopped the training. There was a cashier who works in a bank who was also strictly attending the training. This cashier told me that he was being troubled because he became muscular and he even could not stop exercising while counting Birr. At this time, your thinking capacity will decrease, you may be thinking in terms of your muscle. This does not foster peaceful relationship among people. I observed and understood these things; they are inconsistent with my values; thus, I stopped the training.

In a similar manner, participants elucidated that deficiency in aspects of ST values including equality, social justice, and broad-mindedness leads to lack of peace.

My values have contributed to my peacefulness. When you give priority to others, people like you. When you understand your culture and religion, you also understand others, that they also have their own... Now, everywhere, there is no peace. It is the failure to understand what it means to be human being that gave birth to this. We have forgotten that all of us have a red blood cell. Human being is above all creatures. If we understand this, everything will be resolved. (Interviewee BK).

Discussion

This study was intended to examine the relations between higher order values (i.e., ST and SE) and NVB. The first research question of the present study asked about the fitness of the structural model that guided the study (i.e., Figure 1).

Constructing theories and building models are at the heart of the scientific process. Even though models are often used to represent phenomena visually or diagrammatically, most of the time, models and theories are used interchangeably (Jaccard & Jacoby, 2020). In the present study, an attempt was made to subject the developed conceptual model to advanced statistical test using structural equation modeling (SEM). In SEM, the entire system of variables in the hypothesized model is tested statistically in a simultaneous analysis so as to determine the extent to which the model is consistent with the data. Goodness-of-fit measures are used to examine this in

such a way that if goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected (Byrne, 2010). Nonetheless, SEM literature explicates that no conceptual model perfectly represents the reality that it purports to represent. Thus, SEM scholars argued that some models tend to be more wrong than others (Kline, 2016). The process of examining fitness of a model, therefore, involves searching for models that better represent the data. This leads to the use of the most common approach to SEM—model generating. In the model generating approach, after rejecting the initial model because of its poor fit to the data, the parameters are reestimated thereby leading to a modified model (Byrne, 2010; Hoyle, 2012).

Basically, SEM has two parts: measurement and structural. While the measurement model uses CFA to test the relation between the latent factors (ST, SE and NVB in the present study) and their indicators (i.e., items), the structural model examines the link among the variables. The common practice in SEM (also implemented in the present study), is first testing the measurement model and then proceeding to testing the structural model (Blunch, 2013; Byrne, 2010; Hair et al., 2019; Kline, 2016). In the present study, for the measurement models (see Figures 2, 3 and 4) the model generating approach to SEM was used. As a result, fitness of the modified CFA models of the latent factors were found to be adequate.

The next step in the SEM is testing the structural model. Accordingly, items that were obtained from the final versions of the measurement models were used to represent NVB, and the higher order values (ST and SE) in the structural model. The fitness of the structural model was also found to be acceptable. Thus, the structural model that guided the present study can be used to provide reasonable explanations of

the relations among ST, SE and NVB. Mitiku (2024) developed and tested a Peace Engineering Model in which any environment and person-related variables can be incorporated and tested. The present study added higher order values (ST and SE) as person-related variables and found the model to be meaningful. Thus, the theoretical and practical implications of the model developed and tested in the present study is far-reaching, particularly for the field of Peace Psychology. In this field, generating knowledge by developing, testing and applying theories and models has become an issue, particularly in the “South” where the making and valuing of scientific knowledge has been limited as knowledge was mainly diffused from the “North” (Mayton, 2001; Law & Bretherton, 2017).

The present study also examined whether the relations among NVB, ST and SE follow the pattern predicated by Shalom Schwartz’s Basic Individual Values theory. It was found that while the correlation between ST and NVB was positive and statistically significant, negative relationship was found between SE value and NVB. That is, as ST increases, NVB also increases and vice versa; the result also implies that as SE increases, NVB decreases and vice versa, results which were also substantiated by qualitative findings. Overall, these findings indicate that the value priorities that guide the adolescents’ lives can play positive or negative roles in NVB. Consistent with results of the present study, other studies (e.g., Mayton et al., 1996) have found that prioritizing universalism and benevolent values (aspects of ST values) is more of characteristics of peaceful than non-peaceful persons. It is also documented that peaceful persons prioritize less power values (aspects of SE values) than non-peaceful persons (Mayton, 2014) implying that SE is related with NVB negatively. Moreover, these results are consistent with a number of other studies which have reported positive

correlations between ST values and behaviors expected to be related positively with NVB including cooperation (Sagiv et al., 2010), altruism (Bardi & Schwartz, 2003), peacefulness of groups (Miklikowska & Fry, 2010), favorable attitudes toward welfare (Feldman & Steenbergen, 2001), and willingness to make contact with out-group members (Sagiv & Schwartz, 1995). In a similar manner, the negative relation found between SE values and NVB in the present study can be corroborated by that of Bardi and Schwartz (2003) and Sagiv et al. (2010) which found negative relations between SE and cooperation, altruism and empathy.

In line with Schwartz et al.'s (2012) theory, values are arranged based on the principles of conflict and compatibility in such a way that adjacent values represent compatible motivations whereas the opposite values represent conflicting motivations. This theory predicts that behavior is likely to be associated similarly with values that are compatible and differently with values that are conflicting (Schwartz, 1992). This study supported the pattern predicated by Schwartz's theory as ST was found to be positively related with NVB while negative correlation was found between SE and NVB (see Table 3 and Figure 5) thereby indicating the differential effects of ST and SE on NVB. Thus, this study substantiated what a plethora of other cross-cultural studies found (Benish-Weisman et al., 2017; Sanderson & McQuilkin, 2017; Schwartz, 2017; Schwartz & Butenko, 2014).

With regard to the proportion of variance in NVB explained by ST and SE, the present study found that the higher order values (ST and SE) explained statistically significant and large proportions of variance in NVB independently and jointly. Moreover, the joint contribution of ST and SE to NVB was found to be greater than their independent contributions. Compared to SE, ST was found to contribute more to

NVB. Results from the qualitative analyses also indicated that values do have roles to play in augmenting or debilitating peaceful behavior.

Although the author of this article was not aware of an empirical study that examined contributions of ST and SE to NVB in the Ethiopian context, generally, results of the present study are in consonance with results of some studies conducted outside of Ethiopia. For instance, Mayton et al. (2013) examined the link between values and NVB among college students in the USA. These researchers found that ST values (i.e., universalism and benevolence) were positively correlated with interpersonal nonviolence. On the other hand, Mayton et al.'s study revealed that SE values were negatively correlated with interpersonal nonviolence. Similarly, Mayton et al. (1996) found among college students that ST values (i.e., benevolence, conformity and universalism) were prioritized by nonviolent students. Nonetheless, Mayton et al.'s study found that individuals with more propensity of violence tended to prioritize SE value. Knafo et al. (2008) also reported that, among 907 Jewish and Arab school adolescents in Israel, SE value was correlated positively with self-reported violent behavior, and that ST value correlated negatively with this behavior. Knafo et al. also found that ST and SE values explained 12% of the variance in aggressive behavior. Depending on results of their study, Knafo and his colleagues concluded that lower power values (i.e. lower levels of SE value) and higher universalism values (i.e., aspects of ST value) protect against violent behavior. Indeed, owing to the strong positive roles that they play in augmenting antisocial behaviors (thereby confirming that SE values are anti-nonviolence), SE values have been labeled as unethical "dark values" (Kajonius et al., 2015). Thus, it can be claimed that while ST values are pro-nonviolence values, SE values are anti-nonviolence values.

Conclusions and Implications

One of the conclusions that can be drawn from results of the present study is that the relation between values and NVB can be modeled meaningfully. Moreover, what can be deduced from the results is that values that adolescents prioritize play important roles in enhancing or debilitating their NVB. Indeed, it can be said that while ST values are pro-peace, SE values are anti-peace principles that guide adolescents' lives.

Results of the present study have a number of practical and policy implications. Findings of the present study indicate that while ST values contribute to NVB positively, SE values contribute to NVB negatively. Thus, the more one augments ST values and the more one restrains SE values, the more one enhances NVB, thereby furthering building of culture of peace. However, because the need to self-enhance seems to be natural that starts with fulfilling basic needs and reach its climax at the self-actualization stage (Maslow, 1968), it may be those aspects of enhancing the self that become deleterious for other people (probably because they foster violence) that should be restrained. The often-forgotten stage in Maslow's hierarchy of needs is ST, the stage at which individuals enter peak and plateau experiences; that is, the experiences of peace, unity of all things and ultimate truth (Moss, 2001) which all may contribute to NVB positively.

The results also have implications for policies and endeavors that promote peace building and social cohesion in Ethiopia. In this country, there is a need for gearing policies, governance and programs towards strengthening resilience and responsiveness for peace (Ministry of Peace of the Federal Democratic Republic of Ethiopia, 2023). Such plans and practices benefit from focusing on mechanisms of enhancing

adolescents' values so as to enhance NVB thereby contributing to building culture of peace.

Furthermore, developing and changing values in such a way that they foster NVB is the task of socialization agents (e.g., family, peers, religion institutions, schools, and media) as these agents influence values directly or indirectly. However, rather than attempting to change anti-nonviolence values (i.e., SE values) identified in the present study once they are developed, curbing development of these values and augmenting development of pro-nonviolence values (i.e., ST values) seems to be more effective and economical. This is because the literatures (e.g., Roccas et al., 2017) indicate that owing to their stable nature (values are at the core of one's identity) and ethical concerns, changing values deliberately is difficult. Moreover, results of the present study help adolescents to understand that their own VPs influence their NVB and that they can improve their NVB by improving their VPs.

Implications to Future Research

Although the present study used advanced statistical procedures, tested the model that guided the study and generated the model that has important theoretical and practical implications, as any other scientific research, it has also limitations that should be kept in mind when interpreting and using the results. First, only interpersonal component of the DMN was used in the present study. Thus, future researchers are recommended to include other components (e.g., intrapersonal and societal) in their studies.

Second, only adolescents attending grades 11 and 12 in Addis Ababa city were included in the present study. This limits generalizability of the results. Future studies should extend the present study and test the validity of the model among rural and urban

grade 9 and 10 adolescents, college and university students and the youth outside of the educational system (e.g., the unemployed and employed youth). Moreover, because peacebuilding process starts from the family (Mitiku, 2024) and children are the foci of this process, and values of children (the values literature shows that the youngest age for which values were examined so far is 6.5 years) and early adolescents deserve more empirical attention (Doring et al., 2016), future research may benefit from extending the present study to the population of Ethiopian children and early adolescents. Moreover, future studies can investigate the structures and profiles of values in the Ethiopian context.

Third, although the general rule of thumb for internal consistency of scales for research purpose is over .70 and lower reliability coefficients may be tolerated in studies that employ latent variable models (Kline, 2016) as in the present study, the internal consistency reliability coefficient (i.e., Cronbach alpha) of ST (although its IoQ = .76 was acceptable) was below the lower limit (i.e., .70). Thus, future researchers should improve sample size and quality of items measuring ST and explore the associations among variables in the present study with higher scale reliabilities.

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