The Development and Effectiveness of a Violence Prevention Program for Thai High School Adolescents

Vineekarn Kongsuwan, Wandee Suttharangsee, Sang-arun Isaramalai, Sandra J. Weiss

Abstract: Violence among adolescents has increasingly become recognized as a critical social problem. The purpose of this study was to develop and evaluate the effectiveness of a violence prevention program for Thai high school adolescents. The program was based on Orem's Self-Care Deficit Theory of Nursing.

A within group repeated measures design was used. The sample consisted of 45 Thai adolescents, 12-15 years of age, with moderate to high scores of aggressive behavior and favorable attitudes toward violence. Subjects were purposively selected to receive the 12-week violence prevention program, after being tested and observed. Data were collected via: a researcher-developed Personal Data Sheet; a modified version of Buss' and Perry's Aggressive Behaviors Scale; Buss' and Perry's Observational Aggressive Behavior Scale; a modified version of Brillhart's, Jay's and Wyers'Attitude Toward Violence Scale; a researcher-developed Violence Management Skills Test; and, a researcher-developed Student Satisfaction with the Violence Prevention Program Questionnaire. Data were analyzed using descriptive statistics and repeated measures one-way ANOVA.

Scores for aggressive attitudes and behaviors were obtained and compared three times, including: at baseline; twelve weeks later, but prior to participation in the intervention program; and, upon completion of the 12-week intervention program. The adolescents' aggressive attitudes significantly decreased, while their violence management skills (i.e. interpersonal relationship skills, coping with emotions and stress, problem solving skills, and social responsibility skills) significantly increased. The frequency of their observed physical and verbal aggressive behaviors also decreased after they completed the program. The students' satisfaction with the 12-week program was high.

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Background

Violence has become recognized as a critical social problem and is part of the human experience, especially among adolescents, throughout the world, that requires global attention.[1,2] Approximately 875,000 children and adolescents, under the age of 18 years, die annually, worldwide, as a result of

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violence.[3] Violence among adolescents is known, globally, to lead to injury, loss of competence, disability and death,[2] and affects not only the adolescents, but also their families, communities and society.[4] Throughout Thailand, the number of deaths and disabilities caused by violent acts has led to violence becoming a leading public health issue.[5] In addition, violence has been found to be a major risk factor that directly affects the physical and psychological health of Thai adolescents.[6]

The correlates of violence, among adolescents, can be classified as either physical or psychosocial violence. The prevalence of physical violence among high school students has been found to be associated, most often, with five risk behaviors, namely: sexual intercourse; attempted suicide; substance abuse; episodic heavy drinking; and, fighting.[6,7] With respect to the psychosocial correlates, adolescents who engage in violence often: suffer from a recent loss; feel disappointment or rejection; feel alienated or disenfranchised; experience academic failure; and/or, become involved with alcohol or other drug abuse.[8] Many times, adolescents attempt to solve problems through drug dependence, avoidance of stress-causing situations, and/or inflicting harm upon themselves.[9,10] The psychological correlates can affect not only adolescents, directly, but also their classmates, teachers, families, and society.[10]

Recently, the availability of information, throughout Thailand, regarding school violence, violence in adolescents and violence prevention, as well as research regarding the promotion of mental health, the prevention of violence among adolescents and violence prevention programs, have increased.[11,12] Prior studies have indicated that various violence prevention programs may be effective ways to increase life-long violence management and self-care among adolescents.[13,14] School health promotion programs also have been found to help improve adolescent health.[14] Successful violence management programs for adolescents appear to be built around activities that foster the adolescents' abilities to: gain knowledge about difficulties that occur during adolescence;[15] cultivate a negative attitude toward the use of violence;[16] and, acquire new violent management skills.[2]

Promotion of adolescent's self-care capabilities has been recognized as an important aspect in the development of management strategies to prevent negative physical and psychological outcomes.[17,18] Nurses can help adolescents acquire self-care capabilities that foster engagement in: effective decision management; control of violent tendencies; and, use of appropriate health service resources (i.e. family, school and community). Although prior Thai research has focused on the educational and psychological aspects of violence management,[19,20] prevention intervention studies, developed from a nursing perspective, have not been conducted in Thailand. Therefore, the aim of this study was to develop and evaluate the effectiveness of a violence prevention program for Thai high school adolescents. The focus of the program was to motivate Thai adolescents to carry out self-care practices to control their signs of violence, aggressive behaviors, and unfavorable attitudes toward violence.

It was hypothesized that increased knowledge of self-care practices, related to violence, would cultivate negative attitudes toward the use of violence and help the adolescents develop violence management skills. It was felt that an effective program could foster new guidelines for improving self-care practices among Thai adolescents.

Conceptual Framework

The violence prevention program, in this study, was based on Orem's Self-Care Deficit Theory of Nursing (SCDT)[18] and a concept analysis of violence. According to Orem, self-care involves the activities an individual initiates and performs to maintain his/her life and well-being.[18] Thus, it is important to foster

adolescents' capabilities to respond to their self-care needs for managing violence through the three phases of self-care: *estimative, transitive and productive.* The *estimative phase* involves, for those capable of gaining knowledge, having insight into their situation, and knowing the signs of violence, violence risk factors and effective violence prevention. This phase also incorporates evaluation of one's health history, via physical examination and assessment of health compromising behaviors, including his/her: developmental stage; cognitive functioning; support systems; ability to make appropriate decisions; and, self-care abilities. The *transitive phase* involves one's ability to attend to decision-making. This phase is a crucial step in self-care and a time when health care providers should ask adolescents how they feel (i.e. satisfied, regretful or guilty) about their symptoms of violence and/or violent encounters. By so doing, one can assess whether an individual is trying to manage his/her signs of violence and perform self-care, as well as whether his/her behavior is associated with self-care activities in respect to management of violence. The *productive* phase focuses on determination of one's level of competence in achieving self-care agency. Such determination is needed to assess what an adolescent needs to do to manage his/her signs of violence, so as to judge whether the person performed a suitable action and controlled his/her behavior, as well as the effect and outcome of his/her decision making.

Method

Design: This study utilized a within-group repeated measures design to examine the effectiveness of a violence prevention program for Thai adolescents.

Ethical Considerations: Approval to conduct the study was granted by the Institutional Review Board of the Faculty of Nursing of the primary investigator's (PI) academic institution. The adolescent students' counseling teachers, who served as research assistants (RA), called the students' parents and sent them an information letter explaining the study's purpose, procedure and benefits. In addition, potential adolescent subjects were verbally informed about: the purpose of the study; what their involvement would entail; anonymity and confidentiality issues; and, the right to withdraw at any time without repercussions. Parents who allowed their children to participate were asked to sign a consent form. Adolescents, who consented to take part in the study, after their parents' approval was obtained, were asked to sign an assent form.

Sample and Setting: The sample was obtained from a high school within a province in southern Thailand. The school was selected because it supported a health promotion policy that was attentive to preventing inappropriate behavioral problems among adolescent students, and its population was representative of adolescents who had signs of violence. The names of potential subjects were obtained via advertisement (a brochure posted on the information board of the school and an announcement in the classroom). Seventy students responded to the advertisement, however, only 45 of them met the inclusion criteria.

Inclusion included adolescent students who were: enrolled in the high school selected as a study site; 12 to15 years of age; demonstrating moderate to high aggressive behavior, favorable attitudes toward violence and mild to moderate violent management skills; willing to participate, with parental approval, in the study; and, not participants in any program related to violence management. Subjects were excluded if they had been diagnosed with, or treated for, violent behavior or substance abuse.

The 45 adolescents, predominantly, were: 12 to 15 years of age (mean = 13.44 years); Buddhist (n = 43; 95.5%); female (n = 28; 62.2%); and, living with parents (n = 39; 86.67%) who were married (n = 40; 88.89%). Forty-two (93.33%) of them had one to three siblings. Three (6.67%) other students had four to six siblings. Their five most favorite leisure activities were: listening to music

(n = 8; 17.78%); reading books or magazines (n = 7; 15.56%); playing sports (n = 6; 13.33%); playing computer games (n = 6; 13.33%); and, caring for pets (n = 5; 11.12%). The majority (n = 23; 51.1%) of their families had monthly incomes of less than 5,000 baht. In addition, 46.6% (n=21) of their fathers and 40% (n=18) of their mothers had a secondary school education, with 40% (n=18) of their fathers and 31.1% (n=14) of their mothers being an employee. Only 28.9% (n = 13) of the adolescents had experienced violence within the family, while 80% (n = 36) of them had experienced violence in school. Their experiences with violence, within the family included: fighting with siblings (n = 6; 46.15%); parents quarreling (n = 4; 30.77%); and, parents punishing their children (n = 3; 30.55%). Their experiences with violence in school included: gang or peer fighting (n = 11; 30.55%); harming others (n = 10; 27.78%); rudeness (n = 7; 19.44%); assault among high school seniors (n = 6; 16.67%); and, punishment, by teachers, of offending students (n = 2; 5.56%).

Instruments: Data were collected via six instruments, including: a researcher-developed Personal Data Sheet; a modified version of Buss' and Perry's Aggressive Behaviors Scale;[21] Buss' and Perry's Observational Aggressive Behavior Scale;[22] a modified version of Brillhart's, Jay's and Wyers' Attitude Toward Violence Scale;[16] a researcher-developed Violence Management Skills Test; and, a researcher-developed Student Satisfaction with the Violence Prevention Program Questionnaire. None of the instruments, used in this study, were copyrighted. All of the questionnaires were either originally written in Thai or previously been translated into Thai.

The 13-item Personal Data Sheet (PDS) was used to obtain information regarding each subject's demographics, including his/her: gender; religion; parental marital status; number of persons living in the household; number of offspring in the family; leisure activities; family's monthly income; parents' educational levels; parents' occupations; violence experienced in the family, including types of violence; and, violence experienced at school, including types of violence. The subjects took about 5 minutes to complete the PDS.

Buss' and Perry's Aggressive Behaviors Scale (ABS)[22] was modified and translated into Thai by Sutin.[19] The modified Thai version of the ABS (T-ABS), in which the language was modified to match the Thai culture, was used in this study. The T-ABS was a 58-item, uni-dimensional, instrument consisting of two subscales: one that required self-assessment of verbal (i.e. criticizing or blaming) aggressive behavior and one that required self-assessment of non-verbal (i.e. pulling or snatching at clothes) aggressive behaviors. An example of a verbal aggressive behavior item was: "I shout loudly to others: You're so stupid." An example of a non-aggressive behavior item was: "When I am dissatisfied with others, I sometimes make their books dirty." The subjects rated their experiences involving the use of violence on a scale of 0 = "never" to 4 = "frequently." The total score was computed by adding the response scores across items, for a possible score of: 0 to 77 = mild aggression; 78 to 155 = moderate aggression; and, 156 to 232 = high aggression. As in prior studies,[19] the internal consistency reliability of the T-ABS, in this study, was 0.95. It took the subjects approximately 20 minutes to complete the T-ABS.

Buss' and Perry's 23-item Observational Aggressive Behavior Scale (O-ABS)22 was used to measure, via observation, the frequency of verbal (8 items: i.e. blaming) and physical (15 items: i.e. messing things up) aggressive behaviors during a typical day. An observer was to count, for 50 minutes, the frequency of behaviors in three different settings: inside the classroom, outside the classroom and during home room. A total score was determined by adding the number of observed behaviors, within 50 minutes, in each setting. The higher the number of observed verbal and physical behaviors, the higher the incidence

of aggression. Two RAs trained, by the PI, in use of the instrument, simultaneously observed each adolescent. Both of the RAs were the students' counseling teachers. Although, no clear inter-rater reliability was reported in prior research, the inter-rate observer reliability, in this study, was 0.74 (Kappa).

The 33-item Thai-Attitude Toward Violence Scale (T-ATVS)[23] was a modified version of the ATVS questionnaire developed by Billhart, Jay and Wyers.[16] The instrument was used to measure, via self-report, cognitive (11 items: i.e. "I use violence as a means of problem solving"), affective (12 items: i.e. "I don't like to see fighting among others") and behavioral components (10 items: i.e. "I usually control myself, when I am teased, without using violence") of positive and negative attitudes toward violence. Respondents rated their positive and negative attitudes toward violence on a 4-point scale (1 = "strongly disagree" to 4 = "strongly agree"). The total score, which could range from 1 to 4, was determined by summing response values across all items and then dividing the score by 33 to obtain an average score. No determination of subscale scores was made. Interpretation of the total score was the same as that used by Pandaeng,23 whereby: 1.00 to 2.00 = mild attitude toward violence; 2.01 to 3.00 = moderate attitude toward violence; and, 3.01 to 4.00 = high attitude toward violence. It took subjects approximately 10 minutes to complete the questionnaire. Prior research found the T-ATVS to have an internal consistency reliability of 0.85.23 The internal consistency reliability of the instrument, in this study, was 0.96.

The researcher-developed Violence Management Skills Test (VMST) consisted of two-parts that incorporated instruments developed by Limparatanagorn[20] and Tungklave.[24] The VMST was used to assess the adolescents' ability to utilize various skills (i.e. problem solving, coping with emotions and stress, interpersonal relationships skills and social responsibility) in managing violent behavior. Part I of the VMST, an unmodified version of Limparatanagorn's instrument, contained 44 items within three subscales that measured: problem-solving skills (12 items: i.e. "I like to view problems in different ways."); ability to cope with emotions and stress (19 items: i.e. "I am calm and rarely get mad with others."); and, interpersonal relationships skills (13 items: i.e. "I always think carefully before speaking.").[20] All items were self-ratings using the possible responses: 1 = "not true;" 2 = "somewhat true;" and, 3 = "true." A score for each of the subscales, which could range from 1 to 3, was determined by summing the response values across the items in each respective subscale and then dividing the score by the number of items in the respective scale, so as to obtain an average score. A total score for the VMST, which could range from 1 to 3, was obtained by summing the response values across all items and then dividing by 44 to obtain an average score. Interpretation of the total score was the same as that used by Limparatanagorn,[20] whereby: 1 to 1.66 = mild use of problem-solving, coping, and interpersonal relationships skills; 1.67 to 2.33 = moderate use of problem-solving, coping, and interpersonal relationships skills; and, 2.34 to 3.00 = high use of problem-solving, coping, and interpersonal relationships skills.20 Prior reliabilities of the three subscales (problem-solving skills, ability to cope with emotions and stress, and interpersonal relationships skills) were 0.64, 0.82 and 0.74, respectively.[20] The reliabilities for the three sub-scales, in this study, were: 0.94 (problems solving skills); 0.91(coping with emotions and stress); and, 0.94 (interpersonal relationships skills). Part II of the VMST consisted of a modified version of Thungklave's instrument, which was designed to measure social responsibility.[24] Item wording was modified so as to make the items more understandable by the adolescents. Part II contained 47 self-rated items (27 positively and 20 negatively stated) that were organized within four categories: political responsibility; responsibility to family; responsibility to school; and, responsibility

to friends. Examples of positively stated items from each of the four categories were: "I turn off the lights every time I leave the room" (political responsibility); "I help my mother clean the house" (responsibility to family); "I submit all school assignments on time" (responsibility to school); and, "I always help my friends when they are faced with problems" (responsibility to friends). Examples of negatively stated items from each of the four categories were: "I throw garbage anywhere I want" (political responsibility); "I don't think cleaning plates after a meal is my responsibility, since I am young" (responsibility to family); "I don't like it when the teacher gives me too much homework, since I want to rest" (responsibility to school); and, "When the teacher assigns group work, I frequently leave it for my friends" (responsibility to friends). The possible responses to both the positively and negatively stated item responses where: 4 = "very true;" 3 = "true;" 2 = "somewhat true;" and, 1 = "not true." A total score was calculated by summing the response scores across items and then dividing by 47 to obtain an average score. Interpretation of the score was the same as that used by Thungklave, whereby: 1 to 1.66 = mild use of social responsibility; 1.67 to 2.33 = moderate use of social responsibility; and, 2.34 to 3.00 = high use of social responsibility.[24] The internal consistency reliability for the second part of the VMST, in this study, was 0.96. It took the adolescents approximately 30 minutes to complete the entire instrument.

The PI-developed 12-item self-report Student Satisfaction with the Violence Prevention Program Questionnaire (SSVPPQ) was used, after completion of each of the three phases of the program (estimative, transitive and productive), to assess the adolescents' satisfaction with the effectiveness of the program activities. Questionnaire items were generated from a literature review regarding evaluation of violence projects.[25] Prior to its use, the content validity and item clarity of the SSVPPQ were assessed by a psychiatric nurse with expertise in Orem's Self-Care framework,[18] a community health nurse, two psychiatrists, and two psychologists. The results of the experts' assessment of the SSVPPQ lead to no changes being made in the instrument. Examples of items from the questionnaire included: "I am satisfied with the program" and "I am satisfied with what I have learned about managing my violent behavior." Each item was rated from 1 = "low satisfaction" to 5 = "high satisfaction." A total score was obtained by summing across the responses to the 12 items and dividing by 12 to obtain a mean score. Scores were interpreted as: 1 to 2.67 = mild satisfaction; 2.68 to 4.35 = moderate satisfaction; and, 4.36 to 5.00 = high satisfaction. The internal consistency reliability of the instrument, in this study, was 0.94.

Violence Prevention Program: Development of the program involved three types of key stakeholders (two teachers who had experience in dealing with adolescents manifesting violent behavior; 12 adolescents who were not part of the study, but were similar to the study subjects; and, six parents of the 45 adolescent subjects). These stakeholders shared their views on violence and strategies suited for adolescents' management of violence via two, PI-lead, focus groups. Each focus group, which lasted approximately 45 minutes, consisted of six students, one teacher and three parents. Each focus group was held in the counseling room of the adolescents' school. As a result of the focus groups' findings, the PI developed 12 program activities and an activity program guide. Each of the activities took 50 to 60 minutes to complete. The adolescents participated, as a group, in one activity each week over 12 weeks. The PI directed the weekly activity, each Thursday, in a school classroom.

The first component of the program, the estimative phase, focused on examining positive aspects of self-awareness and engaging in self-investigation. During this phase, the adolescents participated in two activities: self-investigation of feelings/emotions and self-examination of various

responses to feelings/emotions. Self-investigation of feelings/emotions required them to think about their own feelings/emotions and then verbally share their feelings/ emotions with others involved in the activity. Self-examination of feelings/emotions involved the adolescents examining a variety of facial pictures that reflected various feelings/emotions (i.e. sad, happy, loving or violent) and then discussing, with group members, what they believed the pictures represented, and if and when they had such feelings/emotions.

The second component of the program, the transitive phase, focused on: managing negative feeling/emotions that can lead to violence; using behaviors that prevent violence; and, recognizing attitudes and behaviors that discourage violence. Four activities were implemented during this phase: examination of how specific situations influence feelings/emotions, which, subsequently, can lead to violent behavior; use of coping techniques for dealing with feelings/emotions that can lead to violent behavior; development of relationship skills, through effective communication, that can facilitate the prevention of violent behavior; and, learning about empathetic understanding so as to prevent violent behavior. Examination of how specific situations influence feelings/emotions that can lead to violent behavior involved reviewing a written scenario that reflected a difficult situation and then discussing, with group members, what could be done in the scenario to prevent violent behavior. The use of coping techniques for dealing with feelings/emotions that could lead to violent behavior required the adolescents to review another scenario, reflecting a difficult situation, and identify the coping techniques used within the scenario to prevent violent behavior. The students then were asked to practice, in a group setting, coping techniques (i.e., seeking guidance from others, consulting with a teacher, and demonstrating self-control) identified in the scenario. Development of relationship skills that can facilitate the prevention of violent behavior involved the students learning about effective verbal and non-verbal communication. This task was carried out by having each student write on one 3 x 5 card a word that can lead to violent behavior and on another 3 x 5 card a word that that can prevent violent behavior. The PI then presented and discussed, with the group, all of the words the students had written. The focus of this activity was to show how effective communication can facilitate development of good relationships with others which, in turn, can help prevent situations that can lead to manifestation of violent behavior. Finally, learning about empathetic understanding, so as to prevent violent behavior, focused on use of active listening and reflective words for the purpose of understanding what others were trying say. The content was presented, by the PI, by way of lecture. The students then were required to practice, with group members, how to actively listen and use reflective words.

The third component of the program, the productive phase, focused on: enhancing the use of behaviors that prevent or reduce, via problem-solving in everyday life, the likelihood of violence; doing self-evaluation; and, internalizing new responsibilities/ new attitudes toward violence prevention in society. Six different activities were implemented during this phase of the program: applying interpersonal relationship skills to prevent violent behavior; learning how problem-solving skills can prevent violent behavior; developing problem-solving skills for real life; learning different problem-solving approaches; learning about social responsibility; and, applying social responsibility skills in real life. Applying interpersonal relationship skills to prevent violent behavior required the adolescents to practice their verbal/non-verbal communication skills. The PI asked the students to describe specific situations that could provoke occurrence of violent behavior and then demonstrate, via role playing, how they might verbally and/or non-verbally respond to the situation. Learning how problem-solving skills can prevent violent

behavior involved the adolescents discussing and sharing, with group members, how to go about solving problems described in a specific violence-provoking scenario. The focus of this activity was to demonstrate, to the students, how problem-solving skills can foster appropriate versus inappropriate behavior. Learning different problem-solving approaches required the adolescents to present ideas to the group, from an assigned scenario, using the techniques they learned in previous activity sessions (i.e. coping techniques, communication skills, active listening, and using reflective words). Each adolescent was asked to present how he/she would go about not using violent behavior in dealing with the situation described in the scenario. Developing problem-solving skills for real life required the students to write down the various problems and/or personal situations they had encountered that lead to their use of violent behavior. Each adolescent then shared, with the group, his/her problems/situations and told what he/she should have done to prevent the use of violent behavior. The purpose of this activity was to focus on how each student could prevent using violent behavior when faced with a difficult situation. Learning about social responsibility involved the adolescents sharing examples of activities in which they demonstrated various types of social responsibility (i.e. political, family, school and friends). Through sharing their social responsibility experiences they learned new ways of demonstrating responsible behavior. The last activity in this phase, applying social responsibility skills in real life, required the students to work in a small group (i.e. six to seven students per group) for the purpose of proposing a social project and the roles they each would play in developing and implementing the project. Each small group then presented their project ideas to all of the other adolescents.

Procedure: After consent/assent was obtained, the PI administered, in a school classroom as a baseline measure, the PDS, ABS, T-ATVS, and VMST. In addition, the two RAs, using the O-ABS, observed and recorded the students' behaviors in their respective classrooms, home rooms, and outside the classroom, but in the school setting. All 70 adolescents, who initially consented to be in the study, were administered the questionnaires and observed for the purpose of determining if they met the study's inclusion criteria. Only 45 of the 70 adolescents were found to meet the inclusion criteria and, as a result, were retained as subjects. The other adolescents were thanked for their time, but informed they would not be continuing in the study.

After the questionnaires were administered, two focus groups were held for the purpose of providing the PI information that could be used in the development and implementation of the Violence Prevention Program activities. Twelve weeks from the baseline testing, the ABS, T-ATVS and VMST again were administered to the students. Then the 12-week Violence Prevention Program was implemented. At the end of each of the three phases of the program (estimative, transitive and productive), the adolescents were administered the SSVPPQ to determine their satisfaction with the program activities in each respective phase. Upon completion of the 12-week program, the students were administered, for the third time, the ABS, T-ATVS and VMST, and observed, for a second time, using the O-ABS.

Data Analysis: Descriptive statistics were used to assess the demographic characteristics of the adolescents and to compute the scores for the instruments used in the study. Repeated measures analysis of variance (RM-ANOVA) was employed to examine the outcomes at three different assessment times, including: baseline (0 week), pre-intervention (12th week) and post-intervention (24^{th} week). Frequencies and percentages were used to compare observed events of physical and verbal aggressive behavior at baseline and post-intervention. Means and standard deviations were computed to examine scores for student satisfaction with the activities implemented during the three phases of the violence prevention program.

Results

The mean scores for attitudes toward violence after program completion (M = 2.09; SD = 0.35) were significantly lower [$F_{(2,88)} = 53.37$; $p \leq 0.001$] than the mean scores found at pre-intervention (M = 2.51, SD = 0 .27). No significant difference in the mean scores for attitudes toward violence were found between the baseline scores and pre-intervention scores (M = 2.57, SD = .33; M = 2.51, SD = 0.27).

The aggressive behavior mean scores at post-intervention (M = 0.85; SD = 33) were significantly lower [$F_{(2,88)} = 116.48$; $p \leq 0.001$] than at pre-intervention (M = 1.67, SD = 24). No significant difference in the aggressive behavior mean scores were found between the baseline scores and the pre-intervention scores (M = 1.67, SD = 0.24; M = 1.72, SD = 0.25). Moreover, many of the adolescent students' observed physical aggressive behaviors were found to be less frequent after program completion compared to their observed physical aggressive behaviors at baseline. The frequencies of observed events involving physical and verbal aggressive behaviors, during these two periods, are illustrated in **Figures 1 and 2.**

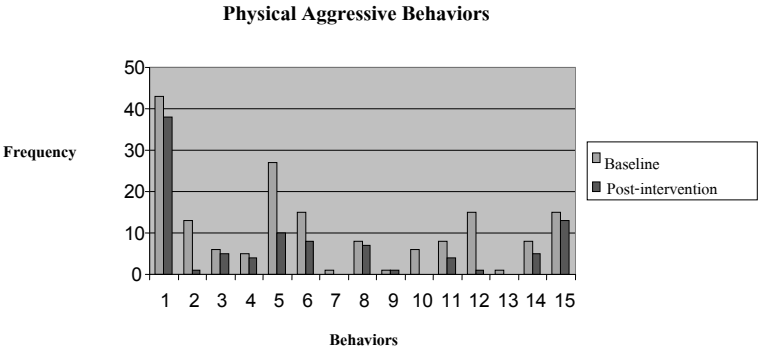

Figure 1: Frequency of Observed Physical Aggressive Behaviors

1 = Harmful to others; 2 = Caused object or property damage; 3 = Pulled or snatched clothes; 4 = Pushed somebody; 5 = Ridiculed; 6 = Threw things at another; 7 = Forced others to do something unwillingly; 8 = Messing things up; 9 = Hid other students' things; 10 = Hit somebody; 11 = Had fights; 12 = Pushed over property; 13 = Put up feet or middle figure to imprecate; 14 = Made faces; 15 = Banged table loudly.

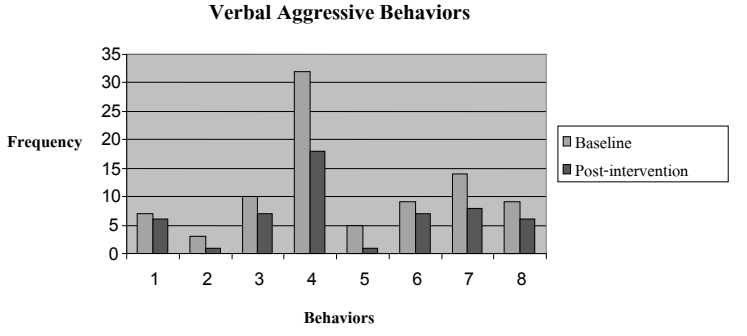

Figure 2: Frequency of Observed Verbal Aggressive Behaviors

1 = Blaming; 2 = Teasing about a friend's and family's name; 3 = Criticizing; 4 = Shouting loudly; 5 = Gossiping; 6 = Speaking sarcastically; 7 = Rudeness; 8 = Threatening

Regarding the adolescents' violence management skills, a significant increase [$F_{(2,88)} = 77.99$; $p < 0.001$] in interpersonal relationship skills means scores was found from pre-intervention (M = 1.93; SD = 0.29) to post-intervention (M = 2.39; SD = 0.24). No significant difference was found in mean scores between baseline and pre-intervention (M = 1.87, SD = 0.24; M = 1.93, SD = 0.29). Comparisons of the problem-solving skills mean scores indicated a significant increase [$F_{(2,88)} = 4.76$; $p < 0.05$] between pre-intervention and post-intervention (M = 2.14, SD = .26; M = 2.29, SD = .25). No significant difference was found in problem-solving skills mean scores between baseline (mean = 2.17, SD = 0.33) and pre-intervention (mean = 2.14, SD = 0.26). The mean scores for coping with emotions and stress were found to be significantly higher [$F_{(2,88)} = 28.51$; $p \leq 0.001$] at post-intervention (M = 2.39; SD = 0.21) than at pre-intervention (M = 2.18; SD = 0.19) No significant differences were found in the coping mean scores between baseline (M = 2.18; SD = 0.19) and pre-intervention (M = 2.19; SD = 0.30). The mean scores for social responsibility were found to be significantly higher [$F_{(2,88)} = 13.12$; $p \leq 0.001$] at post-intervention (M = 3.20; SD = 0.23) than at pre-intervention (M = 2.96; SD = 0.30). No significant differences were found in scores between baseline (M = 2.84; SD = 0.35) and pre-intervention (M = 2.96; SD = 0.30).

Mean scores for the students' satisfaction with the program activities, which was assessed at the end of each phase of the program, reflected a high level of satisfaction (4.36 to 5.00). The mean scores for each of the phases were: estimative (M = 4.38; SD = 0.39); transitive (M = 4.36, SD = 0.53); and, productive (M = 4.36, SD = 0.55).

Discussion

The research-developed, 12-week Violence Prevention Program was found to be successful. After completion of the program, the adolescents' aggressive attitudes and behaviors decreased, while their violence management skills (i.e. interpersonal relationship skills, coping with emotions and stress, problem-solving skills, and social responsibility skills) increased. In addition, the students' satisfaction with the 12-week intervention program was high.

The fact the adolescents were able to decrease their aggressive attitudes and behaviors, and increase their violence management skills, after completion of a violence prevention program that focused on self-care, was similar to findings in prior research.[25] For example, Cutler[26] found that a person's improvement in self-care can lead to autonomy and ongoing behavioral management, as well as a lower chance of recidivism into violence. Furthermore, it has been noted that a reduction in aggressive behavior can occur concurrently with the development of self-care skills, which, in turn, can lead to marked improvement in behavior.[27] McCaleb and Cull[28] found, among adolescents from various socio-cultural backgrounds, instruction on self-care practices needs to be incorporated into an overall violence prevention program. In addition, it has been noted that when adolescents are confronted with aggression from others, highly aggressive adolescents tend to have difficulty arriving at non-aggressive solutions and believe aggression is the answer to adverse treatment by others.2[9, 30, 31] Most related literature suggests that changing self-care behavior promotes well-being among adolescents.[32,33,34] Similarly, a positive relationship between health-promoting self-care behavior and self-care efficacy, in the adolescent population, has been found.[35]

The success of the program, most likely, was due to the self-care focus of the program and its design. Prior studies have pointed out that changing an adolescent's self-care behavior enhances his/her sense of well-being.[36] In addition, a positive relationship between health-promoting self-care behavior and self-care efficacy has been noted among adolescents.[37,38]

The fact the violence prevention program included the use of self-care methods, which has been encouraged by other researchers,[39] may have had an influence on the effectiveness of the program. The program was developed around a series of goals and activities that focused on providing adolescents with direction regarding how to engage in self-care.

The violence prevention program involved a weekly session, for 12 weeks, that lasted 50 to 60 minutes. The length and number of sessions was consistence with suggestions from prior work on violence among adolescents.[40] It is important to note the length and intensity of a violence prevention program must be sufficient for participants to gain mastery of violence knowledge and management skills, as well as produce significant behavioral changes when in a social setting.[41,42] The findings suggest the length and intensity of the content presented, in this study, was sufficient to bring about change in the adolescents' attitudes, behaviors, and management skills related to violence. It must be kept in mind, however, that the approach and optimal time for presenting a violence prevention program may vary, depending upon the demographics of the program participants.[43] In addition, this study's program employed the use of multiple measurement procedures (i.e. self-assessments, self-reports, and observations) to determine changes made in the adolescents' attitudes, behaviors, and management skills related to violence. These measures were similar to those used in prior studies on adolescent violence.[42] Utilization of multiple sources of measurement helps decrease bias and supports psychometric standards appropriate for the specific aim of a program.[44]

The adolescents indicated high satisfaction with all phases of the program and appeared to want to participate in each weekly activity, as well as attend each weekly session. This could have been related to the type of activities used in the program, as well as the fact the students were doing something with their peers.

Limitations and Recommendations

Prior to using the study's findings, the limitations of the study must be taken into account. The study involved predominately females and was conducted among students in only one high school. Also, a repeated measures design was used in the study without involvement of a randomized control group. Thus, since baseline and pre-intervention tests cannot adequately serve the same function as a control group, there may have been uncontrolled threats to the study's validity. In addition, a longitudinal follow-up was not accomplished so as to assure sustainability of the program's outcomes, over time. Thus, no guarantee can be made that the adolescents will be able to sustain use of non-violent behavior. The study also failed to include examination of environmental variables that could have supported or impeded the students' attitudes toward violent behavior. This is important, at the individual level, since adaptation of behaviors is known to not likely persist if the behavior adaptations are not supported by a suitable environment.[45] As one might suspect, it was not possible to control the type of information or experiences the adolescents encountered, during the study, related to violence. This factor could have influenced the results of the various assessments (baseline, pre-intervention, post-intervention testing).[46] Finally, because of the structure and values of the school system, the researchers were somewhat limited regarding the program content that could be taught.

Based upon these limitations, the following factors need to be considered when conducting future research regarding development and implementation of a violence prevention program: inclusion of an equal number of male and female students; use of multiple schools located in various geographic areas throughout Thailand; inclusion of a control group; longitudinal designs to address the long-term effects of a program; and, examination of environmental variables that could support or impede adolescents' attitudes toward violent

behavior. Given the nature of research dealing with the development and implementation of a violence prevention program, it may not be possible for researchers to control the information and experiences encountered by adolescents, related to violence, or the content and activities included in a prevention program when it is offered within a school environment. Both of these issues are realities related to addressing violence among adolescent students. Furthermore, future studies also need to consider comparing the program needs of adolescents who have moderate violence tendencies versus those with severe violence tendencies, as well as those with mental health problems who manifest violent behavior.

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References

1. UNICEF. Child protection from violence, exploitation and abuse. [cited 2004 Mar 7]. Available from: http://www.unicef.org/protection/index html.
2. World Health Organization. World report on violence and health: A public health context for school-based violence prevention. [cited 2005 Nov 3]. Available from: http://www.crime- prevention.org/ features/pdf.
3. World Health Organization. World report on violence and health: Global Campaign for Violence Prevention. [cited 2006 Mar 7]. Available from: http://www.who.int/violence_injuryprevention/violence/ht ml.
4. Thongkliang D. Situation of violence and preventive measures in secondary schools of Bangkok metropolis and vicinity [thesis]. Bangkok, Thailand: Chulalongkorn Univ.; 2003.
5. Ministry of Public Health. Manual for the prevention and solving of violence problems in school. [cited 2005 May 25]. Available from: http://www.moethaiteen.com/images/1107526711/.ppt.
6. Department of Disease Control. Trend and epidemiology report on assaults: National injury surveillance of Thailand in 2000-2005. [cited 2006 Jun 29]. Available from: http://epid.moph.go.th.
7. Black MC, Noona R, Legg M, Eaton D, Breiding MJ. Physical dating violence among high school students - United States. [cited 2007 Jun 28]. Available from: http://findarticles.com/p/articles/m0906/pg_2.
8. Fields AS, McNamara RJ. The prevention of child and adolescent violence: A review. Aggress Violent Behav. 2003; 8: 61-91.
9. Calvete E, Orue I. The impact of violence exposure on aggressive behavior through social information processing in adolescents. Am J Orthopsychiatry. [cited 2011 Jan 10]. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21219274.
10. Sura-arunsumrit B. A case study: Evaluation and management of psychosocial impact in the student crime act in a secondary school, southern Thailand. Proceedings of the 2nd International Conference on Mental Health and Substance Dependence; 2003 Aug 19-21; Bangkok, Thailand.
11. International Clinical Epidemiology Network. Adolescent health. [cited 2005 Dec 16]. Available from: http://www.inclen.org/research/an.html.
12. Ruangkanchanasetr S. Youth risk behavior survey. J Adolesc Health. 2005; 36: 227-35.
13. Tapanya S. No violence in schools. [cited 2008 Dec 25]. Available from: http://www.noviolenceinschools.net,?page_id=10.
14. Stewart R. Adolescent self-care: Reviewing the risks. Fam Soc. 2001; 82: 119-26.
15. Mytton JA, DiGuiseppi C, Gough D, Taylor RS, Logan S. School-based secondary prevention program for preventing violence. Cochrane Database of Systematic Review. 2009; 3: 1-20
16. Brillhart BA, Jay H, Wyers ME. Attitudes toward people with disabilities. Rehail Nurs. 1990; 15: 80-2.
17. Paniagua FA. Development of self-care skills and helping behaviors of adolescents in a group home through correspondence training. J Behav Ther Exp Psychiatry. 2002; 16: 237-44.
18. Orem DE. Nursing: Concepts of practice. 6th ed. St. Louis (MO): Mosby; 2001.
19. Sutin T. The reduction of adolescent students' aggressive behavior through a cognitive modification model [thesis]. Bangkok, Thailand: Chulalongkorn Univ.; 1996.

20. Limparatanagorn P. The effect of a health program applying life skill techniques with participatory learning on violent management skills to prevent violent behaviors of Mattayomsuksa 1 students in Mattayomwatdusitaram School [thesis]. Bangkok, Thailand: Srinakharinwirot Univ.; 2004.
21. Vitoratou S, Ntzoufras I, Smyrnis N, Stefanis NC. Factorial composition of the Aggression Questionnaire: A multi-sample study in Greek adults. Psychiatry Res. 2009; 168(1): 32-9.
22. Buss AH, Perry M. The Aggression Questionnaire. J Pers Soc Psychol. 1992; 63: 452-59.
23. Pandaeng S. The relationship between emotional intelligence and attitudes toward violence of secondary school students: A case study of Kanchanapisekwitthayalai Krabi School [thesis]. Bangkok, Thailand: Kasetsart Univ.; 2004.
24. Tungklave S. The effectiveness of group activities toward social responsibility on the students of Prattom 6 [thesis]. Bangkok, Thailand: Naraesoung Univ.; 2005.
25. Cull VV. Exposure to violence and self-care practices of adolescents. Fam Comunity Health. 1996; 19: 31-41.
26. Cutler CG. Self-Care agency and symptom management in patients treated for mood disorder. Arch Psychiatr Nurs. 2001; 1: 24-31.
27. Vollmer TR, Iwata BA, Smith RG, Rodgers TA. Reduction of multiple aberrant behaviors and concurrent development of self-care skills with differential reinforcement. Res Dev Disabil. 1992; 13: 287-99.
28. McCaleb A, Cull VV. Sociocultural influences and self-care practices of middle adolescents. J Pediatr Nurs. 2000; 15: 30-5.
29. Dodge KA, Lansford JE, Salzer Burks V, Bates JE, Pettit GS, Foantecentaine R, *et al.* Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. Child Dev. 2003; 74: 374-93.
30. Hudley CA. Perceptions of intentionality, feelings of anger, and reactive aggression. In: MJ Furlong MJ, Smith DC, editors. Anger, hostility, and aggression: Assessment, prevention, and intervention strategies for youth. Brandon (VT): Clinical Psychology Publishing; 1994.
31. Lochman JE, Dodge KA. Social cognitive processes of severely violent, moderately aggressive, and non-aggressive boys. J Consult Clin Psych. 1994; 62: 366-74.
32. Estes SD, Hart M. A model for the development of the CNS role in adolescent health promotion self-care. Clin Nurse Spec. 1993; 7: 111-5.
33. Hartweg DL. Self-care actions of healthy middle-aged women to promote well-being. Nurs Res. 1993; 42: 221-7.
34. National Institute of Nursing Research. Health promotion for older children and adolescents. Bethesda (MD): National Institute of Health; 1993.
35. Callaghan DM. Basic conditioning factors' influences on adolescents' healthy behaviors, self-efficacy, and self-care. Pediatr Nurs. 2005; 31: 91-5.
36. Funk JB. Children's exposure to violent video games and desensitization to violence. Child Adol Psycho Cl. 2005; 14: 387-404.
37. Kongsuwan V, Suttharangsee W, Isaramalai S, Kools S. Perspectives of adolescents, peers, parents, and teachers on youth violence. Proceedings of the 10th World Congress on Self-Care and Nursing: Reflecting the Past-Conquering the Future; 2008 June 26-29; Vancouver BC, Canada.
38. Renpenning KM, Susan G, Taylor SG. Self-care Theory in Nursing selected papers of Dorothea Orem. New York (NY): Springer Publishing Co.; 2003.
39. Callaghan DM. The influence of spiritual growth on adolescents' initiative and responsibility for self-care. Pediatr Nurs. 2006; 29: 191-204.
40. Callaghan DM. Basic conditioning factors' influences on adolescents' healthy behaviors, self-efficacy, and self-care. Pediatr Nurs. 2005; 31: 91-5.
41. Linsley P. Kane R. Social capital indicators in predicting, and assessing, violence and aggression in adolescent communities. Proceedings of the 2nd International Conference on Violence in the Health Sector: From Awareness to Sustainable Action. 2010 Oct 27-29; Amsterdam, The Netherlands.
42. Mytton JA, DiGuiseppi C, Gough D, Taylor RS, Logan S. School-based secondary prevention programmers for preventing violence. Cochrane Database of Systematic Reviews. 2009; 3: 1-20.
43. Dahlberg LL, Toal SB, Swahn MH, Behrens CB. Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools. Atlanta (GA): Centers for Disease Control and Prevention; 2005.
44. Lutzker JR. Handbook of child abuse research and treatment. New York (NY): Plenum Press; 2006.
45. Flannery DJ, Vazsonyi AT, Liau AK, Guo S. Initial behavior outcomes for the peace builders universal school-based violence prevention program. Dev Psychol. 2003; 39(2): 292-308.
46. Farrell AD, Meyer AL, Kung EM, Sullivan TN. Development and evaluation of school-based violence prevention programs. J Clin Child Psychol. 2001; 30: 207-20.

การพัฒนาและประสิทธิผลของโปรแกรมการป้องกันความรุนแรง ต่อความรุนแรงของนักเรียนวัยรุ่นไทย ในโรงเรียนมัธยมศึกษา

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บทคัดย่อ: การใช้ความรุนแรงในวัยรุ่นมีจำนวนมากขึ้น และเป็นปัญหาสังคมที่ควรได้รับการดูแล การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาประสิทธิผลของโปรแกรมการป้องกันความรุนแรงต่อความรุนแรงของนักเรียนวัยรุ่นไทยในโรงเรียนมัธยมศึกษา โปรแกรมสร้างขึ้นจากทฤษฎีความพร่องในการดูแลตนเองและแนวคิดความรุนแรง ทำการทดสอบประสิทธิผลโดยใช้รูปแบบการวิจัยเชิงทดลอง ซึ่งศึกษาเปรียบเทียบระหว่างช่วงเวลาที่มีกลุ่มตัวอย่างเป็นนักเรียนวัยรุ่น 45 คน อายุ 12-15 ปี ประเมินประสิทธิผลของโปรแกรมโดยใช้แบบวัดพฤติกรรมก้าวร้าว แบบวัดทัศนคติทางบวกต่อการใช้ความรุนแรง แบบวัดทักษะการจัดการความรุนแรง ได้แก่ ทักษะการสร้างสัมพันธภาพระหว่างบุคคล การเผชิญกับภาวะอารมณ์ และความเครียด ทักษะการแก้ไขปัญหา และความรับผิดชอบต่อสังคม และใช้การสังเกต พฤติกรรมการใช้ความรุนแรงทางร่างกาย และทางวาจา จากระยะเริ่มต้นในสัปดาห์แรก หลังจากนั้นนักเรียนยังคงได้รับการดูแลตามสภาพเดิมของโรงเรียนตลอด 12 สัปดาห์ แล้วจึงดำเนินการให้การดูแลตามโปรแกรมการป้องกันความรุนแรงอีก 12 สัปดาห์ ได้ประเมินความพึงพอใจของนักเรียนต่อประสิทธิผลของโปรแกรม โดยใช้แบบสอบถามความพึงพอใจในการปฏิบัติการดูแลตนเอง 3 ระยะคือ ระยะของการพิจารณา ระยะการตัดสินใจซึ่งจะนำไปสู่การปฏิบัติ ระยะดำเนินการปฏิบัติ และประเมินความสามารถในการปฏิบัติ วิเคราะห์ผลของโปรแกรมโดยใช้วิธีการแจกแจงความถี่ หาค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน และใช้สถิติการวัดซ้ำโดยวิเคราะห์ความแปรปรวนทางเดียว

ผลการศึกษาพบว่า คะแนนพฤติกรรมก้าวร้าว และทัศนคติทางบวกต่อการใช้ความรุนแรงลดลงหลังจากนักเรียนได้รับโปรแกรมการป้องกันการใช้ความรุนแรง และยังพบว่าคะแนนทักษะการจัดการความรุนแรงสูงขึ้นในทุกด้าน จากการสังเกต พบว่ามีความถี่ของพฤติกรรมก้าวร้าวทางร่างกาย และพฤติกรรมก้าวร้าวทางวาจาลดลงในทุกพฤติกรรม

ผลการประเมินความพึงพอใจของนักเรียนในการเข้าร่วมโปรแกรม พบว่ามีค่าเฉลี่ยอยู่ในระดับสูงทั้ง 3 ระยะในการปฏิบัติการดูแลตนเอง จึงเป็นไปได้ว่า โปรแกรมการป้องกันความรุนแรงมีประสิทธิผลในการลดพฤติกรรมก้าวร้าว และลดทัศนคติทางบวกต่อการใช้ความรุนแรงได้ และยังเพิ่มทักษะในการจัดการความรุนแรง โปรแกรมนี้สามารถนำไปใช้ในการศึกษาวิจัยต่อเนื่องเพื่อขยายผลต่อการจัดการศึกษา และนำไปประยุกต์ใช้ในระบบการบริการทางการพยาบาล รวมถึงหน่วยงานที่มีภารกิจต่อการแก้ไขปัญหาความรุนแรงในสังคมไทยต่อไป

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คำสำคัญ: นักเรียนวัยรุ่น, ทฤษฎีความพร่องในการดูแลตนเอง, ความรุนแรง, โปรแกรมการป้องกันการใช้ความรุนแรง

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