

SCHOOL-HEALTH MODIFIER: AN UNDESIRABLE HEALTH BEHAVIOUR

METHOD OF MANAGEMENT

¹Osato Harriet OBASUYI (Ph.D.) & ²Dr. Efosa Samuel OBASUYI

¹Department of Health Safety and Environmental Education, Faculty of Education, University of Benin, P.M.B. 1154, Ugbowo, Benin City, Nigeria
ORCID ID: 0000-0003-4060-1647
harriet.obasuyi@uniben.edu

²Department of Maxillofacial Surgery, Edo Specialist Hospital, Benin City, Nigeria

Abstract

Undesirable health behaviours do not only undermine health but also school success. Therefore, proposing a health intervention and self-help tool kit in the form of School-Health Modifier to manage such behavioural excesses can help students learn basic life skills needed to successfully manage the behaviour. With the meaning, aim, objectives and principles of the School-Health Modifier, the why, when and how were espoused to guide health education experts, psychologists, counsellors and trainees. The validity of the modifier was done by experts in Health and Counselling Psychology and the Cohen's kappa (κ) was used to establish the reliability yielding a coefficient of 0.77. The methodological procedure was provided in three stages with four modifier techniques with adolescent delinquency being a point in focus. First stage of health behaviour identification involves the functional assessment of the adolescent delinquency, followed by exposure to a management package and finally the learning of a basic life skill. The four modifier techniques are required to take learners through the stages. It is hoped that for the deficits in behaviour, delinquent adolescents might be less assertive through School-Health Modifier, be more focused on success attainment by relating more positively with people around them.

Keywords: School-health modifier, undesirable health behaviour, method of management

INTRODUCTION

Most school cultures are less well prepared to address or refer health conditions, especially those associated with social undesirable behaviours which can undermine emotional health to professionals in the field of health and counselling psychology for modification. Evidence has indicated that an appropriately provided school health service should not only promote health, prevent illness and identify deformities of learners but also be able to reach out with health information to parents or guardians concerning their children (Obasuyi, 2022). Among others, the modification of behaviour is centred around steps covering knowledge of the behaviour, a blueprint of skill formation to unlearn the behaviour or develop a new one and the practice of the new skill. Emphasis of these steps was provided by Zakrajsek (2023) that awareness, activity and practice are needed to advance behaviour modification. An effective modification method cannot be complete

if an understanding of the undesirable behaviour subject matter (for example delinquency), and skills are absent.

Delinquency is most likely associated with deficits in life skills, and poor methods of modifying them. The knowledge of delinquency, the method (proposed as school-health modifier) and participants' competence and life/social skills must be put together for a successful modification programme. Several studies, for a successful behaviour modification, have proffered interventional efforts such as video and self-modelling for autism; soft skills, morals and value enhancement; multisystem and functional family therapies; and group-directed social skills training for the development of appropriate skills and prevention of unhealthful behaviours (Bellini & Akullian, 2007; Abdullah, Ortega, Ahmad & Ghazali, 2015; Henggelar, 2015; Hotton & Coles, 2016).

After a review of the aforementioned literature, the researcher took a different perspective and initiated a 'School-Health Modifier' which she envisaged as a method that can modify a defined undesirable health behaviour while paying attention to the aforementioned crucial steps of knowledge of the behaviour, the blueprint of skill formation and the practice of new skills. Therefore, the paper is proposed for use in a behaviour modification scene in which its procedures in an undesirable behaviour management forum will be best utilized through the practice of appropriate life skills. A case in scenario is the learning of Delinquency Modifier Skill in the management of adolescent delinquency. The Delinquency Modifier Skill is self-structured and contained in the School-Health Modifier Management Package of Appendix A. Therefore, using the School-Health Modifier for a specified undesirable behaviour management can help participants learn basic life skills needed to successfully manage the behaviour.

Definition, Aim, Objectives and Principles of School-Health Modifier

Definition: School-Health Modifier is a method-driven object of management geared towards teaching or learning appropriate life skills which will help modify a defined undesirable health behaviour for individuals within and outside the school community. **Aim:** To modify undesirable behaviour which undermines health and well-being through the teaching or learning of a new skill. **Objectives:** (1) identify an undesirable health behaviour; (2) to conduct functional assessment of the variables characterizing the health behaviour; (3) design an appropriate life skill for the identified health behaviour; and (4) apply the life skill to modify the health behaviour. **Principles:**

An undesirable behaviour can be taught or unlearned through variable regulation, motivation, modelling, instruction, rehearsal and feedback.

Components of School-Health Modifier: Based on the objectives of School-Health Modifier, the following components are necessary considerations: **(1)** Health behaviour Identification; **(2)** School-Health Modifier Management Package appropriate to teach or learn a life skill, and **(3)** Life skill to be taught or learned.

Why School-Health Modifier: The School-Health modifier is worthy of use because it: (1) is a health intervention tool kit which can empower professionals to effect modifications of target behaviour; (2) is self-help tool which can assist young people with skills of unlearning an undesirable behaviour; (3) has theoretical basis; and (4) has psychometric properties.

Theoretical basis of the School-Health Modifier

The School-Health Modifier is based on the Social Cognitive Theory propounded by Bandura in 1963. SCT is a health behaviour theory which posits the dynamic and reciprocal interaction among three factors, the person, behaviour and environment. This postulation termed reciprocal determinism with behavioural capability, expectations, self-efficacy, observational learning and reinforcements as concepts of the SCT (Bandura, 1995). With the SCT, the basic principles of School-Health Modifier, which had been stated in previous section to include variable regulation, motivation and modelling, can be justified alongside the operational procedures of School-Health Modifier including Modifier-Instruction, Modifier-Modelling, Modifier-Rehearsal and Modifier-Feedback. These procedures are explained in subsequent section.

In a social environment, a person can begin unlearning an undesirable behaviour by becoming knowledgeable about the variables/events triggering the behaviour and regulating their influence on it. Such knowledge can come through Modifier-Instruction. With Modifier-Instruction, a change agent can transmit information basic to events responsible for an undesirable behaviour and formation of a new skill. Following the instruction, appropriate skill needed for behaviour modification can be copied from change agents during Modifier-Modelling. Through Modifier-Rehearsal, participants can be guided to act out specific roles congruent to the appropriate skill. Well acquired skills can be reinforced by motivating participants with incentives and positive rewards through Modifier-Feedback.

Psychometric properties of School-Health Modifier

The psychometric properties of School-Health Modifier were done to establish its validity and reliability. By giving the parameters (aim and objectives) of School-Health Modifier and its management package, to three experts in Health and Counselling Psychology of the University of Benin Nigeria, the validity was determined. The experts compared the parameters of the modifier with its management package and made corrections. Positive comments of two of the experts improved the validity of the management package.

The reliability of the School-Health Modifier was established with Cohen's kappa (k) statistic by giving the modifier and the package to two counselling psychologists in order to elicit their independent ratings. The experts, separately, checked through the School-Health Modifier Management Package and used their observations to fill an observation schedule containing the aim and objectives of the modifier. The Content Assessment Form (see Appendix B) is a categorical scale of 'yes' or 'no' with responses options being '1' and '0' respectively. The k statistic was used to determine the level of agreement between the two counselling psychologists' ratings. Consequently, k coefficient of 0.77 was obtained meaning that a substantial strength of agreement existed between the raters. The k value is considered substantial enough for the reliability of the School-Health Modifier.

When to use the modifier

School-Health Modifier can be used when there is an undesirable health behaviour which is implied from a social skill deficit. Reducing the social skill deficit that prompted the undesirable health behaviour will possibly reduce the occurrence of the behaviour. Undesirable health behaviours that can be addressed with School-Health Modifier include but not limited to psychoactive drug use, suicide attempt, rape, obscene dressing, sarcastic talks, and delinquency. For example, Van der Stouwe, Gubbels, Castenmiller, Van der Zaouwen, Asscher, Hoeve, Van der Laan and Stams (2020) noted that reducing the social skills issue that caused delinquent behaviour will reduce further delinquency.

Undesirable health behaviour is what an individual does and says that negatively affect his and other's social and emotional health. For instance, Anett had an unprotected sexual intercourse with a classmate of his, Jane, in the month of May and told his friend, John about it. In this hypothetical example, Anett's behaviours were unhealthful in terms of what he did and said (sexual

intercourse and his telling John). The potential effects of an unhealthful behaviour on health include but not limited to stigma, damage to one's image, disease onset such as STIs or HIV/AIDS problem as Anett's behaviour did not give room for prevention of disease, protection and promotion of self and other's health. Other instances where School-Health Modifier can be used are as follows:

1. when an undesirable health behaviour has one or more aspects which can be assessed through measurement. Through observation, description and documentation of the behaviour using appropriate measuring instruments, an assessment can take place. Evidence showed that the physical dimensions of a behaviour which can be measured include frequency, duration and intensity (Miltnerberger, 2008). In another hypothetical example, Alfred drinks three bottles of alcoholic beverage three times in a week and always becomes drunk. Note: that 'being drunk' is not the behaviour but a label. Each time he does, the wife gets a smack. The number of times, 'three in a week', is the frequency which can be counted and recorded. The duration is the period of occurrence of the unhealthful behaviour from the first attempt to when he eventually stopped drinking the alcoholic beverage. The intensity is tagged, 'smack', which is the physical force melted on the wife.
2. when an undesirable health behaviour is seen or not and has an impact on the environment and the environment has an impact on it. The environment here are self-specific, physical and social. When environmental factors influence the behaviour, then an understanding of the factors and subsequent alteration are necessary parameters for behaviour modification.

From the above, it is obvious that individuals that act in unhealthful ways may lack the social skills to minimize the occurrence of the problem behaviour and hence the School-Health Modifier.

Who to use the School-Health Modifier

Individuals with an undesirable health behaviour connected with one or all of the aforementioned behaviours mentioned in the foregoing sub-head as well as those indulging in risky sexual activity, and binge drinking can use School-Health Modifier. Any human behaviour which affects or influences health are potentials for intervention with the modifier but with corresponding life skill formation. The agents of management are health education experts and counselling psychologists who are qualified and has the experiences to take individuals with target behaviour through the School-Health Modifier Management Package.

How to use the School-Health Modifier

With particular attention to the components, which were developed from the objectives, of the School-Health Modifier, three procedures can be used in order to teach or learn life skills necessary for behaviour modification. These include:

Stage One: Health behaviour Identification

Health behaviour is what an individual does or says that influences his/others' health either in positive or negative ways. Examples of health behaviours include but not limited to healthcare seeking, eating, rest/sleep, and exercising (Short & Mollborn, 2015). In behaviour modification, the first and most important step is to identify the potential variables which influence the behaviour. There is an adage that says, 'there is no smoke without fire'. This means that behaviour has a source. The source of behaviour is the reason for its occurrence. In order to ascertain why a behaviour occurs, functional assessment is required following the health behaviour that has been identified. In behaviour discuss, functional assessment is the process of determining the relationship among the factors that influence a given behaviour. The factors/conditions prompting the behaviour and the consequences related to it must be clearly understood. This simply implies uncovering the antecedents (A) that trigger behaviour (B) and the motivating/reinforcing consequence (C) that sustains the behaviour (Friedman, 2009; DiClemente, Salazar & Crosby, 2019). After considering the ABC continuum, instruments such as questionnaire, observation schedule, and/or behaviour modification scales can be used to identify and/or measure the indicators of the health behaviour.

In adolescent delinquency modification, for example, identification of the potential variables which influence the delinquency is needed. Functional assessment helps to design a behaviour modification programme for the defined undesirable adolescent delinquency. For example, the ABC component can be applied. A-Contingency gives an account of the social, environmental and psychological conditions under which the delinquency occurs or do not occur which could include peer influence, hanging out late, and/or self-efficacy. Other considerations could cover when, how, and where the delinquency occurs or not occur with particular attention to its frequency, duration and intensity. The B-Contingency involves the identification of the circumstances responsible or not responsible for delinquency. For the C-Contingency, one could ask: what possible measures have been used to modify or reduce the likelihood of indulging in

delinquency and what likely functions do the behaviour serve for the individual. Lovering (2023) provided four functions that a behaviour can serve including escape; attention seeking; accessibility to food, activities, materials; and sensory stimulus/reinforcement. Repeated and accurate functional assessments with Adolescent Delinquency Questionnaire (ADQ) which is structured by the researcher (see Appendix C), is required.

Stage Two: School-Health Modifier Management Package appropriate to teach or learn life skills

School-Health Modifier Management Package is a blueprint consisting of what trainers or trainees are expected to do in order to teach or learn a life skill for the behaviour modification. In the case of adolescent delinquency, the management package consists of eleven sessions with the first being the introduction in which the trainer will familiarize himself or herself with the participants and establishes their delinquency status (see details in Appendix A). A trainee can ignore the first session and fill the ADQ. The second session will help trainers to expose to the participants, the meaning, identification of examples, levels of severity and risk factors of adolescent delinquency. The trainee can take some time to read the manual (see Appendix D). The third session covers a determination of the functional assessment of the variables influencing adolescent delinquency (details in Appendix A). Other sessions of the package are discussed in Stage Three. During the training, the trainer uses four approaches of the School-Health Modifier to take participants through the training sessions. Details of the approaches are embedded in the management package in Stage Three.

Stage Three: Life Skill to be taught or learned

After the functional assessment of events responsible for undesirable health behaviour has been established, appropriate life skills concomitant with the events are needed to be taught or learned by the participants. In an earlier example of the unprotected sexual intercourse Anett had with Jane, events that could possibly be responsible for the undesirable health behaviour could be:

1. Low self-worth or integrity on the part of Jane;
2. Poor communication skill of Jane and Anett;
3. Low assertiveness power of Jane and Anett;
4. Both staying in a hide out;
5. Planned visitation;
- and 6. Lack or insufficient sex education.

Under some or all of these factors, examples of life skills which can be taught or learned by participants include self-awareness, interpersonal and thinking skills. These are outside the context of this paper.

The immediate social setting with definite and important skill deficits and excesses of the adolescent are important considerations in any life skill to be taught/learned. Excesses of adolescent delinquent behaviour might involve doing some or all of these too much: destruction of property, theft and armed robbery, bullying, withdrawal, lying, carrying dangerous weapons, attempting murder, rape and its perpetration; fights; illegal drug use/abuse; cheating, hitchhiking, disorderly conduct, drunkenness, forceful breaking and entry; begging, avoiding classwork and learning; or increased frequency of suspension/expulsion. For the deficits in behaviour, a delinquent adolescent might do some or all of these less: communication, self-awareness, message processing, initiation, attending, asking for assistance, and assertiveness.

Through training and retraining on any skill for a long period, success can be achieved in making adolescents reduce or avoid behavioural excesses and adopt or increase behavioural deficits. For example, in the School-Health Modifier Management Package, sessions four to nine cover details of the Delinquency Modifier Skill with emotional and behavioural phases being the main themes of the skill.

At the emotional and behavioural phases, adolescents will learn to reduce or do away with bullying and adopt assertiveness. An individual with delinquent behaviour can go through the steps in the phases in collaboration with management agents (peers, professionals, and members of his family). In addition, the management agent or trainer are expected to use certain approaches to take participants through the phases in order for them to meet their behavioural needs without affecting other people's behaviour.

Four approaches which are not mutually exclusive can be used by trainers to take trainees through the School-Health Modifier Management Package with the teaching of the Delinquency Modifier Skill as core consideration. The approaches are: (1) Modifier-Instruction, (2) Modifier-Modelling, (3) Modifier-Rehearsal, and (4) Modifier-Feedback.

Modifier-Instruction is the direction specifying the information needed to carry out a desired health behaviour. With Modifier-Instruction, the trainer can provide the directions needed for participants to follow in order to prepare them for health behaviour modification. In one instance, safe sex can be promoted to a group of adolescents by teaching them and having them acquainted with the correct instructions related to the sex-related abuse prevention skill. Such instructions can be 'avoid

a sex-appeal dressing; consistent and correct use of condom’. In the context of this paper, in another instance, the second, third, fourth and fifth sessions of the package, require the trainer to use the Modifier-Instruction to take trainees through the definition of adolescent delinquency and the stages of the emotional and behavioural phases of the Delinquency Modifier Skill. The instructions must be simple, clear and provided by credible trainers, so participants will understand and believe them. The instructions must also be concise enough to meet the age and competency level of the participants. Where a participant is able to repeat the instructions following the experiences taught, a reinforcer is given. An effective management package should incorporate instructions into Modifier-Modelling.

Modifier-Modelling is demonstration-driven and involves the demonstration of the required health behaviour by a live or symbolic model in order to make learners learn the useful skills for either unlearning an undesirable behaviour, learning a new one or sustaining and enhancing a desirable behaviour. In the School-Health Modifier Management Package, session five covers the demonstration of the emotional and behavioural phases of the Delinquency Modifier Skill. For unlearning an undesirable behaviour such as adolescent delinquency, it is important to note that delinquency has anger and aggression basis. Reilly, Shopshire, Durazzo and Campbell (2019), defined anger as emotions ranging from slight irritation to serious rage or fury and aggression as a behaviour carried out with the intention to inflict harm to someone or destroy property with verbal abuse, threats and violence as examples.

Going by these definitions, it can be deduced that adolescents that sometime become delinquent could have inner tendencies of anger and outward aggression presumably perpetrating the delinquency. The inner feelings of a delinquent adolescent could be exacerbated with his emotional reactions beginning with the experience of mild agitation to severe fury and strong inner tendency to express the bouts of anger in aggression. In the aggression, the adolescent’s behavioural reaction could cause injury or harm to someone else or even damage of properties.

To intervene in unlearning this behaviour, the Delinquency Modifier Skill can be taught to the participants. The Delinquency Modifier Skill is an adaptation of the Conflict Resolution Model and progressive muscle relaxation, presented by Reilly, Shopshire, Durazzo and Campbell (2019) as skills for managing anger and aggression respectively. The Delinquency Modifier Skill can be taught to delinquent adolescents based on the assumption that adolescent delinquency, as earlier

mentioned has anger and aggression basis. It exists in two phases with Phase I and II addressing the emotional stage and behavioural stages of the delinquency respectively (details in Appendix D).

At the end of exposure to both phases, the delinquent would have felt changes in his/her mood including feelings and sensation as well as the strong urge to act delinquently especially aggressive delinquency. This means that anger episodes and aggression surrounding delinquency should have been brought to the barest minimum through the gradual and consistent control of the experiences while learning the desired behaviour of assertiveness.

Assertiveness in delinquency means upholding one's right in ways that are respectful of other people and getting along with them. In it, you want to prevent the occurrence of conflicts as a result of acting delinquently and thus the expression of your feelings, thoughts and behaviours must not infringe on other's rights. Participants can take the skill training on their own or implore the service of health or counseling psychologist who is acquainted with Delinquency Modifier Skill in a Modifier-Modelling. Acquired skills such as Delinquency Modifier Skill can be modelled and prompted if the skill has been well motivated by the trainer.

On the other hand, for participants to be able to acquire the needed skill, their behavioural and personal competence occupy key place in the demonstration. For example, in demonstrating the Delinquency Modifier Skill, the model or trainer should be able to establish if participants possess communication, self-awareness, message processing, attention, listening, keen observation, initiation, attending, and/or asking for assistance as important personal and behavioural competence. Learners are expected to attentively listen, observe the skill being demonstrated, copy it and also be able to act out the right behaviour of the model. The competence could influence the learning of the Delinquency Modifier Skill, decision-making or any other behavioural skill. In teaching decision-making skills for drug avoidance, a live model with his team acts out the basic steps to take in order to make worthwhile decisions against peer pressure and cigarette smoking.

Modifier-Rehearsal: This procedure involves the chance given to participants of the management package to put the right skill into practice by following the instructions provided for skills, and acting it out either on their own or under the monitoring of a model. In Modifier-Rehearsal, the

health professional or change agent can sometimes be in doubt that the appropriate skills taught may not have been well-internalized by the learners until rehearsed. In as much as this procedure could elicit a reinforcement of the required skill, it also gives an instance of mistakes likely to occur in the course of the rehearsal. Still during the Modifier-Rehearsal procedure, the required behaviour is acted by participants through the skills learned with correctly played roles attracting positive or negative reinforcers, extinction or stimulus regulation.

Modifier-Feedback: A thorough assessment of the rehearsal or role play gives an insight into how well the correct skill accompanying the desired behaviour was performed in Modifier-Feedback. Questions such as these could be considered: where the players able to follow the instructions provided? where actors able to act out the right skills responsible for the desired behaviour? what error did each key player make that needed corrective instructions? what was done and said, that required reinforcement and/or correction? how many role-play sessions are still needed to attain success in the programme? what actor's personal/behavioural competence influenced the demonstration of the appropriate behaviour? Did the reinforcers, extinction and stimulus regulation have any effect on the skills taught? Answers to these and many more are basis of an effective Modifier-Feedback.

CONCLUSION

Behaviour modification is a complex social milestone requiring a multifaceted dimensional skill deficit enhancement. For school success, efforts in this direction can be targeted at learners with health behavioral excesses including but not limited to adolescent delinquency. The School-Health Modifier can be a useful tool in managing the undesirable health behaviours with particular attention to why, when and how it can be used by health education experts, psychologists, counsellors and trainees. For the deficits in behaviour, delinquent adolescents might be less assertive and through School-Health Modifier method be more likely to complete a school programme or relate more positively with people around them.

RECOMMENDATIONS

Based on unique social nature of individuals especially adolescents, the School-Health Modifier is recommended in the following ways:

1. That professionals in health education, counselling psychology, and humanities use the management package and procedures accompanying this modifier to assist individuals with an undesirable health behaviour to reduce or avoid such behaviours; and
2. Individuals with problem behaviour connected with one or all of these: delinquency, drug use/abuse, risky sexual activity, binge drinking, suicide attempt, rape, obscene dressing, sarcastic talks can use the management package and procedure to help themselves out of the problem.

REFERENCES

- Abdullah, H., Ortega, A., Ahmad, N., & Ghazali, S. (2015). Aggressive and delinquent behaviour among high risk youth in Malaysia. *Asian Social Science*, 11(6): 62. Doi: 10.5539/ass.v11n16p62.
- Bandura, A. (1995). *Self-efficacy in changing societies*. New York, Cambridge University Press.
- Bandura, A. (1963). *Social Learning and personality development*. New York: Holt, Rinehart, and Winston.
- Bellini, S., & Akullian J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders. *Exceptional Children*, 73: 261-284.
- DiClemente, R.J., Salazar, L.F. & Crosby, R.A. (2019). *Health Behaviour Theory: Principles, Foundations, and Applications (2nd Ed.)*. USA: Jones & Barlett Learning, Burlington, USA.
- Friedman, S.G. (2009). Functional assessment: Hypothesizing predictors and purposes of problem behavior to improve behaviour-change plans. *APDT Journal*, <https://www.behaviorworks.org>.
- Henggeler, S.W. (2015). Effective family-based treatments for adolescents with serious antisocial behavior. In J. Morizot & L. Kazemian (Eds.). *The development of criminal and antisocial behavior*, 461-475.
- Hotton, M., & Coles, S. (2016). The effectiveness of social Skills Training Groups for individuals with Autism Spectrum Disorder. *Rev J Autism Dev Disord*, 3, 68 – 81. <https://doi.org/10.1007/s40489-015-0066-5>.
- Lovering, N. (2023). *What are the four functions of behavior*. Retrieved 23 January, 2024 from <https://psychcentral.com-autism>.
- Miltenberger, R. (2008). *Behavior modification: Principles and procedures (4th edition)* CA: Wadsworth, Cengage Learning.

- Obasuyi, O.H. (2022). Health service in post primary schools in Egor Local Government Area, Edo State. *Journal of Educational Research on Children, Parents & Teachers*, 3(1): 595-614.
- Reilly, P.M., Shopshire, M.S., Durazzo, T.C., & Campbell, T.A. (2019). *Anger management for Substance Use Disorder and Mental Health Clients*. US Department of Health and Human Services, SAMHSA, Rockville.
- Short, S.E., & Mollborn S. (2015). Social determinants and health behaviors: Conceptual frames and empirical advances. *Curr Opin Psychol.*, 5: 78-84.
- Van der Stouwe, T., Gubbels, J., Castenmiller, Y.L., Van der Zouwen, M., Asscher, J.J., Hoeve, M., Van der Laan, P.H. & Stams G.J.J.M. (2020). The effectiveness of social skills training (SST) for juvenile delinquents: A meta-analytical review. *Journal of Experimental Criminology*, 17: 369-396. <https://doi.org/10.1007/s11292-020-09419-w>.
- Zakrajsek, T. (2023). Understanding adoption of new teaching strategies through a behavioural change model. Retrieved 16th July, 2024 from <https://www.scholarlyteacher.com>.