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Efficacy of Social Streaming Training on High School Boys' Aggression and Perceived Stress

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Abstract

The purpose of this article was to investigate the impact of Social Streaming Training on high school boys' aggressive behavior and perceived stress. The final sample of adolescent boys (n=62) from educational institutions in the Twin Cities of Pakistan was subjected to a quasi-experimental pretest-posttest design and purposive sampling technique. At the time of each intervention session, each training cohort comprised 15 students based on their scores on standardized measures; Brief Aggression Questionnaire (≥ 48), and Perceived Stress Scale (≥ 13) were included in the study.Prior to the post-test, the pre-test and initial introductory sessions were administered over a two-week period, whereas the subsequent training sessions spanned eight weeks. Boys exhibited a positive correlation between aggression and perceived stress, as indicated by the correlation results. In addition, posttest measures of the sample revealed a significant reduction in aggressive behavior and perceived stress following the implementation of skill streaming techniques. Since the fast-paced, competitive environment is overwhelming for adolescent males, this research is crucial for enhancing their calmness and decreasing their stress level. These findings will aid educational and clinical psychologists in effectively addressing these types of problems.

Introduction

In the 21st century, youth is stressed, and such feelings are given to them as a gift from their environment as well as due to their age-related demands. Such turmoil can negatively impact their perception and affective state (Joseph & Henry, 2009). During adolescents, stress is the leaf in their life's tree which is mandatory to grow and there is no safe side to move away from this. Diverse competent studies reported that teenage boys have perceived stress in relation to externalized overt behavior and act defensively (Biro, Adany & Kosa, 2011). Intheir teenage years, boys are highly explicit towards roughness (Adler & Adler, 1998) to gain a healthy social repute. Aggressive behavior of teenage boys can be identified and defined by hostility, violation of rules, poor communication skills, physical assault, breaking things, stressing themselves and others, etc, which can have an impact on the mental health of such boys (Pond et al., 2012). It has been indicative through previous research that responsive and pro-vocative anger-based stimuli can have then association with the perception of teenagers(Fatima & Sheikh, 2009).

It has been noticed that perceived stress during the adolescent period of students can weaken their relations with parents, siblings, and even friends, and cause behavioral problems (Naiemeh, Maryam & Hamid, 2007). According to a study conducted by a Pakistani medical school, perceived stress in the post-childhood age group may be associated with low social competence, sudden angry outbursts, bodily issues, lack of social support, academic accomplishment, and financial restrictions, as well as gender (Abdul Ghani et al., 2011). A controlled experiment found that both perceived and genuine stress can result in identical brain responses and violent behavior (Verona, Sadeh, & Curtin, 2009). According to a prior study, perceived stress might lead to mental illness or behavioral problems in social interactions (Hampel & Petermann, 2006). The teen's perceived stress may have been related to homicidal aggressive acts, and it might cause tension for the entire family (Piquero & Sealock, 2000).

Due to several stress-related and aggression issues, it is mandatory to build social skills in teenagers and to stabilize their affective state (Kuo, 2004). Skills Streaming training is a component of Aggression Replacement Training (*ART*) and was first translated by Goldstein and his colleagues as a method for fostering the development of social skills (Goldstein & Glick, 1994). This is a subjective behavioral organization program designed to mitigate the degeneration of ferocity. This strategy was employed for youngsters, violent youth, juvenile offenders, and adults. The most promising method for eradicating behavioral problems, according to research, is promoting basic social skills with peers and adults, as well as self-control with respect to violence and stress (Goldstein, Nensen, Daleflod, & Kalt, 2004). This systematic training program employs role-playing and several anger management and relaxation exercises (Glick & Gibbs, 2011). Few investigators focused on

adolescent boys with criminal records and serious behavioral disorders (Mahoney & Stattin, 2000; Vitaro & Gagnon, 2000).

Objectives

- To investigate the association between aggression and perceived stress among adolescent boys of high school.
- To examine the role of social streaming on the aggression and perceived stress of high school boys.

Hypotheses

- There is a positive relationship between aggression and perceived stress in adolescent boys.
- There is a difference between the pre-and post-test scores of high school boys' aggression and perceived stress.

Methodology

Research Design &Sample

This research used a Quasi-experimentalpretest-posttest design. A total of $N = 62$ adolescent boys were taken from the educational institutes of Rawalpindi and Islamabad. The training groups had 15 students at the time for each session of intervention. The training was conducted during schoolhours as per the permission of the school authorities. The inclusion and exclusion criteria were designed to control confounding variables.

*Inclusion Criteria.*This criterion is maintained by considering the *ART* manual standards (Glick & Gibbs, 2011). Participants were boys ranging in age from 12 to 18 years old mainstream students (McLeod, 2013). Participants with higher scores on the Brief Aggression Questionnaire (≥ 48), and Perceived Stress Scale (≥ 13) were included in the study.

Exclusion Criteria. Diagnosed participants or adolescents under any psychological or medical treatment were excluded from the study. Participants with no understanding of English and Urdu languages were excluded from this study.

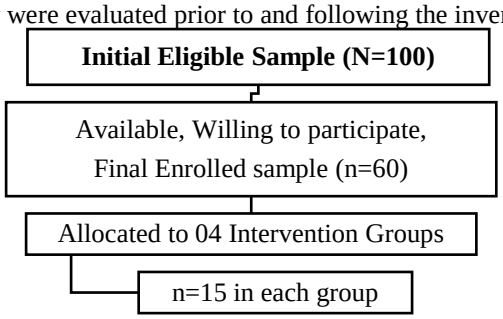
Measures

The Brief Aggression Questionnaire (BAQ).assessed the degree of aggression and its various forms, developed by Gregory D. Webster and colleagues in 2014.*BAQ* consists of 12 items with 7-pointLikert type scoring: 1 (none), and 7 (extreme). Item 7 has reversed scoring. 12 is the minimum score and 84 is the maximum score. Test-retest reliability is .81 for the whole instrument and for the subscale, its values arePhysical Aggression (PA) has a test-retest reliability of.81, whereas Verbal Aggression (VA), Anger (A), and Hostility (H) have test-retest reliability values of.81,.72,88, and.57, respectively (Webster et al., 2014).

Perceived Stress Scale (PSS).This10-item version was revised in 2009 by Cohen, Kamarck, and Mermelstein, it is a standardized measure of perceived stress. Each item is scored on a 5-point scale ranging from never (0) to almost always (4). (4). On positively worded items, such as 4, 5, 7, and 8, reverse scoring can be utilized, with higher scores indicating greater felt stress. 13 is the minimum score deemed to be average. The alpha reliability of the scale is 0.86, the test-retest reliability is >.70, and the correlation of the PSS to other measures of similar symptoms ranges between 0.52 to 0.76. (Cohen et al., 1983).

Procedure

Initially, permissionswere taken from the corresponding authors of all the instruments employed in the study and the intervention being performed on the adolescents via email. The corresponding author of skill streaming training (part of *ART*) has provided the manual or skills protocol through email and guided the researcher accordingly.After this,informed consent was sought from the participants and school authorities. The school staff was aware of the study's objective and methodology. They were instructed on the session procedure. The study was conducted in small groups of fifteen students in each session of the ten-week program; there were four groups of fifteen participants. The study was done during school hours, but in a separate hall or room to ensure secrecy. Each session lasted between 40 and 50 minutes. Participants were selected in accordance with the inclusion criteria. They were evaluated prior to and following the invention.



The process consists of two phases.

Step I (Pre-test). The consent form was completed and the instructions for completing the brief aggression questionnaire and perceived stress scale were followed. Before completing the scale, participants were instructed to "completely fill it out to reflect how they have been feeling throughout the past events/months."

The participants were given the psychometric measures individually in a group setting. In the third week, after collecting baseline data from the groups regarding their perceived stress and aggression, training sessions commenced.

Week # 1.

- Permission and detailed discussion about the training program with institution authorities.
- Participants' consent and detailed introduction about the training program.

Week # 2.

- Pre-test administration and explanation of queries regarding the psychometric tool.
- The division of students intofour groups having 15 students each with an equal number of boys.

Step II (Intervention Sessions and Post-test). The participants received intervention in the form of small groups. Following are the specifics of social skills training.

Week # 3.

- Introduction of boys to beginning skills of social streaming.
- Skills in starting a conversation, saying thank you, and introducing other people with the help of role-playing.

Week # 4.

- Feedback on previous skills
- Progression of skills by joining in the conversation, learning of apologizing, and following instructions with the help of role-play.

Week # 5.

- Opinionon social skills learned and summarizing the skill training with the participants.
- Outline of skills dealing with stress.

Week # 6.

- Learning the skills regarding making complaints and answering complaints.
- Learning regarding being a good sport, dealing with embarrassment and being left out and coping with failure.

Week # 7.

- Feedback and revision of previous skills
- Understanding anger and aggressive behavior.

Week # 8.

- Role playing on the imaged situational triggers anger.
- Evaluation of self-control by using alternatives to aggression, avoidance of teasing, and getting out of fights and feedback.

Week # 9.

- Learn to deal with group pressure and acquisition and summarize the training with the participants.
- Feedback was recorded.

Week # 10.

- Immediate post-testwastaken, and an evaluation of the perceived stress and aggression of adolescent boys was done.
- De-briefing has been done as per requirement.

Ethical Consideration

Study goals were not misrepresented. Informed consent provided real information. Students have been informed of the research and ensured data confidentiality. No researcher-participant relationship existed. Participation was respected and kept confidential. Participants were safe.

Results

Table 1

Psychometric properties and Pearson correlation among aggression and perceived stress (N=62)

Variables	*α*	*M*	*SD*	Range		1	2
				Potential	Actual		
1. Aggression	.77	46.1	13.2	12-84	24-84	-	.46**
2. Perceived Stress	.76	24.5	3.3	0-40	17-34		-

***p*<.01

Aggression and perceived stress reliability coefficients were shown in Table 1. .77 and.76 are satisfactory. Perceived stress is positively correlated with aggression r (60) = 0.46, p<.01.

Table 2

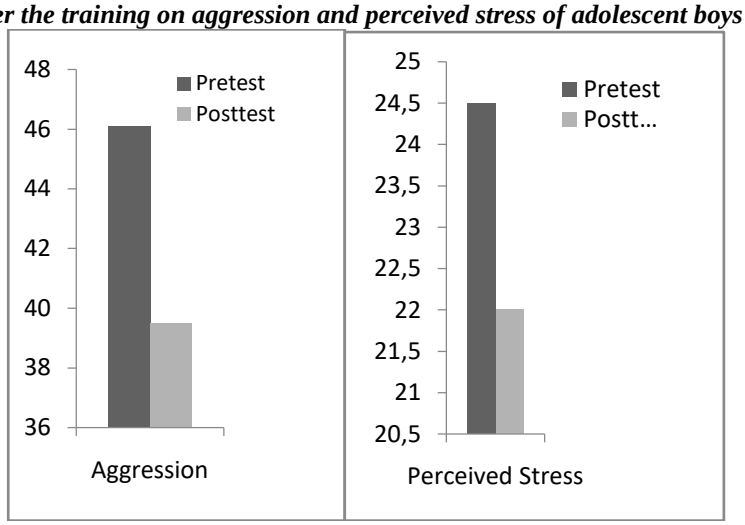
Mean, standard deviation, and t-values on aggression and perceived stress of participants during the pretest and posttest.

Variables	Pre-test (*n*=62)		Post-test (*n*=62)		*t* (122)	*p*	95% *CI*		Cohen's *d*
	M	*SD*	*M*	*SD*			*LL*	*UL*	
Aggression	46.1	13.2	39.5	13.0	2.8	.00	1.96	11.3	.50
Perceived Stress	24.5	3.3	22.0	4.3	3.6	.00	1.1	3.8	.65

Table 2 shows the significant mean differences, standard deviation, and t-values of aggression among adolescent boys before (*M*=46.1, *SD*=13.2) and after intervention (*M*=39.5, *SD*=13.0) with *t*(122)=2.8, *p*<.01 and of perceived stress before (*M*=24.5, *SD*=3.3) and after intervention (*M*=22.0, *SD*=4.3) with *t*(122)=3.6, *p*<.01.

BarGraphs 1 & 2

Mean differences after the training on aggression and perceived stress of adolescent boys (N=62)



Graph 1 Graph 2

Graph 1 indicated the difference in aggression before and after the skill streaming training of adolescent boys while Graph 2 indicated the mean differences in perceived stress before and after the intervention.

Discussion

This article examined the relationship between aggression and perceived stress, as well as the impact of skill-streaming training on the aggression and perceived stress of teenage males.

Initially, the hypothesis indicated that aggression and perceived stress in adolescent boys are positively correlated. The result was statistically significant and consistent with previous studies. According to a study conducted on college students, perceived stress has a direct correlation with aggression and other severe health issues, such as depression (Hudd et al., 2000). Furthermore, Kristalyn (2015) found that suicidal ideation, extreme wrath, and negative psychological health may be the results of perceived stress. The environmental theoretical model demonstrated that stress could manifest as aggression, which is detrimental to mental health (Richardson & Hammock, 2007). The college population is more prone to aggression due to the perceived stress of situations and academics, and researchers have worked to improve the behavior of males in this regard (Kendra, 2013).

The second and third hypotheses stated that there is a difference in the pre-test and post-test mean scores of adolescent males for perceived stress and aggression. The results were significant and consistent with previous research; a study conducted on a sample of children from England and North America found that skill streaming has a positive influence on children's behavioral problems and eliminates their aggression (Barnoski & Aos, 2004). The same results were discovered in a study of male adolescents in Scandinavia (Gundersen & Svardal, 2004; 2010). According to a study, most adolescent issues with the highest pre-treatment scores have improved because of skills training during ART (Hemphill & Littlefield, 2006). According to studies, adolescents' social behavior is akin to a fundamental need, and its maintenance is required in high school, the workplace, social gatherings, and in their personal lives as well. In this regard, skill training has an exceptionally positive effect on adolescents (NICHD Early Child Care Research Network, 2006; Malecki & Elliot, 2002; Levy & Murnane, 2001; Huston & Ripke, 2006). After skill-streaming training, the methods for reducing aggression in male adolescents significantly reduce the likelihood of anger outbursts, and their prosocial behavior also improves. It was reported in an ART thesis that the improvement of social skills, aggression, perceived stress, and other behavioral issues was enhanced in the post-training phase, yielding superior long-term results (Langeveld, Gundersen, & Svarddal, 2012).

Implications

The study is helpful in enhancing the abilities of adolescent boys to control their anger and use appropriate social skills to promote mental health, as well as to generalize these skills in different situations and to enjoy stress-free adolescence (Cook, Gresham, Kern, et al., 2008; Patterson, Jolivette, & Crosby, 2006).
This study also demonstrates that this therapeutic technique can improve social communication and reduce perceived stress in situations that provoke wrath in adolescents. This training program can reduce instances of tension and aggression among adolescents outside of school settings as well.

Limitations & Suggestions

The first drawback of this study is that the intervention was only offered to teenage boys. To make the results more generalizable, the intervention might be given to a larger sample with diverse gender groups. Second, birth order, socioeconomic position, and family structure were not included in this study. Future research should consider these factors. Finally, qualitative research designs might also be applied to this study. In this study, the sample was literate enough to understand questionnaires in English, however for more precision, scales can be taken in Urdu to eliminate biases.

Conclusion

This study examined the impact of skill-streaming training from the ART manual on the perceived stress and aggression of male adolescents. Additionally, the relationship between the variables was investigated. Currently, it has been observed that adolescents suffer from tension and rage. They are in a state of self-identity turmoil and may give others a negative impression due to the emotional and psychological duress they are experiencing. This study offers a remedy for these hazards of adolescence.
This study evaluated the impact of training on adolescents at two distinct time intervals, namely the pre-testing condition and the immediate post-testing condition. Teenage males demonstrated a significant positive relationship between aggression and perceived stress, according to the findings. Among adolescent males, the significant differences in aggression and perceived stress were summarized by a comparison of the pre-and post-test means. The present study contributes significantly to the development of evidence-based training skills for adolescents and their healthy social skills. This study has contributed valuable literature to future studies in this field.

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