

## Mindfulness-Based Program for Management of Aggression Among Youth: A Follow-up Study

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### ABSTRACT

**Background:** Youth have shown indulgence in various high-risk behaviors and violent activities. Yoga-based approaches have been used for the management of psychological problems. The present work explores the role of mindfulness-based program in the management of aggression among youth. **Materials and Methods:** Sociodemographic information schedule, Buss-Perry Aggression Questionnaire, and World Health Organization quality of life were administered on 50 subjects in the age range of 18-25 years at pre- and post-mindfulness-based program level. **Results:** It revealed the presence of feeling of well-being and ability to relax themselves; changes in score of anger, hostility, physical, and verbal aggression; and enhancement of quality of life in the physical and environment domains at 1 month follow-up. **Conclusions:** Mindfulness-based program has shown changes in aggression expression/control and implies integration of it in available program for the management of aggression among youth.

**Key words:** Aggression, mindfulness-based program, youth

### INTRODUCTION

Recent years have seen an increase in the incidents of aggression among youth. It includes behaviors such as hitting, rape, reckless driving, road rage, substance use, and other high-risk behaviors. Lack of personal and social support, contextual crime, and violence have influence on the expression of aggression among youth.<sup>[1]</sup> Academic performance of children who experienced violence, irrespective of the nature of violence and socioeconomic group, was poor when compared to academic performance of children who had not experienced violence.<sup>[2]</sup> Males reported more

relational aggression in a romantic relationship.<sup>[3]</sup> Cultural factors also influences the expression and use of coping behaviors to manage anger. Indians use strategies such as repression and rational self-coping statements to manage anger provocation.<sup>[4]</sup> Iranian male students scored higher on anger expression index in comparison with Indian students.<sup>[5]</sup> In this regard, available Indian approaches such as meditation do have relevance in promoting anger control. It is also known as Vipassana meditation or insight or awareness. Vipassana meditation<sup>[6]</sup> is one of India's most ancient

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meditative techniques. Mindfulness is defined as “paying attention in a particular way: On purpose, in the present moment, and nonjudgmentally.”<sup>[7]</sup> This awareness is based on an attitude of acceptance of personal experience that entails being experientially open to the reality of the present moment. Mindfulness practice invites the meditator to notice and accept his thought as an event occurring in the mind rather than as a truth that defines the self. Thus, mindfulness can alter one’s attitude or relation to thoughts, such that they are less likely to influence subsequent feelings and behaviors.<sup>[8]</sup> It is an important construct in both Western psychology<sup>[9,10]</sup> and various Eastern spiritual traditions.<sup>[11,12]</sup>

Mindfulness has also been described as a metacognitive state of detached awareness.<sup>[10]</sup> Metacognitive processing not only consists of acquiring knowledge regarding one’s cognition, but also involves regulatory processes such as planning, monitoring, and evaluating.<sup>[13]</sup> In a clinical context, it allows the users to develop metacognitive plans for controlling affective thought processes.<sup>[8]</sup> Thus, a mindfulness perspective would encourage a person experiencing a craving/ruminations or some other form of anxiety to change the metacognitive beliefs regarding the aversive cognitions rather than the actual cognitions themselves.<sup>[10]</sup>

The practice of mindfulness meditation has been shown to be effective in reducing impulsiveness and increasing tolerance of common stressors.<sup>[14]</sup> Mindfulness has been demonstrated to bring reduction in stress-related symptoms/negative distress of mood disturbance.<sup>[15,14]</sup> Evolving the mindfulness meditation-based aggression management program will help decrease the effect and handle triggers/ruminations associated with aggression. Studies on mindfulness have demonstrated reduction in stress-related symptoms and it has been associated with reduction of negative distress of mood disturbances.<sup>[16]</sup> It will contribute to enhanced feeling of well-being and reduction in aggression.<sup>[17]</sup>

There is ample evidence to document the efficacy of mindfulness-based program for people with affective problems, and mindfulness training has shown to decrease negative affect. There is scarcity of work to assess the efficacy of mindfulness for the management of aggression. It will also help in the development of cost-effective program for aggression among youth.

## MATERIALS AND METHODS

### Aim

To assess the efficacy of mindfulness-based program for the management of aggression.

### Objective

To examine the efficacy of mindfulness-based program for the management of aggression and its impact on quality of life.

### Subjects

Fifty subjects in the age range of 18-25 years based in Bengaluru who had difficulty in controlling aggression, and who were also screened on Buss-Perry scale were taken for the mindfulness-based program for management of aggression. The inclusion criteria included ability to read and write English/Hindi/Kannada. Subjects with an unwillingness to participate and history of substance abuse were excluded from the study.

### Tools: Sociodemographic information schedule

Developed by the investigator, it provides information about the subject’s sociodemographic variable, situations associated with anger, type of anger, style of expression of anger, control over aggressive ideation, and protective factors for controlling the aggression and risk factors such as substance abuse, mood disturbance, childhood experiences, academic effects, family influence, peer influence, and media influence. Buss-Perry Aggression Questionnaire<sup>[18]</sup> represents the revision of Buss-Durkee hostility inventory. It has 29 items and has been scored on a 5-point scale. It has high internal consistency. Quality of Life Scale: World Health Organization quality of life (WHOQOL-BREF)<sup>[19]</sup> was used to assess the quality of life. It has 26 items that constitute 4 domains: Physical health, psychological health, social relationship, and environment. The present work has obtained Institute Ethic Committee’s approval.

### Procedure

Subjects with difficulty in controlling aggression were taken for observation after receiving informed consent. Sociodemographic information schedule, Buss-Perry scale, and WHOQOL-BREF were administered at pre intervention as well as at 1 month follow-up in individual setting. Intervention included eight sessions (40-60 min) delivered in a group of 8-10 subjects over a period of 1 month. The content of the sessions are as follows: Presence/identification/measurement of aggression and its psychosocial consequences; role or relevance of behavioral intervention and mindfulness in aggression; handouts on aggression management that includes identification of cues — physical and psychological — to anger and use of distraction; and mindfulness (first session) and working on behavioral methods for aggression management. Training in mindfulness meditation: Home assignment for practicing mindfulness meditation. Application of techniques and moving in the direction of delay; distraction of aggression; identification of ruminations

(second session); and discussion on difficulties faced in the application of techniques. Training in deep breathing and mindfulness-based body scan meditation: Home assignment (third session); review of previously learned techniques and overcoming the difficulties; mediation to overcome impulsivity and understanding its association with aggression (fourth session); identifying, modifying, and understanding anger-producing thoughts; ruminations home assignment: Thought diary (fifth session); management of impulsivity and behavioral experiment (sixth session); discussion on difficulties in the management of aggression and behavioral experiment (seventh session); review of intervention program, feedback applications of mindfulness in the management of aggression; discussion on the importance and significance of practice; and application of learned techniques. Deciding the date and time of follow-up session (eighth session).

The follow-up assessment was carried out using quality of life and Buss-Perry impulsivity scale at 1 month interval. Data analysis was carried out using percentage scores and parametric statistics.

## RESULTS

Twenty-two percentage involved themselves in physical violence, 12% also used weapons during expression of aggression, and 14.2% had experienced injuries due to fights. Pre- and post-intervention assessment indicates the significant difference in physical aggression ( $P = 0.000$ ), verbal aggression ( $P = 0.001$ ), anger ( $P = 0.000$ ), hostility ( $P = 0.000$ ), physical quality of life ( $P = 0.000$ ), and environmental quality of life ( $P = 0.000$ ). Subjects reported persistent feeling of well-being, ability to recognize the ruminations, better ability to relax them during period of distress, improved relation with others, and decrease in urge to smoke while facing stress.

## DISCUSSIONS AND CONCLUSIONS

The study revealed changes at post-intervention in terms of presence of feeling of well-being and ability to relax themselves; decreased urge to smoke; physical aggression ( $P = 0.000$ ); verbal aggression ( $P = 0.001$ ); anger ( $P = 0.000$ ) and hostility ( $P = 0.000$ ); physical quality of life ( $P = 0.000$ ); and environmental quality of life ( $P = 0.000$ ) [Table 1]. It has been corroborated by available works. Mindfulness helps in reducing ruminations related to aggression, which leads to reduction in the expression of aggression.<sup>[20]</sup> In a multiple baseline across subjects design, three subjects (who had frequently been readmitted to an inpatient psychiatric hospital owing to their anger management problems)

**Table 1: Comparison of scores at pre- and post-mindfulness based program**

Pre- and post-intervention variables	Mean	SD	t	df	Significant (two-tailed)
Buss-Perry Aggression scale					
Physical aggression	3.1	6.2	7.04	218	0.000
Verbal aggression	1.04	4.43	3.46	218	0.001
Anger	2.50	6.49	5.71	218	0.000
Hostility	2.65	7.16	5.54	218	0.000
WHOQOL					
Physical QOL	-3.63	12.72	-4.22	218	0.000
Social QOL	-2.43	22.64	-1.59	218	0.113
Psychological QOL	-0.38	13.52	-0.47	218	0.678
Environment QOL	-14.71	17.21	-12.65	218	0.000

Significance at 0.001 level. SD – Standard deviation; WHOQOL – World Health Organization quality of life

were taught a simple meditation technique, requiring them to shift their attention and awareness from the anger-producing situation to the soles of their feet, a neutral point on their body. Their verbal and physical aggression decreased with mindfulness training; and no physical aggression and very low rates of verbal aggression occurred during 4 years of follow-up in the community.<sup>[21]</sup> Mindfulness-based procedure showed reduction in physical and verbal aggression after mindfulness-based training. Similar reductions in physical and verbal aggression were seen when the same training was introduced in control conditions.<sup>[22]</sup> Mindfulness was found to be positively associated with thought recognition that has an influence on positive mental health as well as reduction of anger and aggression.<sup>[23]</sup>

The study has limitation in the form of absence of female representation in the sample, studying the role of rumination and aggression, and long-term follow-up to document the efficacy of mindfulness-based program for the management of aggression. It has implications for enhancement of one's quality of life using mindfulness-based program and integration of mindfulness-based program in the available behavioral intervention for the management of aggression among youth at institutional level.

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### Conflicts of interest

There are no conflicts of interest.

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