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Use of Music Therapy for Enhancing Self-esteem among Academically Stressed Adolescents

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The study aims to evaluate the efficacy of music therapy in enhancing the self-esteem of academically stressed adolescents. It was hypothesized that post-intervention scores on measure of self-esteem would be enhanced as compared to pre-intervention scores. A pre and post-assessment design was adopted. School form of the Self Esteem Inventory (Coopersmith, 1981) and academic stress scales of the Bisht Battery of Sterss Scales (Bisht, 1987) were used to identify 30 adolescents with low self-esteem and high academic stress. Music therapy was given for a period of 15 days. After intervention, self-esteem inventory was administered again to see the effects of music therapy. Results revealed that music therapy enhanced adolescent's self-esteem as post-intervention scores of experimental group on self-esteem were high as compared to control group (t = 10.85, p < .01). Significant difference (t = 10.28, p < .01) was also found between pre and post-intervention scores of experimental group whereas control group didn't show any statistical difference between its pre and post-intervention scores (t = 1.06).

Keywords: Self-esteem, academic stress, music therapy

Student life coincides with adolescence and stress can manifest in children as reaction to the changes in life in addition to academic pressure and academic stress. Academic stress is the product of a combination of academic related demands that exceed the adaptive resources available to an individual. If a student is unable to cope effectively with academic stress, then serious psychological, social, and emotional health consequences may result (Arthur, 1998; MacGeorge, Samter, & Gilligan, 2005; Tennant, 2002). Children are constantly under the stress of studies and examinations, in short, they are entangled in the web of academic stress and are often ill-equipped to cope with stress during transitions from childhood to

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preadolescence, and from preadolescence to adolescence phases (Dharam, 1997).

Research has shown that low self-esteem makes the person more vulnerable to as individuals with low self-esteem adopt passive-avoidant coping styles focused on emotions whereas individuals, with high self-esteem or a high feeling of control, adopt active coping strategies focused on problems (Thoits, 1995). Studies indicate that self-esteem plays an important role in developing and controlling the stress of students. Students who were more stressed were found to have lower self-esteem and less awareness of their health (Hudd et al., 2000).

Research findings have indicated an inverse correlation between life stressors and self-esteem (Abramson, Metalsky, & Alloy, 1989; Garber, Robinson, & Valentiner, 1997; Kliewer & Sandier, 1992). Negative self-esteem predisposes adolescents to depression and other psychiatric difficulty (Garber et al., 1997). The findings lend support to the theoretical assumptions in the literature that high self-esteem and supportive social relationships influence academic stress through motivational and affective pathways.

Teachers, educationists, social scientists, and parents are increasingly becoming concerned about issues related to academic stress, examination anxiety, and their effect on students' learning process, well-being, and mental health and measures to control and curb delirious effects of these. Self-esteem represents a motivational force that affects perceptions and coping behavior; it buffers stress by mitigating the perceived threat and by enhancing the selection and implementation of efficacious coping strategies; it thus becomes the prime duty of social scientists, particularly of psychologists, to develop scientific ways of enhancing self-esteem to cope with stress among adolescents emanating from educational and academic arena. The present investigation was undertaken to examine music therapy as an intervention on self-esteem of adolescents to eliminate stress. It is an attempt to use music therapy as self-esteem booster.

Music therapy is based on the associative and cognitive powers of the mind. It is one of the expressive therapies which are of late interpreted as a complementary or integrative medicine. There are areas where people are not able to express themselves. Tyranny, socioeconomic status or hierarchy, fear of the powerful, feelings of shame, are some of the few social reasons as to why the expression is gagged in the social milieu and which snowballs over the years to affect the mental as well as physical well-being of an individual (Sairam, 2006).

Modern neurologists while analyzing human brain have attributed functional characteristics to the two hemispheres; assigning the left to perform analytical functions and the right to emotional functioning. These hemispheres are interconnected through the corpus callosum. Music therapy is thought to activate biochemical and electrical memory material across corpus callosum, thus enhancing the ability of the two hemispheres to work in unity, rather than in opposition (Updike, 1990). Music can stimulate the production of endorphins, the body's natural opiates, as well as reduce levels of cortisol and noradrenaline, hormones related to stress (Watkins, 1997). According to an ancient Indian *Swara Sastra* (oneness of breath, mind and senses, the renunciation of all existence), the 72 *melakarta raags* (musical scales) control the important 72 nerves of the body (Bagchi, 2003).

Self-esteem and self-confidence are factors found to be improved with the application of music as a therapeutic tool (Henderson, 1987; Kliewer & Sandler, 1992; Magee, 1999). Within the literature there is a wide variety of examples of music helping to increase self-confidence and self-esteem with various types of individuals. Certain diagnostic groups, such as depressed patients, are clearly more in need of activities to build self-confidence. Sausser and Waller (2006) concluded that music enhances self-expression and self-esteem. Moreno (1995) described music therapy as similar to traditional healing methods in its ability to support positive belief systems, enhance feelings of group support and individual self-esteem. Research by Henderson (1983), found self-esteem had increased following a music therapy intervention with thirteen hospitalized patients diagnosed with 'adjustment reaction to adolescence'. Within a population of autistic children, Brunk (1999) argued that music therapy and adapted music lessons may both influence self-esteem.

Music therapy has been highly effective with individuals who typically lack crucial self-esteem and self-concept (Henderson, 1983; Johnson, 1981; Kivland, 1986). Disclosure and awareness of self has been precipitated through the music as the relationship with music, therapist and self has developed. Songwriting, according to Goldstein (1990) provides a successful, pleasant experience and that a great deal of additional information about the participant can be gained through such techniques. Music therapy not only allows for the development of self-esteem through successful educational and social interactions, it also enables the child to use the group as a support system, a replacement for what has lacked in family structure and rituals. Music has structure within itself, and has been used to mark rituals throughout time for as long as man has known music. Also, it is

important to remember that toning (the release of tension and anxiety through the voice), is the body's natural regulation mechanism for healing, both emotionally and physically **(**Bradway, 2009**).**

Music therapy is presented in two modes. One is passive mode which gives importance to listening; the other one is active mode, which gives importance to participating. Passive form of music therapy may be beneficial to almost all forms of ailments. Active form is of immense help in neurological problems, like neurological aphasia (receptive aphasia and expressive aphasia) in the segment of alternative medicines to help children to reduce speech problems, to enhance speech fluency, to reduce hyper activity in hyperactive children, and so on. Passive form is more helpful in enhancing the concentration and memory, in boosting self-confidence, to reduce the stress and strain, to cope up with series of heart problems, like hypertension, in bringing down the blood pressure and normalize the patients (Mythili, 2010).

Music therapy works with the relationship between learning and music by reflecting an awareness of self-perception, allowing subsequent growth and facilitating intrinsic change at many levels (Wilson, 1991). Music can reduce aggressive behavior and improve self-esteem in children with highly aggressive behavior (Choi, Lee, & Lee, 2007). Though various researches have been conducted in west to understand the effect of music therapy on children, few studies have been under taken in India on the subject. Understanding the efficacy of music therapy on the lives of children in Indian setting would be useful for programming remedial measures. This study aims to understand the effect of music therapy to enhance self-esteem of academically stressed children.

Hypothesis 1: Post-intervention self-esteem scores of individuals in experimental group would be significantly higher as compared to post-intervention self-esteem scores individuals in control group.

Hypothesis 2: Post-intervention self-esteem scores of individuals in experimental group would be significantly higher as compared to the pre-intervention self-esteem scores.

Sample

The sample comprised of 60 adolescents between the age group of 15 to 18 years of age. The mean age range was 16.85.

Instruments

Scale of Academic Stress (SAS-3). The scale of academic Stress from Bisht Battery of Stress Scale (Bisht, 1981) was used for the study. It consists of 80 items. It contains for scales measuring academic anxiety, academic frustration, academic pressure, and academic conflict. Academic anxiety 15 items, academic frustration has 26 items, academic pressure has 24 items, academic conflict has 15 items. Its dependability coefficient and stability coefficients are .87 .82 respectively and it has internal consistency of .88.

Self Esteem Inventory (SEI). The school form of the self-esteem inventory by Coopersmith, 1987) was used. This inventory consists of 58 items, eight of which comprise a lie scale. The items measure children's attitudes toward peers, parents, school, and their perceptions about themselves. Its internal consistency coefficients are .80 for grade 8, .86 for grade 9, and .80 for grade 12. The predictive validity is reported to be .53 and concurrent validity is reported to be .33 ($p < 0.1$).

Intervention design

The music therapy was applied through a cassette with a 30-minute recording of *Raga* being played by a flute. A cassette player with headphones was utilized for this purpose. A raga can be defined as:

> A raga (Sanskrit word) is one of the melodic modes used in Indian classical music. A raga uses a series of five or more musical notes upon which a melody is constructed. However, it is important to remember that the way the notes are approached and rendered in musical phrases and the mood they convey are more important in defining a raga than the notes themselves. In the Indian musical tradition, ragas are associated with different times of the day, or with seasons... Therefore, the word is used in the literal sense of 'color' 'passion', or 'the act of dyeing', and in the figurative sense of 'something that colors one's emotions' (Jairazbhoy, 1995, 45).

The use of raga for emotionally moving or healing was first initialed by Tansen (a famous musician) could work miracles with his singing. Many raga are ascribed to Tansen. Such raga as *Mian ki*

Malhar, *Mian ki Todi*, and *Darbari Kanada* are the most famous. A Mian ki Todi was used as the intervening raag for the present study.

The participants in the experimental group were subjected to the flute-version of the raag for half an hour daily for 15 days. The experimenter discussed neutral or unrelated issues like study habits, time-management and career selection with the participants of the control group to avoid unethical practice.

Procedure

Experimental and control groups were employed to examine the efficacy of music therapy on self-esteem. Scales of academic stress and self-esteem were administered on 100 students, out of which 60 subjects were found to have high academic stress and low self-esteem. Half of the screened subjects (n = 30) were selected for music therapy, whereas the remaining subjects were assigned to the control group. Consent of the respective authorities and subjects was taken in advance. All the participants were very comfortable with English language. The subjects were seated in such a way that they could not look at each other and were instructed to enjoy music through headphones till the music continued. After 15 days of intervention, self-esteem scale was administered again to assess the efficacy of music therapy to both the groups.

Results

In the light of stated hypothesis, means, standard deviations, and *t*-test were computed.

Table 1

Means, Standard Deviation, t-test, for Post-intervention Scores of Experimental and Control Group on Self-esteem (N = 60)

	Experimental (n = 30)		Control (n = 30)			Cohen's	95% CI	
	M	*SD*	*M*	*SD*	*t(59)*	*d*	LL	UL
Self-esteem	45.80	6.13	28.93	5.92	10.85**	2.799	13.76	9.98

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.
***p* <.01

Table 1 is depicts means and standard deviations of control and experimental group obtained on self-esteem. The difference between

control group and experimental group on self-esteem is found to be statistically significant proving effectiveness of music therapy intervention in enhancing self-esteem (t = 10.85, p < .01). It is evident in this table that after getting music therapy intervention, individuals in experimental group scored high on self-esteem (M = 45.80, SD = 6.13) as compared to those who did not receive any such treatment i.e. control group (M = 28.93, SD = 5.92).

Table 2

Means, Standard Deviation, t-test for Pre-intervention and Post-intervention Scores on Self-esteem (N = 60)

	Self-esteem scores							
	Pre-intervention		Post-intervention			Cohen's	95% CI	
Groups	*M*	*SD*	*M*	*SD*	*t(59)*	*d*	LL	UL
Experimental	29.53	6.13	6.12	45.80	10.28*	2.65	13.10	19.44
Control	27.32	5.92	5.76	28.93	1.06	0.27	-1.41	4.63

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

*p <.01

To provide more confidence in the efficacy of intervention, pre-intervention scores on self-esteem were compared with post-intervention scores in both control and experimental group.

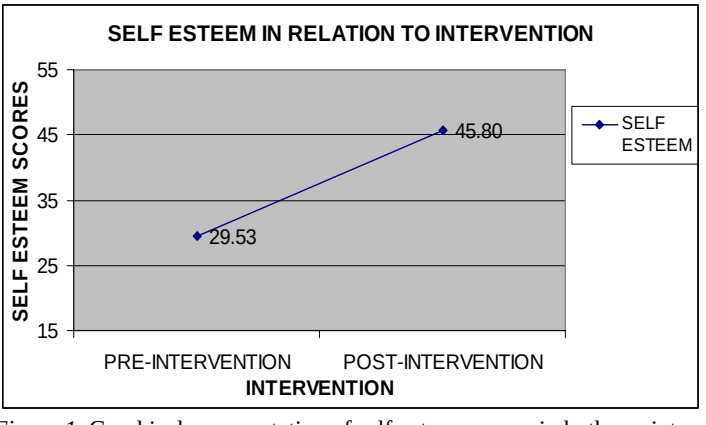

Figure 1: Graphical representation of self-esteem scores in both pre-intervention and post-intervention assessment session.

Finding of these pre-intervention post-intervention comparisons are presented in Table 2 and Figure 1, which shows that post-

intervention self-esteem mean scores are higher than pre intervention mean scores of experimental group. Pre-intervention and post-intervention self-esteem scores differ significantly ($t = 10.28$, $p < .01$), whereas no significant difference has been found between pre-intervention and post-intervention scores of control group. The following figure depicts the graphical representation of self-esteem scores in both pre-intervention and post-intervention assessment session ($t = 1.06$).

Discussion

Healing by means of music is a very ancient medical art with many approaches to both learning and practice. Music therapy, as it is practiced today, is the systematic application of music in the treatment of physiological and psychological aspects of any disequilibrium in the body. The present study was designed to assess the impact of music as therapy in enhancing self-esteem. The aim of the therapy was to regain the lost touch to one's own body self-regulatory processes. The aim of the research was to facilitate change through the use of music as therapy in the students' behavior with particular emphasis on self-esteem.

The hypotheses of this research that music therapy would enhance self-esteem have been supported. The results are in line with the previous researches which indicated that self-esteem had increased following a music therapy intervention with thirteen hospitalized patients diagnosed with 'adjustment reaction to adolescence' (Henderson, 1983), musical performance can also help to build self-esteem and expression (Gardstrom, 1987). Another example is by Smeijsters and Hurk (1999) who conducted an in-depth case study of a woman suffering badly from grief and had issues finding a personal identity. They found music therapy enabled the client to express part of her personality, which had been suppressed, and during the music therapy process, her self-esteem increased. Music helps in enhancing self-esteem, self-expression, and interpersonal communication (Freed, 1987). It is clear that a range of musical activities can all produce a positive effect on self-esteem and self-confidence. It seems that this effect should be particularly apparent in a therapeutic environment, especially if it is emphasized as an aim of the therapy.

Support for the present findings could be derived from some previous studies which explain that self-esteem is not only seen as a basic feature of mental health, but also as a protective factor that contributes to better health and positive social behavior through its role as a buffer against the impact of negative influence (Mann et al., 2004). Music therapy is important for establishing and recreating

identity (Aldridge, 1989; Magee, 1999). Much of the literature supporting the use of music therapy describes how music therapy enhances self-esteem and self-efficacy (Purdie, 1997; Purdie & Baldwin, 1994) as well as develops positive self-image (Jochims, 1995; McMaster, 1991). Music has the ability to facilitate language acquisition, general intellectual development, creativity and self-worth (Hanschumaker, 1980). Montello and Coons (1998) study results give the evidence of improved self-worth and self-esteem as a result of using music.

The findings of the study clearly indicate that music is an incredibly powerful form of expression. It combines both words and sound to deliver a message. Music therapy can trigger specific memories in one's mind. There is no doubt about strong connection existing between music and feelings. High self-esteem in turn declines individual's proneness to stress. Kittredge (1911) beautifully quoted Ingersoll who believed that music expresses feeling and thought, without language; it is below and before speech, and it is above and beyond all words.

Limitations and Suggestions

This research carries certain identifiable limitations which need to be addressed. The sample is the urban middle SES adolescents aged between 15-18 years attending schools. Thus, the interpretation of study result would refer to only school-based, mid to late adolescence, studying in District Yamunanagar schools in Haryana, India. These findings could not be generalized to the whole adolescents aged between 15-18 years in other regions of India. Secondly, this study used only self-report questionnaires; the finding of the present study must therefore be interpreted in light of the limitation of them because questionnaires asking for personal information on such issues might make adolescents feel uncomfortable. Research also lacks follow-ups and cross-sectional design. Therefore, it is suggested that replication studies with longitudinal data and others adolescents are needed to confirm and extend the boundary conditions of the findings. In addition, the study across age group in other region of the country, with early adolescents or with young adults in the north, north-eastern, central, and south should be conducted. Larger samples from more English as well as government schools of different states should be used for further research. Follow-ups provide the direction that whether the effects of music therapy are transitory or persistent.

Implications

The most significant implication of this study is that, by the use of a music therapy as a therapeutic intervention, self-esteem can be enhanced, at least within the selected adolescent population. In our fast-paced world, sometimes adolescents can benefit from simple information on interventions to cope with day to day stress. The teens in this survey indicated, they would like to learn new options like music therapy to deal with daily life stressors. These findings can be used to encourage the use of music as a therapeutic intervention with similar cultural populations in India and elsewhere. Music therapy offers potential to meet psychological, social, and emotional needs that very few other non-pharmacological interventions can address. Creating an evidence base in music therapy for this selected group will assist clinicians, psychologists, and medical practitioners in establishing best practices in mental health care.

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