

DANCE AS A CATALYST FOR STRESS BUSTING

Charanya Gurusathya

Artistic Director, Natyashala School of Bharatanatyam, Pune, India
Member-International Dance Council, UNESCO

Address for correspondence:

Charanya Gurusathya
Natyashala School of Bharatanatyam, Artistic Director
B2-701, Ganga Panama, Pimple Nilakh
Pune-411027, Maharashtra, India
E-mail: charsathya@gmail.com

Abstract Dance is a catalyst for inspiration, for creating awareness of movement and self-expression, and to make a difference in the lives of children and adults. The current generation of kids is undergoing different kinds of stress, academic pressure, peer pressure and monotonous routines. Dance can be a fantastic stress-buster.

While we define meditation as “controlled brain activity”, dance is surely a form of meditation. When one dances, the brain has to coordinate with the body and mind to completely coordinate between music and movements. Dancing to one’s favorite music and enjoying it helps an individual focus strictly on the moment they are in. This aids in controlling the release of cortisol hormones from the brain, which helps in lowering stress and tension levels. “When the body feels good, the mind does too”. Dance can be a very therapeutic and healthy way for people to channelize any feeling that they may be experiencing. If anyone is suffering from depression, dance can give an outlet for emotions; connects you to a positive environment. Dance replaces stress hormones with pleasure hormones like endorphins and serotonins.

This paper incorporates the basic principles of learning and reinforcement that are known to be effective methods in helping individuals to dance. The paper attempts to portray the author’s experiences about “Dance as a catalyst for stress busting”. The research methodology used are literature survey, inputs in the form of survey and personal experiences of the author.

This paper publishes the results of a survey that was conducted amongst teenagers based on the students of Natyashala School of Bharatanatyam. The survey was primarily oriented to answer whether and how dance acts as a stress buster in their lives.

Another, a practical experience-based approach was conducted as, an in-school Dance Program for children with special needs; catering specifically to children with Autistic disabilities is presented here.

Techniques to inculcate dance as an early intervention for teenagers are also discussed. As one continues to dance, we can see how dancing will naturally develop and increase one’s self confidence and self-esteem, both on and off the dance floor, helping to further reduce the feelings of tension and pressure.

As the awareness for Autism Spectrum Disorder has increased, so have the number of therapeutic approaches. Therefore, the most effective treatment or combination of treatments remains inconclusive. Creative movement and dance is a practical and feasible option for children with Autism Spectrum Disorder. This article aims to present a narrative review of the literature for dance and stress and it is hoped that parents, teachers, and educators can gain thorough understanding of how dance can be adapted for autistic children who may be thinking about implementing dance movement therapy into an autistic child’s routine.

Key words stress, autism, tension, self confidence, self esteem

Introduction

When life tries to bring you down – Just Dance! – Shonna. H. Leiker



Figure 1. Teenage girls posing after the interview

Background

Dance is the language that body speaks. Dance is a beautiful form of art that helps one express themselves saying a word. Just like different languages in the world, dance also has so many languages – be it classical, folk, hip hop, ballet, contemporary, freestyle. Some dance forms are soft and delicate like ballet and contemporary, while some are fierce and powerful like hip hop, folk. Some dance forms are classic and beautiful like Bharatanatyam and Kuchipudi. Dance is not just an art of expression but also a great workout regime it keeps one fit. Dance helps one to improve concentration, memory, build flexibility and strengthen spine and back. The foot-tapping movements are like acupuncture that helps press all the points of the body connected to the feet. Dance is a great stress buster and helps relieve mental stress like no other. With dance one can let everything out in a non destructive way and feel lighter. Sometimes dance says more than words can ever describe.

Purpose

The sole purpose is to analyze the benefits of dancing and how dance makes a mark in one's life. This study is hoped to provide evidence necessary to establish dance as an effective medium to reach out to people in various fields and show how it reflects in the daily living of a person, especially teenagers. The aim is to find out the effect of dance to create body awareness, sense of well-being, social skills and empathy among autistic children. This research can help provide new teaching strategies for educators to use dancing methodology in classroom with children and disabled students at every walk of life.

“When the body feels good, the mind does too” – This paper incorporates the basic principles of learning and reinforcement that are known to be effective methods in helping individuals to dance in both solo and group sessions.

Problem Statement

The problem statement explored in this study is based on “Dance as a catalyst for stress busting”; it deals specifically with how dance acts as a stress buster in teenagers and autistic children.

Material and Methods

Initial research was done at libraries and through internet referring to books, journals and magazines to get inputs about meaning of stress, causes for stress, and symptoms of autism.

A research survey was conducted amongst teenagers on how dance acts as a stress buster in their lives. Real life experiences and views are being projected in this paper.

Another, a practical based approach was conducted as an in-school Dance Program for children with special needs, catering to children with Autistic disabilities.

Limitations of the Study

While dealing with teenage students, they were hesitant to give away exact responses. Some of the students provided similar responses to their peers'. The younger participants tended to choose answers that were convenient to them, which created ambiguity in the findings. However, the one on one sessions and individual questions gave the students an opportunity to answer freely helping in inferences.

Working with children diagnosed with Autism Spectrum Disorder had the potential of many limitations, given that they often experience outbursts, anxiety, attitudes, short attention spans, poor coordination, dynamic emotions, varying physical capability, and other behavioral patterns. Each participant had unique needs, and those needs changed every time I met with him/her. I never knew what to expect and was prepared to discard my lesson plan and improvise if the needs of the participant were not being addressed that day. In the classes, two out of the three participants had a difficult time verbally expressing themselves and their needs. This resulted in frustration for the participant, at times making me rely on the parent or guardian for the majority of the feedback and reflection.

Research Questions

1. What are you currently studying and what are your hobbies other than dance?
2. What kind of music do you like and which type of videos do you watch on YouTube?
3. How has dance helped you in your lifestyle?
4. How do you plan to make a difference to the world at large?



Figure 2. Mythology Coloring with imagination of Stories

Dance is a Stress Buster

Creative arts interventions, including art, dance movement, dramas and music, are used to target depression and depressive symptoms in adults and children (Dunphy et al., 2019). This includes interventions led by trained arts therapists as well as health and arts professionals.

Stress is one's body's way of responding to any kind of demand or threat (<https://www.helpguide.org/articles/stress/stress-symptoms-signs-and-causes.htm>). When you sense danger – whether it is real or imagined – the body's defenses kick into high gear in a rapid, automatic process known as the “fight-or-flight” reaction or the “stress response”. Some symptoms of stress include (https://www.webmd.com/balance/stress-management/stress-symptoms-effects_of-stress-on-the-body#2):

- becoming easily agitated, frustrated, and moody,
- feeling overwhelmed or having difficulty relaxing your mind, inability to focus,
- headaches, stomach upset, including diarrhea, constipation, and nausea,
- aches, pains, and tense muscles,
- insomnia,
- frequent colds and infections,
- being pessimistic or seeing only the negative side.

In this generation of stress, academic pressure, peer pressure and monotonous routines, dance can be a fantastic stress-buster (<https://www.scribd.com/document/398606720/fpsyg-09-02655-pdf#>). Recent studies have also shown it to be effective in improving conditions such as insomnia, anxiety, brain function, and tiredness, which are often the causes of stress and worry.

In today's world meditation is a necessity, where stress catches on faster than the eye can see or the mind can perceive. Meditation holds the power to unconditional happiness and peace of mind. While we define meditation as “controlled brain activity”, dance is surely a form of meditation (<https://www.artofliving.org/in-en/meditation>). When

one dances, the brain has to coordinate with the body and mind to completely focus on the music and movements. Dancing to one's favourite music and enjoying it can help an individual focus strictly on the moment they are in. This aids in controlling the release of cortisol hormone from the brain, which helps in lowering the stress and tension levels.

Techniques

“When the body feels good, the mind does too” – this paper incorporates the basic principles of learning and reinforcement that are known to be effective methods in helping individuals to dance in both solo and group sessions (<http://www.arthurmurraydancenow.com/blog/3-ways-dancing-relieves-stress>). Techniques on strengthening and stretching muscles, creative body movement, individual and group movements are taught in both creative dancing and basic dance movement.



Figure 3. Yoga Asanas in Bharathanatyam

Techniques to inculcate dance as an early intervention for teenagers are discussed as below:

1. Focus on Strengthening and Stretching muscles – warm up sessions, Yogic Movements like Surya namaskar and imbibing the different Yoga Asanas in Bharathanatyam.
2. Basic dance movement – learning the basic adavus in Bharatanatyam, mastering the Ara mandi posture, learning the Shiro, Drishti, Greeva, Mandala, Pada, Chaari Bhedas. Understanding Theoretical Aspects of Bharathanatyam, Understanding Facial Expression through Theatre.
3. Creative Dancing:
 - Learning Kalaripayattu – Martial Art Kerala,
 - Folk Dances of India – Kalbelia, Garba, Koli, Bhangda, Bihu, Lavani,
 - Zumba Techniques,
 - Exploring Freestyle Dance,
 - Creative Expression – Choreography Techniques.



Figure 4. Dance Make-up Learning by the Teenagers

4. Continuous Knowledge Sharing on dance related topics:

- Dance Make-up & Hairstyle,
- Dance Saree Drapery, Dance Charades,
- Taalam Concepts & Writing Articles related to Art,
- Mythology Colouring with imagination of the Stories,
- Classical Video Screening of Stalwarts in the Field.

Dance can be a very therapeutic and healthy way for people to channelize any feeling they may be experiencing. Dance/Movement Therapy is defined as the therapeutic use of movement to supplement the emotional, cognitive, physical, spiritual and social integration of the individual (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5836011>). Physically, dance movements stimulate the vestibular and cardiovascular system. Psychologically, embodied feelings and expression improve body image. Exploring one's own movement abilities and limitations helps to increase emotion regulation, impulse control, and relation to reality of life. If you are suffering from depression, dance can give you an outlet for your emotions, connects you to a positive environment. The ability to express with or without talking/singing gives a sense of freedom both physically and physiologically. Dancing replaces stress-hormones with pleasure hormones like endorphins and serotonin.



Figure 5: Classical Video Screening of Stalwarts in the Field

Teenagers Inputs¹

Avya is a 19-year-old Economics student from Pune, a Model United Nations enthusiast, with an interest in singing, art and public speaking. She listens to hip hop English music and is a huge Bollywood fan. In her spare time, Avya spends time with her parents and friends. Her YouTube search history is filled with dance videos of all style, watching blog videos by David Dobrik and Casey Neistat. She has a keen interest in conspiracy theories.

Avya says: “Dance has done a lot for me but more than anything else, it’s been a stress buster. During my 12th standard board exams, the only thing that kept me going was dance! Not only did it serve as a good form of exercise, it also helped me focus better on academics. My concentration level increased and in turn, my stress level plummeted by significant amounts. And now even in college, with all the assignments and deadlines, dance helps me stay focused. A quick practice goes a long way in de-stressing my mind and body.”

Avya believes everything happens for a reason and wishes to spread the message of humanity and peace among the masses in addition to the upliftment of all genders simultaneously.

Sitara is a 16-year-old 12th grade commerce student. Sitara is creative, aesthetically inclined, empathetic, and perseverant and always tries to imbibe good quality from our surroundings. She loves to watch science fiction, horror and adventure Hollywood movies, read books on thrill, crime and classics. She is a big fan of music by Tame Impala, Sufjan Stevens, Sleeping at Last and The Big Moon. During her free time she watches different dance choreographies, comedy, fitness and lifestyle videos on YouTube.

Sitara says: “Dancing has always served as an outlet for all my emotions, whether positive or negative. Throughout the pressure of my boards and other exams, dancing was an important part of my day as it was not only a stress reliever, but also helped me relax and distract myself for a while. Besides my dance sessions, my friends at dance class also contribute in a huge way to making me feel better on the days I feel low.”

Tahira is 18 years old and she is pursuing graduation in Arts with specialization in Economics. She likes to swim and play badminton and sometimes attend live sports events like a cricket or football match. She listens to songs of different genres that catch her attention on the radio or T.V. She loves to relax and be with friends during free time and on YouTube she usually watches dance videos, standup comedy videos and follows YouTube channels like Filter Copy, Dice Media, Indian Raga, and East India Comedy.

“Dancing helps me relieve stress by keeping me away from stressful events in my life, allowing my brain to recharge and face the day with renewed vigour. It has also helped me during my board exams to cope with the exam stress. My message to the world is ‘Expand your boundaries’. Learn to see beyond the limitations that seem real, and empower yourself to push past those boundaries.” says Tahira.

Jayantika is a 16-year-old Psychology and Political Science student. She has a melodious voice and loves to sing and take part in dramas. She spends her free time painting. She listens to alternate pop, rock and instrumental English music. She also loves listening to classic Hindi songs and Tamil songs occasionally. She is glued to funny bloggers on YouTube who captures their life on a daily basis. She follows “Last Week Tonight” by John Oliver which is a weekly satirical news show, that’s funny and at the same time keeps you well informed.

Jayantika says: “Dance to me is an escape. It’s an amazing way to de-stress yourself physically as well as emotionally. We tend to grow as human beings as we learn to express ourselves through Abhinaya. Personally, it’s also my only form of exercise and helps me stay quite fit. I honestly couldn’t imagine my life without dance.”

¹ The names of the teenage girls are changed in order to keep their identity confidential.

Aarini is a 17-year-old Science student. She is a good listener and she is empathetic to all. She is also an ardent state level swimmer and goes on trekking quite often, recent achievement being walking 40 kms in a day from Panhala to Pawankhind. She watches friends and movies on comedy channel and funny blogs by David Dobrik on YouTube.

“Any type of physical activity releases neurotransmitters and endorphins which serve to alleviate stress. Since I never ended up getting a gym membership, I use dance practice instead. I feel so much better after leaving all my frustration and stress on the dance floor. Be optimistic and pursue your dreams till the very end. If you are serious about something in life keep it your priority and achieve it.” says Aarini.

Ragini is a 16-year-old, class 12th Science student. She is a friendly person, who can easily interact with new people and is highly self-confident. She loves listening to classical and Bollywood music. Her interest in traveling has taken her all around India; she has a bucket list of exploring the world. She is an ardent reader and fan of Chetan Bhagat novels.

Ragini says: “Dance is everything to me. It is a form of fitness, more importantly; it helps me express what I feel. Dance boosts my confidence and helps me concentrate on the work I do and execute it with perfection. Dancing relieves me of stress by helping me distance from stressful events in life, allowing my brain to recharge and face the day with renewed energy. The more confident I am after I dance. Challenges are what make life interesting. Overcoming them is what makes life meaningful.”

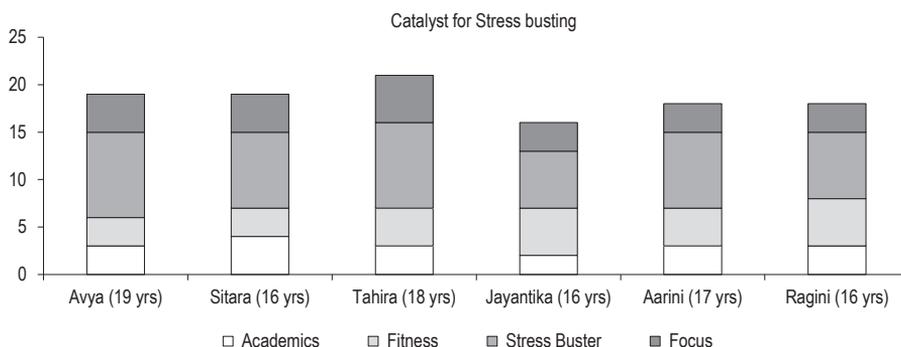


Figure 6. Teenagers Views

The scientific reasoning for why dance has the ability to act as a stress buster stems from the idea that when the body feels good, the mind does too. As one continues to dance, we can see how dancing will naturally develop and increase one's self confidence and self-esteem, both on and off the dance floor, helping to further reduce the feelings of tension and pressure. So let us dance.



Figure 7. Let us dance

Dance for Kids with Autism

Autism, or autism spectrum disorder (ASD), refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication (<https://www.autismspeaks.org/what-autism>). Autism affects an estimated 1 in 59 children. People with autism often lose the awareness of their mind and body. As awareness for ASD has increased, so have the number of therapeutic approaches; however, no single intervention has proven beneficial, therefore the most effective treatment or combination of treatments remains inconclusive (https://www.researchgate.net/publication/264373169_DanceMovement_Therapy_as_an_Intervention_for_Children_with_Autism_Spectrum_Disorders). Creative movement and dance is a practical and feasible option for children with ASD.

The signs and symptoms of autism include:

1. Low or lack of social skills and communication.
2. Touch or physical contact – do not like to be touched.
3. Difficult to adjust with sudden environmental changes like a sudden loud noise, strong smell or increase in light intensity.
4. Echolalia: people with autism often repeat the words or phrases they hear, known as echolalia.
5. Repetitive or recurrent behaviors.
6. Showing empathy: people with autism can rarely understand others feelings and emotions and thus showing empathy is very difficult for them.

Children learn through seeing and doing, learning patterns and other critical parts of how to function through traumatic experiences and relationships (Devereaux, 2017, p. 36). When individuals learn movement patterns it becomes an individual's response to his or her inner emotional state. This generally means that when an individual sees others communicate socially, their mind connects to the neurons related to the proper response needed for this experience emotionally. Therefore, the rationale is that if movement patterns can be changed, dance movement therapists can promote health and growth in children with autism by teaching new movements.

Symbolic interaction becomes a vital part of therapeutic work that is in dance movement therapy. Both the instructor and the student can find a deeper meaning into what can be seen through symbolic expression. Some examples of symbolic movement include personal touch, eye contact between two individuals as well as group eye contact, facial expressions including smiling and frowning and body movements. These symbols can have multiple meanings depending on the individual. Dance, for a long time, has been used as a stress relief, mirroring, healing and therapeutic tool. Dance can be used to take away a person's need to articulate their emotions and feelings verbally, due to their non-verbal nature. Since autism disorder heavily impairs verbal communication, the combination of dance and movement is an excellent alternative. If an individual does not know where their emotions are coming from, the therapeutic process can be confusing. Dance movement therapy can be an asset in treatment to make children with autism have a less confusing therapeutic process, also acting as a huge stress buster.

Dance Therapy has gained its widest recognition for its applicability and implication on people with autism (https://digitalcommons.lesley.edu/cgi/viewcontent.cgi?article=1011&context=expressive_theses). Movements of dance help to enhance communication of emotions and behaviors and also improve motor ability. Since Dance Movement Therapy focuses on the mind-body approach, thus it helps the people in therapy in re-establishing this mind-body connection and return to harmony.



Figure 8. Academy for Severe Handicaps and Autism – ASHA

Research Findings

Studies and research findings have supported the positive implication of dance on people with autism. When it comes to considering any prospective therapy which may be incorporated into the autism spectrum disorder child's routine; this is something that must be considered carefully. Factors such as the inclusive of cost, time commitment, and even reluctance of the child to attempt a novel activity; all come into play (<https://pdfs.semanticscholar.org/5691/9f3c8a8dc7847795d5bf5a12bff738a05881.pdf>). The following are a few basic highlighted points from the selected studies as regards dance therapy and its effects on autistic children. A study and teaching was conducted at ASHA, Academy for Severe Handicaps and Autism in Bangalore, for 10 kids in the age group of 7 to 13, with Autism Spectrum Disorder. The aim is to find out the effect dance has on body awareness, sense of well-being, social skills and empathy. The verbatim reports from parents, family, friends and teachers have positively reinforced the fact

that dance movement has a huge impact on improving many of the autism symptoms. A dance movement session included a variety of techniques to help the person overcome the disability symptoms:

1. Simple imitation of the students movements – like playing the music and allowing them to move, later converting it into simple steps.
2. Mirroring techniques like the students being stimulated to copy the movements that the instructor or teacher is doing to increase the movement vocabulary in them.
3. Touch Therapy: stimulate the young kids by a simple and soft touch and directing them to develop movements like walking, running, jumping, hopping, crawling, sitting, standing and bending, which are widely required for daily life activities.
4. Props: usage of props like balls, scarves, pompoms, hoola hoops to promote wider movement.

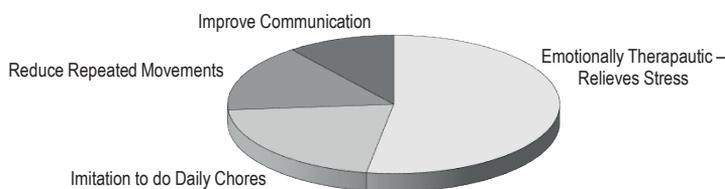


Figure 9. Teachers and Parents Inputs

These creative arts therapy techniques are developed in an individual-specific way, catering to the needs of every child, so that the children affected with ASD get the utmost benefit from the therapy session.

Feedback from Families of Autistic Children²

1. Dance is a great stress reliever to my daughter, not only because it is great physically for the body but it is also emotionally therapeutic. I have seen her go to class upset or emotionally energized and within moments of beginning to move with the music she is composed into herself and is willing to understand and dance. – says mother of Aishwarya, 12 years old.

2. The dance program has helped my son, Nikhil, 7 years old, a lot. He imitates a lot now, I hope this will help him in doing things like brush his teeth and wear his dress.

3. The thing that made me happy about the dance sessions was that when Spatika came home she was content and calm. She was able to sit down at the table with us and not get up and down 20 times. She was also able to participate in a conversation with my other daughter and myself without being anxious and interruptive. I feel she was able to think more clearly and when speaking her thoughts were on the topic.

After receiving the dance movement therapy led by me, the children spent less time wandering, showed more time on-task behavior, less time showing negative responses to being touched, and less time resisting the teacher.

² The names of the students are changed in order to keep their identity confidential.

The teachings showed that after the sessions of dance movement therapy based on mirroring, children reported improved body awareness, well-being, specifically decreased stress and tension, and increased social competence.

As a teacher-researcher, my role was to provide people with ASD a creative outlet to experience art and movement as a way of expressing themselves. I aimed to empower the students to discover personal expression by exercising their social, mental, and physical well-being.

Benefits of Dance Movement in People with Autism

Dance Movement therapy has helped people with autism in various ways and in all the areas of impairment. The benefits experienced are as follows:

1. It helps in improving attention and concentration and thus helps in guiding the students educationally.
2. Dance as a way of expression of emotion enables autistic people to express through movements – it teaches them to laugh, smile, cry.
3. Group sessions in dance movement therapy enables in developing social skills and communications of an autistic person.
4. Doing a choreographed dance movement sequence in a series of sessions in a row helps in improving memory and recapitulation skills. It helps in stopping the repetitive movements as the students learn different movements in the session.
5. Touch therapy helps in developing trust on others as well as helps in reducing sensitivity to physical contact and touch. It helps in developing body awareness and improves general well-being and can stimulate verbal communication skills.
6. As the social skills develop, it promotes understanding the feeling and emotions of others and thus develops empathy.

With the vast range of benefits and the varied focus that a dance movement therapy session includes, it is sure to benefit anyone taking the session. As for a child with autism, an early diagnosis with a good intervention including dance movement could help the child in developing properly in the cognitive, social, emotional and motor development at the pace and help them lead a better life.



Figure 10. Kids imitating the Instructor



Figure 11. Hoola Hoop helping the kids' wider movement

“Dancing helps to replace stress with pleasure hormones like endorphins and serotonin”

Constructive and Restrained Attributes of the Research Paper

Constructive Attributes

1. Dancing increases one's self-confidence and self-esteem, helping to reduce the feelings of tension and pressure. The dance movement therapy improves the emotional, cognitive, physical, spiritual and social integration of the individual.
2. The formation of a trusting relationship with an adult has an undoubtedly positive impact on an autistic child.
3. Children with autism spectrum disorder can learn to eliminate inappropriate, excessive behaviors, such as throwing tantrums, they can also learn more positive, useful behaviors, such as verbally expressing what is frustrating.

Restrained Attributes

1. The teenage students were hesitant to give away exact responses. Some of the students provided similar responses as their peers, this created ambiguity in the findings.
2. The children diagnosed with Autism Spectrum Disorder often experience outbursts, anxiety, attitudes, short attention spans, poor coordination, dynamic emotions, varying physical capability, and other behavioral patterns.
3. Each participant has unique needs, and those needs to be changed every time I met with him/her. I never knew what to expect and was prepared to discard my lesson plan and improvise if the needs of the participant were not being addressed that day.
4. In the classes, two out of three participants had a difficult time verbally expressing themselves and their needs. This resulted in frustration for the participant at times making me rely on the parent or guardian for the majority of the feedback and reflection.

Discussion and Conclusion

Stress is a problem that any individual in the world can be affected by and stress can take a powerful toll on people's health and lives. When we become stressed we are more likely to engage in activities such as watching television, surfing the web, and other various activities that numb the brain. We tend to put our stresses aside instead of dealing with them directly.

Music, dance and exercise are healthy and efficient ways to reduce stress. Dance is physical movement that conveys the mood or attitude of the dancer. One of the best results of exercise is the production of serotonin. Serotonin is a chemical produced in the brain that relaxes and puts the body in a happy mood. This chemical is essential for a person's well-being because serotonin also regulates sleep, appetite and the ability to learn.

Dancing can be a way to stay fit for people of all ages, shapes and sizes. Dancing improves ones muscle tone, strength, endurance and fitness. Dancing is a great way to meet new friends.

We can rightly say dance:

1. Is an outlet for emotional expression, stress reduction and creativity that benefits youth during stressful situations by channelizing their energy positively.
2. Develops self-confidence and self-awareness with feeling of unity and completeness.
3. Increases self-esteem and more positive outlook among learners of the art.
4. Stabilizes and helps gain better control of the body.

Dance has been repeatedly shown to positively impact a person's mental health. The study has revealed that, despite problems such as stress and other potential challenges in teenage girls, dance can result in high adherence and a positive experience for the students. Dancing has the capacity to contribute to new healthy habits. Teenage girls who were struggling with problems like neck and back pain, stress, anxiety and depression, improved their mental health and reported a boost in mood after they took the dance classes; the positive effects last longer.

Furthermore, many cultures agree that there is a mind and body connection, and many cultures use dance to heal this often damaged connection. Dance therapy is suggested for patients today as treatment for emotional and therapeutic support, as dance allows individuals to connect with their inner-self, this was very well seen with autistic children where they were able to lead a better living and keep themselves focused to a larger extent.

The rhythm of dance can positively impact one's mood by lowering stress and anxiety levels. Dance as an exercise enhances confidence by teaching to trust our instincts and impulses. In group learning sessions, the act of collective movement decreases feelings of isolation and assist students in developing healthy bonds. The art of self-expression has the power to point one in new directions in terms of thought and behavior. Learning new forms of creativity often enables one to non-verbally express emotions that could be challenging to share any other way.

Acknowledgement

The research paper on "Dance as a Catalyst for Stress Busting" has been done to acquire knowledge on this theme. This research would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

I am truly indebted and thankful to the young teenage students who willingly shared their life experiences to take the research forward. This thesis would have not been possible without their valuable inputs at every stage of the study.

I owe sincere and earnest thanks to the management of ASHA, Academy for Severe Handicaps and Autism in Bangalore for providing me with valuable insights into the field of autism and allowing the tender minds to explore and imbibe dance into their daily life routine. The valuable feedback from the parents of autistic children without which I would not be able to conduct the sessions with the young innocent hearts and how dance can be an effective tool for social change as well as for educating the masses.

Lastly, I thank my family members who have given me their unequivocal moral, emotional and educational support throughout, as always, for which my mere expression of thanks does not suffice. All of which have helped me complete this research successfully.

References

- Acolin, J. (2016). The Mind–Body Connection in Dance/Movement Therapy: Theory and Empirical Support. *Am. J. Dance Ther.*, 38, 311–333. DOI: 10.1007/s10465-016-9222-4.
- Archer, S., Buxton, S., Sheffield, D. (2015). The effect of creative psychological interventions on psychological outcomes for adult cancer patients: A systematic review of randomized controlled trials. *Psycho-Oncology*, 24, 1–10. DOI: 10.1002/pon.3607.
- Chantal Sicile Kira (January 7, 2014). *Autism Spectrum Disorder (revised): The Complete Guide to Understanding Autism*. Penguin Random House Company.
- Devereaux, C. (2017). Neuroception and Attunement in Dance/Movement Therapy with Autism. *Am J Dance Ther*, 39, 36. DOI: 10.1007/s10465-017-9249-1.
- Dunphy, K., Baker, F.A., Dumaresq, E., Carroll-Haskins, K., Eickholt, J., Ercole, M., Kaimal, G., Meyer, K., Sajjani, N., Shamir, O.Y., Wosch, T. (2019). *Creative Arts Interventions to Address Depression in Older Adults: A Systematic Review of Outcomes, Processes, and Mechanisms*.
- European Association Dance Movement Therapy (EADMT) (1994). Retrieved from: <http://www.eadmt.com>.
- Foxman, P. (2004). *Dancing with Fear: Overcoming Anxiety in a World of Stress 1996*. Rowman & Littlefield Publishers, Inc.
- Hanna, J.L. (2006). *Dancing for Health: Conquering and Preventing Stress*. Rowman & Littlefield Publishers, Inc.
- Hanna, J.L. (2006). *Dancing for Health: Conquering and Preventing Stress*. Rowman Altamira; Lanham, MD, USA.
- Netzer D., Chang, M. (2019). Exploring Natural Materials: Creative Stress-Reduction for Urban Working Adults. *Journal of Creativity in Mental Health*, 14 (2), 152_168. DOI: 10.1080/15401383.2019.1568940.
- Notbohm, E. (2012). *Ten Things Every Child with Autism Wishes You Knew*. Future Horizons.
- Payne, P., Crane-Godreau, M.A. (2015). *The preparatory set: A novel approach to understanding stress, trauma, and the body mind therapies*. DOI 10.3389/fnhum.2015.00178.
- Teo, J., Hoon, O.P. (2015). Dance and Movement as Therapy for Children with Autism Spectrum Disorders (ASD): A Case for Kuching, Sarawak. In: *Assistive Technologies for Physical and Cognitive Disabilities*. DOI: 10.4018/978-1-4666-7373-1.ch012.
- Wiedenhofer, S., Koch, S.C. (2016). Active factors in dance/movement therapy; specifying health effects of non-goal-orientation in movement. *Arts Psychother.* 52,10–23. DOI 10.1016/j.aip.2016.09.004.

Cite this article as: Gurusathya, C. (2019). Dance as a Catalyst for Stress Busting. *Central European Journal of Sport Sciences and Medicine*, 2 (26), 15–29. DOI: 10.18276/cej.2019.2-02.