

Relationship Between Music Performance Anxiety and Perseverative Thinking Among Trained Singers

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Abstract

Music, the greatest art of the country has unique quality of appealing directly to the hearts and mind of people. Singing involves a singer in logical, analytical thought, simply because singing is a highly complex activity during which you really must think technically for some of the time, while constantly projecting creative, visual and non-verbal communication and body language. When singers perform the two hemispheres of the brain organize different modes of thought and perception. The Purposive sampling technique was used to collect a sample of 172 trained singers of both male and female population were included, who undergo music performance anxiety, in connect with perseverative thoughts. Data was collected using Kenny Music Performance Anxiety Inventory and Perseverative Thinking Questionnaire. The result, the statistical analysis indicates significant positive correlation between Music Performance Anxiety and Perseverative Thinking across various demographic categories. It reveals high levels of music performance anxiety are generally associated with high levels of perseverative thinking. Overall, these findings underscore the importance of addressing music performance anxiety and its association with perseverative thinking in order to promote better performance strategies.

Keywords: Music Performance Anxiety, Perseverative Thinking, Performance Strategies, Trained Singers

1. Introduction

Henry Woodworth Longfellow described music as the universal language of mankind. Author Man has made music to add further dimensions to his expression of the magical, the mystical and the emotional. (Massey, 1996). Human are creative animals and prestigious monument to spirit of the humans is the beauty of music. From olden days, man has made music to include further to the essence in communication. Man found some sounds in nature pleasing and found meanings in the songs of birds and discovered rhythms in the movement of heavenly bodies. (Massey, 1996). One of the oldest forms of art, in its classical form, is Indian music. The vocal chord is the oldest instruments known to human life, with great deal of familiarity. The singer is expected to produce the song along with its lyrics to the spectators, be it a live stage performance or at a recording studio. Singers perform along with several artists, disc jockeys, a band, the songs that has been written for them by the production team. Taking a proper vocal training is highly essential order to perform on stage. The different nuances and techniques must be

mastered in the field of singing. These techniques include; Holding a microphone properly, how to move on stage while singing and how to follow a conductor. Singers have to always be cautious about taking proper care of their voice, by avoiding consumption of a lot of cold beverages, exposure to pollution and other activities that would cause strain to the vocal chord. Singers must always remember that the vocal chord are the most unique and beautiful part of the body. (Kim, 2002)

Every person should know how their voice is shaped. This classification is based on vocal range and pitch. A person's voice might gradually evolve and change as they mature, further changing the pitch abilities and the voice range classifications. The adult female voice is classified into three types: Soprano, Mezzo-Soprano and Contralto. Soprano is the higher female voice which is further sub-divided into types according to their ranges technical abilities. These voices have a broader range. The highest and the lightest Soprano is Coloratura. Mezzo is a sub-category of Soprano that have the similar range, with a slightly increased power and warmth of the tone in low range. The least women voice is Alto. In classical singing, the Alto voice can be heavy and dark; whereas in popular music, more specifically in Jazz, Alto voice is warm and rich. (Demosthenous, 2010)

The adult male voice is further divided into Tenor and Bass, and additional third classification known as Baritone that lies somewhere in between Tenor and Bass. Tenor is the highest range and popular male voice. Tenors are of two types, lyrics and dramatic. Baritone is the midway between Tenor and Bass. Bass is the lowest range and heaviest male voice among the three. The voice range changes through the mentioned ranges as one matures and evolves through their age. Their voices grow too, just like every other part of their body. (Demosthenous, 2010)

There are seven singing styles. The first one being Bel Canto, which is an Italian technique for singing, that translates to beautiful singing, emerged in the seventeenth century in Florence, is often used in Opera singing. The second style of singing is Belting, that aims to provide power and resonance in the voice. It is principally used in musical theatres and is very different from Bel Canto. The third style includes choral technique. Different qualities of tone is able to produce by the voices and there ought be a portrayal of tone to illustrate the sadness and exclamation. The fourth style is Jazz. This includes main vocal singer with a jazz band and jazz group, in which the singers embellish the main vocal line. The fifth type is overtone singing also called as throat singing because the phonation occurs in the throat. The sixth style is Rock. Rock is the sense of energy. The energy that the singer withholds is mainly mental. It is a combination of excitement awareness and intent. The last and seventh style is Gospel. It is closely connected with Afro American culture. Gospel is a different style of singing that aims through music and words to explain extraordinarily spiritual experiences. Gospel songs were developed in churches where people sang with their soul and embellished their performance with melodic ornamentations and improvisations. (Demosthenous, 2010)

Looking into the genre of Indian classical vocal music, the Northern Indian or Hindustani tradition is practiced largely in the north and central India. The tradition includes number of styles, vocal and instrumental. Like many performances of North Indian music, this one has a solo performer assisted by a group of accompanists typically where the singer is accompanied by players of Tampura, tabla, and harmonium. They are at the disposal of the solo performer, who tells the musicians what to play, when and how. The golden age of Carnatic music became at peak of colonialism, from the early to mid- nineteenth century. The trinity of composers, Thyagaraja, Syama Sastri and Muthusamy Dikshitar, who was said to have revolutionized the practice of Carnatic music were prevelant during this period. Although, Carnatic music is termed as a vocal music, the violin is the most visible and audible elements, found in every

concert playing solo or doubling the vocalists. No other instrument is so powerful as the violin. (Weidman, 2006)

There are several factors associated with performance of singers. One such factor is performance anxiety. Performance anxiety is a strong and excessive feelings of fear or worry that is related to being able to accomplish something specific, or the fear of the consequences of not being able to do well. The fear that develops while speaking in front of a thousand people, giving a musical performance in front of a huge number of audiences, the stress factor that accumulates while being on stage, under the pressure of performing for thousands of people, and several other such factors are encapsulated into understanding what performance anxiety is all about. Several physiological symptoms are associated with performance anxiety. This includes increased heart rate, sweating, dry mouth, muscle tension, tremors and so on. It is essential to understand the core reason of occurrence of anxiety. Anxiety usually occurs as result of anticipating a performance, in which anxious and perseverative thoughts are likely to surface in the singer's mind, making it even more difficult to perform. These afore-mentioned physiological symptoms further trigger behavioral responses like missing the lyrics while singing, making errors in the tune while singing, forgetting chords etc. Performance anxiety arises as result of worry that develops due to various possible disasters or factors that could go wrong prior to, or during the performance. Worrying is the quintessential cognitive factor that is associated with anxiety. Judgements associated with the performance, the negative thoughts or in other words the perseverative thoughts about performance become an essential part of the anxiety diathesis. (Lehrer, 1990)

Perseverative thinking occurs when a person gets stuck on to a thought that occurs repeatedly associated to a negative incident. These thoughts occur when a person is trying to handle stressful situations in his life, when he is trying to understand, acknowledge and perceive information from the external environment, shift his focus over stimuli, cannot stop dwelling into certain information or events and cannot manage to handle behaviors. The relation drawn between performance anxiety and perseverative thinking associated along with it is a quintessential factor associated to study among trained singers who perform on stages. Even when a singer is physically ready to perform but psychologically unstable and not in a position to perform, no matter how big and great the effort is, none of the vocal techniques used at the moment will be beneficial as a factor. The thought patterns of the performer may affect the pre-performance preparation or the main performance in a huge way. A singer should be focused in all aspects while performing, in terms of his or her logical, analytical thought, as it is a highly complex form of art for which one must really use a lot of technical aspects and constantly be creative, attentive, focused and should convey proper non-verbal communication. The left hemisphere dominates logical analytical thinking, evaluates criticism. While the right hemisphere reigns over insight, tempo, feelings and positive feedback. (Emmons, 1998)

While performance anxiety among singer in still symptoms physically, it may lead to disruptions of analytical and positive thoughts which may in turn lead intentionally or unintentionally lead to perseverative thought. It is therefore essential to not just study about the physical symptoms of performance anxiety among singers but also understand the establishment of its relation with perseverative thinking. (Emmons, 1998). Music Performance Anxiety (MPA) that is commonly known as stage fright, is a psychological phenomenon that significantly impacts musicians, regardless of their level of expertise. A comprehensive understanding of MPA involves exploring its nature, causes, symptoms, and the ways in which individuals can cope with and overcome this challenge. MPA is known as the extreme fear, apprehensive feeling that a person experiences when exposed to the prospect of performing in front of the

public. There exists both physiological as well as psychological response for the music performance anxiety. These symptoms interrupt a singer's proper method of rendering a performance. Lot of internal and external factors around the singer contributes to the presence of music performance anxiety. The fear of being judged for their performance, presence of low self- efficacy and low self-esteem, lack of self-confidence and society's expectations are among the primary causes.

The symptoms of MPA can be cognitive, psychological and physiological. Cognitive symptoms include perseverative or negative thoughts, fear pertaining to failure, self- doubt. The most common physiological symptoms include trembling, sweating, raised heart rate and gastrointestinal problems. Singers must recognize and immediately look into reducing these symptoms as it might interfere with the important aspects of performance. Anxiety is another important factor that can impair cognitive processes in humans, affect concentration, deal with memory problems and diminishes creative experiences (Steptoe & Fidler, 1987). Physiological symptoms can directly reduce the effort and ability to produce the best performs by the singers. It is hence essential for a singer to take up a holistic development approach in terms of reducing physiological, psychological and cognitive symptoms and other environmental interventions. Practicing mindfulness, visualizations and other cognitive behavioural techniques are proven to be highly beneficial in managing negative thoughts and emotions. Educators, peers, and the broader musical community play vital roles in fostering an atmosphere where musicians feel safe to express themselves without fear of judgment (Papageorgi, Creech, & Welch, 2013). Encouraging a positive mindset and emphasizing the intrinsic value of music performance can contribute to a healthier perspective.

Symptoms of Music Performance Anxiety

Cognitive Symptoms:

One of the primary cognitive symptoms of MPA is Negative ideas, when musicians frequently struggle with negative ideas regarding their performance. These ideas could include uncertainties about their skills, worries about being judged, and dread of making mistakes. During a performance, negative self-talk might have a major impact on cognitive functioning (Kenny, 2011). The second significant cognitive symptom is fear of failing, which arises while trying to live up to expectations from others or from oneself. Anxiety levels among musicians may rise due to concerns that they won't measure up to expectations placed on them by peers, teachers, or the public (Osborne & Kenny, 2008). Memory Losses: MPA can affect cognitive processes, which can cause memory gaps and make it harder to remember musical sections. The anxiety-induced stress can interfere with a musician's ability to concentrate and maintain focus during a performance (Steptoe & Fidler, 1987).

Physiological Symptoms:

A raised heart rate is one of the most typical physiological reactions to MPA. Heart rate increases as the body's natural fight-or-flight response takes over. Anxiety symptoms may get worse due to this increased physiological arousal (Kenny et al., 2014). Performers may tremble or shake in their fingers, hands, or other body parts. The overall calibre of the performance may suffer from impairments to the fine motor skills necessary for accurate musical performance. Another physiological sign of MPA is excessive perspiration. Sweating is the body's reaction to stress-induced attempt to maintain body temperature, which can cause discomfort and possibly complicate handling instruments (Kenny et al., 2014). Anxiety can also cause gastrointestinal symptoms, such as nausea, cramping in the stomach, or problems with digestion. According to Kenny et al. (2014), these symptoms could add to the general physical discomfort experienced throughout a performance. Both vocalists and instrumentalists may experience dry mouth due

to MPA. Mouth dryness can affect phrasing, articulation, and general vocal or instrumental control, making a performance more difficult (Papageorgi, Creech, & Welch, 2013).

Behavioral Symptoms:

Performers who are suffering from MPA may exhibit avoidance behaviors, such as skipping rehearsals, abandoning their musical endeavors, or avoiding performance chances. These actions have the potential to keep the anxious cycle going (Papageorgi et al., 2013). Muscle stiffness or rigidity is a common behavioral indicator of physical tension. A musician's ability to perform in a comfortable and fluid manner may be hampered by tension in their jaw, shoulders, neck, or other regions.

Psychological Effects of Music Performance Anxiety on Musicians:

Music Performance Anxiety (MPA) is a complex psychological phenomenon that exerts profound effects on musicians. Beyond the immediate stress associated with performance, MPA can have enduring psychological consequences that impact a musician's mental well-being, self-perception, and overall quality of life. This essay explores the intricate psychological effects of MPA on musicians, shedding light on the emotional and cognitive dimensions of this pervasive issue. One of the primary psychological effects of MPA is the emergence of cognitive distortions and negative self-talk. Musicians may develop irrational beliefs about their abilities, envision catastrophic outcomes, and engage in self-critical thoughts. These distorted cognitions contribute to heightened anxiety levels and create a negative feedback loop that reinforces the cycle of performance-related stress (Kenny, 2011). MPA often gives rise to intense self-doubt and diminished confidence in one's musical abilities. A musician's confidence might be undermined by the dread of making mistakes or getting bad feedback, which can lead to a persistent feeling of inadequacy. According to Osborne and Kenny (2008), a musician's self-esteem may be impacted in a variety of ways outside of the stage by this erosion of confidence. One of the main components of MPA is the fear of being evaluated, which makes musicians more socially anxious. Fear of being judged by classmates, teachers, or the public can make one feel anxious, ashamed, and under close observation. The musician's general social well-being and interpersonal connections may suffer as a result of this evaluative anxiety in nonperformance settings (Papageorgi, Creech, & Welch, 2013). During performances, MPA can affect cognitive functioning and cause issues with focus, memory, and attention. Persistent exposure to MPA can contribute to emotional distress and, in severe cases, lead to burnout. The chronic stress associated with performance anxiety may deplete emotional resources, leaving musicians feeling emotionally exhausted, fatigued, and disengaged from their musical pursuits.

Burnout can have long-term consequences for a musician's mental health and passion for their craft (Kenny et al., 2014). For some musicians, particularly those who have experienced highly distressing performances, MPA can contribute to the development of performance-related trauma. Traumatic experiences on stage can leave lasting emotional scars, creating a heightened fear of recurrence and amplifying the psychological toll of MPA (Fishbein et al., 1988).

Five Factor Model of Perseverative Thinking:

A conceptual framework called the Five-Factor Model (FFM) of perseverative thought was created to classify and comprehend the many aspects of persistent negative thinking. The term "perseverative thought" describes the recurring and persistent quality of some thought processes, which are frequently connected to anxiety and depression. Examples of these processes include worry, rumination, and obsession. Five fundamental dimensions comprise perseverative cognition, according to the FFM:

Repetitiveness: This measurement gauges the frequency and degree of recurrence of the ideas. It considers how frequently and persistently these thoughts occur throughout time.

Intrusiveness: This dimension evaluates the degree to which ideas obstruct a person's ability to concentrate and go about their everyday business. Unwanted and disruptive, intrusive thoughts frequently interfere with other cognitive functions.

Unproductiveness: This dimension assesses how much thinking does not result in fixing problems or producing positive results. Negative emotions are frequently made worse by unhelpful thinking, which does not help to resolve the current problems.

Capture of Mental Capacity: This dimension quantifies the degree to which an individual's thoughts take up all of their cognitive resources. High levels of capture indicate that these recurring thoughts take up a large percentage of a person's mental capacity, making it more difficult to do other cognitive tasks.

Social Disengagement: The extent to which persevering ideas cause a person to retreat from social situations and activities is examined in this dimension. Due to their obsession with these ideas, people who exhibit high degrees of social disengagement may isolate themselves or find it difficult to form relationships.

Importance of Studying Perseverative Thinking in Trained Singers

Perseverative thinking, characterized by repetitive and intrusive thoughts focused on distressing topics, plays a significant role in shaping the psychological well-being and performance of individuals, including trained singers. This essay explores the importance of studying perseverative thinking in trained singers, delving into its potential impact on various aspects of their musical practice, mental health, and overall performance.

Understanding Perseverative Thinking

Perseverative thinking encompasses rumination, worry, and obsessive thoughts that persist beyond the initial trigger, often leading to heightened anxiety and stress (Ehring et al., 2011). In the context of trained singers, these repetitive thoughts may pertain to performance anxieties, self-criticism, or concerns about vocal technique. Recognizing the prevalence and nature of perseverative thinking in this population is crucial for creating targeted interventions and support systems. Perseverative thinking can interfere with a singer's ability to maintain focus on their vocal technique and artistic expression during practice and performance. Persistent worries about hitting specific notes, concerns about audience judgment, or fear of vocal flaws can create a mental burden that affects the singer's vocal control, pitch accuracy, and overall performance quality (Kenny, 2011). The psychological well-being of trained singers is closely tied to their ability to manage stressors, including perseverative thinking. Continuous rumination on past performances, fear of future mistakes, or self-doubt can contribute to heightened levels of stress, anxiety, and, in severe cases, symptoms of depression (Kenny et al., 2014). Addressing these mental health aspects is vital for the overall resilience and longevity of a singer's career. Perseverative thinking often intersects with performance anxiety, amplifying the psychological and physiological responses to stress. Understanding the relationship between perseverative thinking and performance anxiety is essential for developing targeted interventions that address both cognitive and emotional aspects of these challenges (Papageorgi et al., 2013).

Singers engage in extensive practice to refine their vocal skills, but perseverative thinking can alter practice habits. Repetitive thoughts about perceived weaknesses or anxieties related to upcoming performances may lead to avoidance behaviours, hindering consistent and effective practice routines (Williamson & Thompson, 2006). Understanding how trained singers cope with perseverative thinking is crucial for designing effective coping mechanisms. Some singers may employ adaptive strategies, such as mindfulness or positive self-talk, while others may resort to maladaptive coping mechanisms that further

exacerbate stress (Clark et al., 2014). Identifying these patterns can inform interventions tailored to individual needs. In educational settings, instructors and vocal coaches must be attuned to the presence of perseverative thinking among their students. A supportive learning environment that addresses psychological well-being alongside technical proficiency is essential for nurturing confident and resilient singers (Papageorgi, Creech, & Welch, 2013).

Factors Influencing Perseverative Thinking in Trained Singers

Performance anxiety stands out as a prominent factor influencing perseverative thinking in trained singers. The fear of judgment, concerns about making mistakes, and the anticipation of critical evaluation can trigger persistent and intrusive thoughts. Anxiety-related perseveration may manifest as worries about vocal technique, fear of forgetting lyrics, or doubts about one's abilities, all of which can contribute to a heightened state of stress (Kenny, 2011). Trained singers may grapple with perseverative thinking rooted in past negative experiences. The tendency toward perseverative thinking can be influenced by individual variances in personality factors. Certain singers may be more prone to intrusive and repetitive thinking due to their perfectionistic impulses, high levels of self-criticism, and overall worry-proneness. Comprehending these personality traits is essential to customizing interventions that cater to the individual requirements of every vocalist (Ehring et al., 2008). The cognitive styles of vocalists, such as cognitive flexibility and resilience, influence how they organize and process their ideas. Persistent thinking may be made worse by a rigid cognitive style that is characterized by rigidity and difficulties adapting to changing situations. Rather, a more adaptable cognitive style can encourage adaptive reactions to situations, reducing the negative effects of intrusive thoughts (Ehring et al., 2011). Persistent thinking can be greatly impacted by the circumstances in which people learn and perform. Stressors that are cognitive and emotional can be intensified by competitive environments, high standards, and high pressure circumstances. On the other hand, perseverative thinking can be lessened in loving and supportive settings that value psychological health and offer helpful criticism (Williamson & Thompson, 2006). Persistent thinking can be influenced by long-term stress and fatigue, even in experienced vocalists. Mental exhaustion may result from the rigorous nature of a singing profession as well as the pressure to perform well and uphold high standards. A singer's capacity to handle the demands of their career may be adversely affected by persistent stressors, which can intensify intrusive thoughts (Kenny et al., 2014).

Perseverative thinking can be influenced by how well-trained singers use their coping skills. Goal-setting, positive self-talk, and mindfulness are examples of adaptive coping techniques that can lessen the impact of intrusive thoughts. Conversely, unhelpful coping strategies like substance abuse or avoidance can make perseverative thinking worse and have unfavourable effects (Clark et al., 2014). The degree of mentorship and educational support that trained singers receive can have an impact on how well they are able to use perseverative thinking. Having access to performance psychologists, mental health services, and competent mentors can be extremely helpful in resolving intrusive thoughts and building resilience.

REVIEW OF LITEERATURE

In Bertain, 2023's study on Prevalence of Music Performance Anxiety in Conservatory Theatre Singers, problems in singing and performance due to Performance Anxiety was studied. 126 participants were included and data was collected using Kenny Music

Performance Anxiety Inventory. An overwhelming presence of Music Performance Anxiety was found among participants, as KMPAI scores of 105 and higher indicated a clinically significant level of Music Performance Anxiety. Findings showed commonality in corresponding phenomena with negative self-tal

ks, perseverative/negative thought.

Osborne, 2022's study gives an investigate account of theoretical adequacy of establishing music performance anxiety as a subtype of social phobia, using Rapee and Heimberg's (1997) model of anxiety in social-evaluative situations to account for the cognitions experienced by anxious individuals in solo musical performances. Similarities in the phenomena in terms of cognitive processes were shown in a sample of 84 musicians. The two cognitive constructs in the model seemed to be critical in social phobia were also the two constructs giving music performance anxiety. It is given that social phobic models provide a valid account of the cognitive processes in music performance anxiety. These results are combined with epidemiological and etiological information in a cognitive conceptualization of music performance anxiety

Nusseck, M 2021's study tested with a questionnaire to check these performance times to find out if there occurs different variation of the perceived MPA across the performance. The study was performed in 532 musicians. The musicians were asked to complete the Performance-specific Questionnaire for Musicians (PQM) immediately after performance. The results confirmed the presence of self-efficacy and functional coping for positive performance experience.

Clarke, 2020 Conducted a study based on assessing the Group Acceptance and the Commitment Therapy Intervention for Music Performance Anxiety among singers with an idea of checking feasibility of intervention. 31 participants completed an online survey including demographic details and outcome measures. Group sessions went for 2 hours each week for 6 consecutive weeks. Participants were provided with a 3-month follow-up through an online survey. It showed a significant increase in the psychological flexibility and significance in decrease in the Music Performance Anxiety.

METHODOLOGY

Aim

To explore the relationship between Music Performance Anxiety and Perseverative Thinking among trained singers.

Objectives

To assess and explore the impact of Music Performance Anxiety and Perseverative Thinking among trained singers

Variables

- Music Performance Anxiety -Independent Variable
- Perseverative Thinking -Dependent Variable

Hypothesis

H0- There is no significant relationship between the Music Performance Anxiety and Perseverative Thinking among trained singing population.

Research Design

Non-experimental hypothesis testing research design

Period of the study

From January 2024 to July 2024

Site of the study

Trained singers were approached in **Tamil Nadu** Government Music College, RA Puram, Chennai.

Sampling Procedure

Purposive Sampling was used to recruit a sample of 172 trained singers from **Tamil Nadu** Music

College, Chennai.

Samples were collected based on the following criteria:

Inclusion criteria

- Both male and female within the age range of 18 to 25 years
- Having undertaken professional training in singing
- Having the ability to read English or Tamil
- Being a part of public performances and concerts

Exclusion criteria

- Singers below 18 years of age and above 25 years of age
- Singers with more than 10 years of experience
- Singers who lack professional training
- Singers who cannot read English or Tamil
- Singers who are not into public performances and concerts

TOOLS

Socio Demographic Data Sheet

The socio-demographic data collected for the study from the participants included Name in initials, Age, Place of residence, Gender, and Educational Qualification

Kenny Music Performance Anxiety Inventory (K-MPAI), Kenny (2009)

This is a 40-item inventory that assess an emotion-based theory of anxiety as it applies to anxiety to the context of music performance (Kenny, 2009). Item addresses underlying anxiety- evocation of anxious prepositions. Items are examined with the 7point Likert scale where high scores indicate severe Music Performance Anxiety and psychological distress.

Scoring:

Each item is scored on a 7-point Likert scale, between 0 (Strongly disagree) and 6 (Strongly agree). A total score can be obtained, adding up all the items with more scores indicating more Music Performance Anxiety and Psychological Distress.

Reliability and Validity:

The KMPAI has been translated into 22 languages- Brazilian Portuguese, Croatian, Czech, Dutch, French, German, Hungarian, Indonesian, Italian, Japanese, Latvian, Lithuanian, Mandarin, Polish, Persian, Portuguese, Spanish, Romanian, Taiwanese, Turkish, Ukrainian and Korean. The results replicated the ones on the KMPAI with Australian musicians indicating cross- cultural validity.

Content, Construct, Validity and Clinical Utility of the Spanish, Portuguese and Brazilian Portuguese adaptation of the KMPAI have been shown in studies of Brazilian, Spanish, Peruvian and Portuguese musicians. This questionnaire reported very high internal consistency. Most studies revealed better convergent validity with other scales used in general population.

Perseverative Thinking Questionnaire (PTQ), Ehring, Ehlers (2011)

The 15- item PTQ was evaluated in 2 studies comprising non- clinical as well as clinical participants. Repetitive Negative Thinking (RNT) has core characteristics of repetitiveness, intrusiveness and difficulties with disengagement.

Scoring

Based on the working definition of RNT, the PTQ was constructed carrying of 15 items. The item set comprised 3 items for each of assumed process of RNT- Repetitive (The same intrusive, difficult to

disengage from (I cannot stop dwelling on them), unproductive (I keep asking myself questions without finding an answer), capturing mental capacity (Thought prevent me from focusing on other things). The items are rated on a 5- point rating scale-

1. Never
2. Rarely
3. Sometimes
4. Often
5. Almost always

Reliability and Validity

From the studies conducted based on this questionnaire, for the sum score, a very good internal consistency was found in all the samples collected. Similarly, all subscales showed good internal consistency. Results show a decent correlation for the Perseverative Thinking Questionnaire score. The total Perseverative Thinking Questionnaire score showed significant and substantial correlation with other measures of Repeated Negative Thinking.

Procedure

- Trained singers both male and female aged between 18-25 years from renowned musical organizations in Chennai were approached to obtain their informed consent to take part in the study.
- After the nature of the study was put forth and informed consent obtained, the socio- demographic details were collected from the singing population.
- The investigator administered the Kenny Music Performance Anxiety Inventory and the Perseverative Thinking Questionnaire.

Statistical analysis

The statistics that were used in finding the relationship between Performance Anxiety and Perseverative thinking is Pearson's Correlation. Statistical Package for Social Science (SPSS) 20.0 was used for the inferential analysis of the study.

Need for the study

Given the fact that singing involves complex abilities and techniques, physical and mental efforts namely, analytical thoughts, spontaneity, it is important to shed light on the impact of musical performance anxiety and its relation with perseverative thinking among singers. Although several studies have been conducted globally with reference to music performance anxiety and its impact on the performance, there are very few Indian studies that has tried to explore the relationship between music performance anxiety and perseverative thinking. On the other hand, effects of perseverative thinking or perseverative thoughts on the musical performance among singers are yet to be explored among the young adult's category. Several studies have been conducted measuring music performance anxiety as an individual variable. There is a notable absence of studies done combining the two variables- Music Performance Anxiety and Perseverative Thinking.

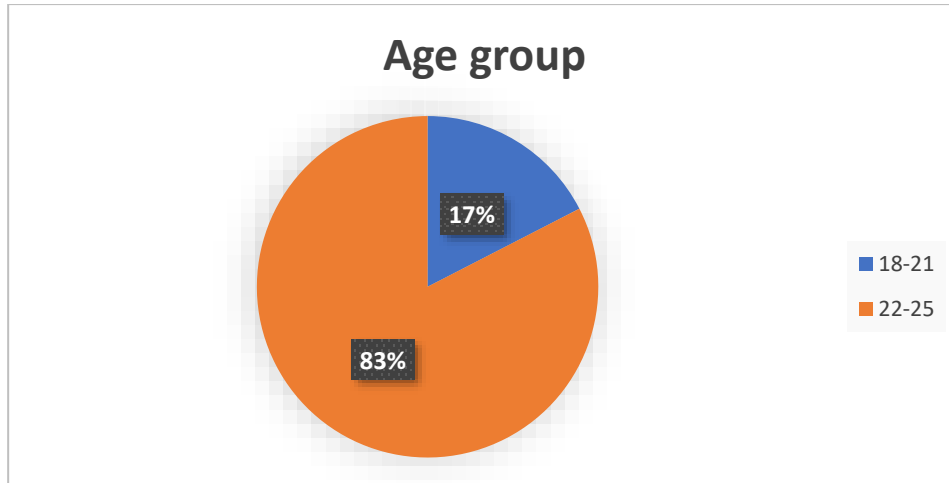
RESULTS AND DISCUSSION

This chapter describes the findings of statistical significance of the current study. The results were computed using SPSS version 20.0. The statistics used to analyse the data were Descriptive Statistics (Mean, Standard Deviation). The results are described in detail and discussed in relation to the existing literature on trained singers and their associated sociodemographic details.

Table 4.1 Shows the distribution of respondents based on age group

Age group	N	%
18-21	30	17
22-25	142	83
TOTAL	172	100

Figure 4.1 shows the distribution of respondents based on age group

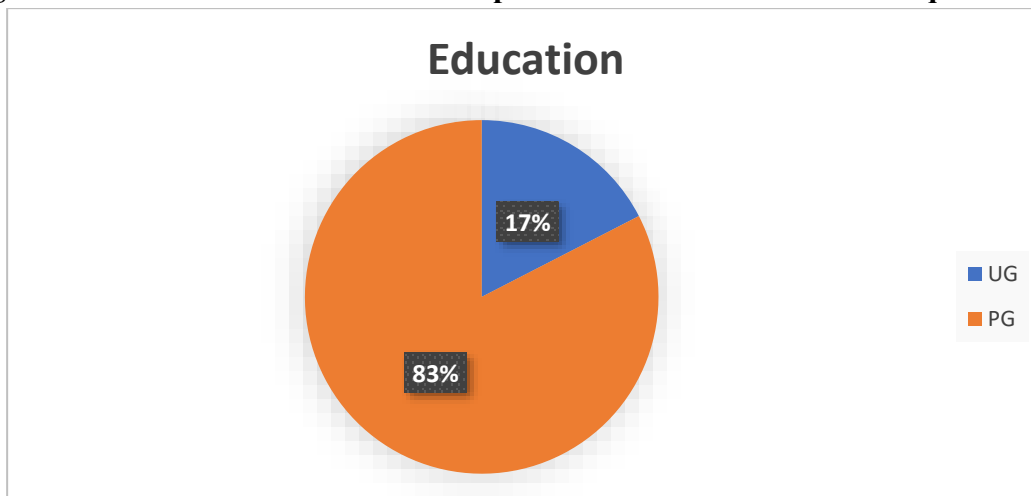


According to table 4.1, 30 (17%) of the 172 samples are under the age group of 18- 21 years. 142 (83%) of the samples are under the age group of 22-25 years.

Table 4.2 shows the distribution of respondents based on educational qualification

Education	N	%
Under-graduation	30	17
Post- graduation	142	83
TOTAL	172	100

Figure 4.2 shows the distribution of respondents based on educational qualification

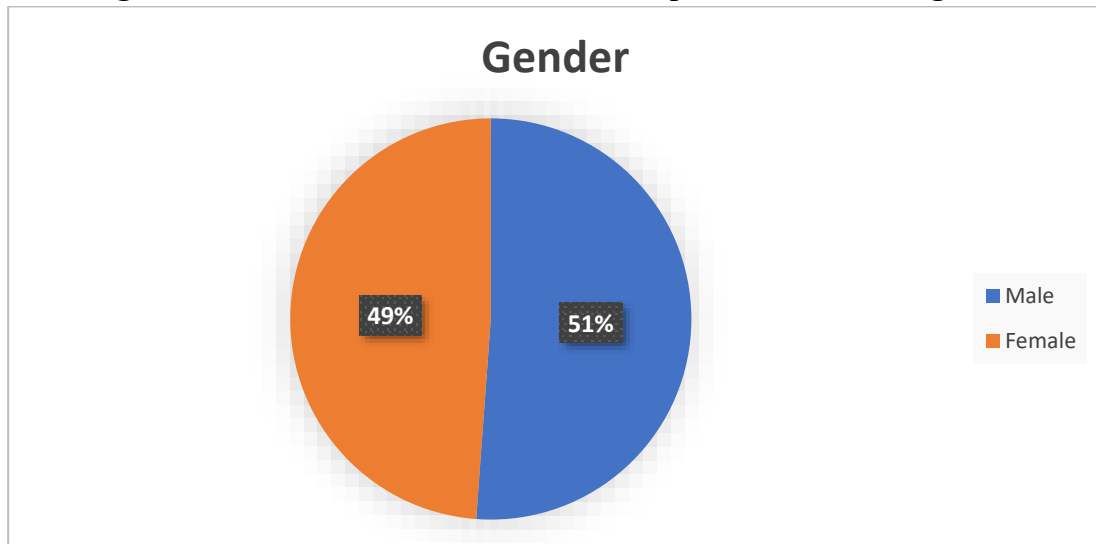


According to the table 4.2, 30 (17%) of the 172 samples have an education of Under-graduation in Music and 142 (83%) of the samples have an education of Post- graduation in Music.

Table 4.3 shows the distribution of the respondents based on gender

Gender	N	%
Male	88	51
Female	84	49
TOTAL	172	100

Figure 4.3 shows the distribution of the respondents based on gender

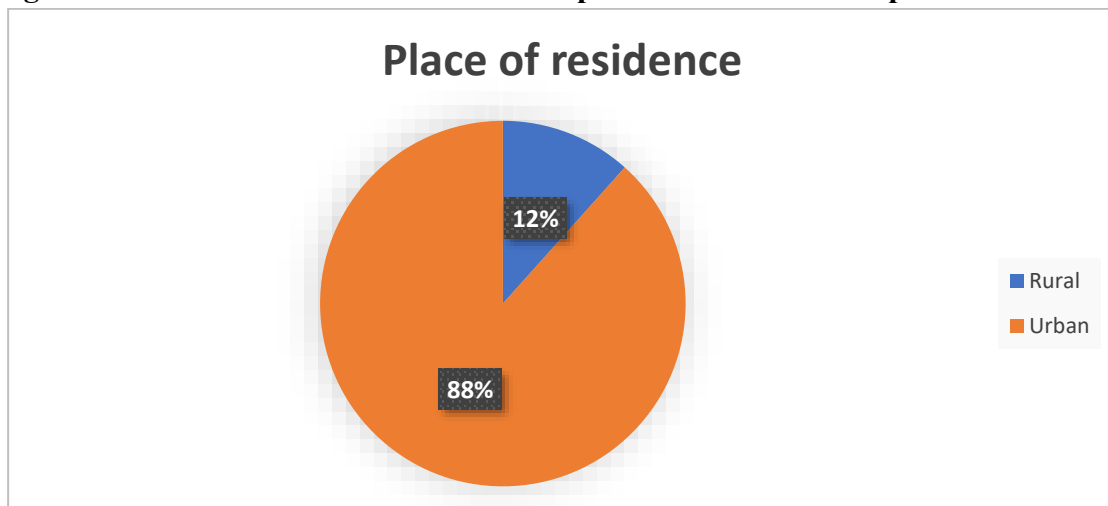


According to the table 4.3, 88 (51%) of the 172 samples of respondents are Male and 84 (49%) of the samples are Female.

Table 4.4 shows the distribution of the respondents based on place of residence

Place of residence	N	%
Rural	20	12
Urban	152	88
TOTAL	172	100

Figure 4.4 shows the distribution of the respondents based on the place of residence



According to the table 4.4, 152 (88%) of the sample of 172 respondents belong to the urban residence, 20 (12%) of the samples belong to the rural residence.

Sample Characteristics

The sample consisted of 172 trained singers from Tamil Nadu Government Music College.

Table 1 shows the descriptive statistics of the variables, music performance anxiety and perseverative thinking among the respondents

VARIABLES	MEAN	STANDARD DEVIATION	N
Music Performance Anxiety	148.50	38.59	172
Perseverative Thinking	36.76	14.18	172

Table 1 shows the descriptive statistics of the variables, music performance anxiety and perseverative thinking, out of a sample of 172 respondents. The mean value of the scores secured by the respondents in Music Performance Anxiety is 148.50, standard deviation of a value 38.59. The mean value of the scores secured by the respondents in Perseverative Thinking is 36.76, standard deviation of a value 14.18.

Table 2 shows the relationship between music performance anxiety and perseverative thinking among the respondents

VARIABLE Music Performance Perseverative Thinking		
Music Performance Anxiety		0.820**
Perseverative Thinking	0.820**	

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the Bivariate Pearson Correlation coefficient for the variables used in this study. The table shows that the two variables Music Performance Anxiety and Perseverative Thinking have a correlation coefficient of $r = 0.820^{**}$. This indicates that “There is a significant positive correlation between the two variables Music Performance Anxiety and Perseverative Thinking. The p value ($p=0.000$) is lesser than 0.05 ($p<0.05$). Hence the relationship between Music Performance Anxiety and Perseverative Thinking is significant at 0.01 level. This provides strong evidence that there is a significant relationship between the two variables, therefore rejecting the null hypothesis (H_0) “There will be no Significant relationship between Music Performance Anxiety and Perseverative Thinking”. A study conducted by (C Nielson., 2018), post-event negative thinking was assessed in professionally trained singers. Results revealed higher Music Performance Anxiety indicates more negative rumination in thinking. This result was found to be similar with the result of the present study in terms of the socio demographics and nature of the studies. In both these studies, professionally trained singers from colleges in the urban areas were collected that yielded similar results.

Table 3 shows the impact between Music Performance Anxiety and Perseverative Thinking

Variable	R value	R square	Adjusted R square	F value	Significance
Music Performance Anxiety Perseverative Thinking	0.820 ^a	0.672	0.670	347.852	0.000 ^b

- a. Predictors (Constant): MUSIC PERFORMANCE ANXIETY
- b. Dependent variable: PERSEVERATIVE THINKING

The regression analysis revealed a strong positive relationship between Music Performance Anxiety and Perseverative Thinking. The result indicates that Music Performance Anxiety is a significant predictor of Perseverative Thinking, explaining approximately 67.2% of the variance in cognitive function. The Correlation coefficient (R = 0.820) suggests a strong association between Music Performance Anxiety and Perseverative Thinking, indicating that as Performance Anxiety increases, Perseverative Thinking also increases further. The significant F value (p<0.001) confirms that the relationship between Music Performance Anxiety and Perseverative Thinking is not due to chance. Overall, these findings suggests that Performance Anxiety plays a critical role in impacting Perseverative Thinking, and that regulating performance anxiety can effectively regulate perseverative thinking.

Table 4 shows the mean score, standard deviation, T value of Music Performance Anxiety with respect to age, gender, place of residence and educational qualification.

Variable	Age group	N	Mean	Standard Deviation	t value
18-21	30	156.93	38.45	-1.292	
22-25	142	146.79	38.53	(NS) 0.839	
TOTAL	172	148.50	38.59		
Music Performance Anxiety	Gender	N	Mean	Standard Deviation	t value
	Male	88	150.25	41.99	0.606
	Female	84	146.67	34.82	0.021
TOTAL	172	148.50	38.59		
Place of Residence	N	Mean	Standard Deviation	t value	
Urban	152	147.03	40.03	1.377	
Rural	20	159.65	22.75	0.013	
TOTAL	172	148.50	38.59		
Education	N	Mean	Standard Deviation	t value	
UG	29	156.93	38.45	-1.292	
PG	143	146.79	38.53	(NS) 0.839	

Years of experience in singing	N	Mean	Standard Deviation	t value
TOTAL	172	148.50	38.59	
1-3 years	89	149.96	37.92	.509
4-6 years	83	146.95	39.47	(NS) .578
TOTAL	172	148.50	38.59	

It can be inferred from the statistical data, which shows the Music Performance Anxiety for several categories. The mean Music Performance Anxiety score for people aged 18-21 years is 156.93, with a standard deviation of 38.45, according to the age group. The mean score for respondents aged 22-25 years is 146.79, with a standard deviation of 38.53. Nevertheless, the t-value of age group is only -1.292, which is statistically not significant with a significance of 0.839.

In terms of gender, the mean value for 88 male (N=88), is 150.25, with a standard deviation of 41.99. Whereas, in female, with a total count of 84 (N=84), the mean value is 146.67, with a standard deviation of 34.82. The T value of the gender category is -0.606 which is statistically significant as they have a significance value of 0.021.

In Place of residence, the number of people living in the Urban side is 152 (N=152) with a mean value of 147.03 and a standard deviation of 40.03, whereas in the rural place, a total of 20 (N=20) had a mean value of 159.65, with a standard deviation of 22.75. the t value for the variable is 1.377, which is statistically significant as they have a significance value of 0.013.

Examining the education, it is observable that 29 respondents belong to Under-graduation, with a mean value of 156.93 with a standard deviation of 38.45. Whereas, 143 respondents belong to post-graduation, with a mean value of 146.79 and a standard deviation of 38.53. The t value of the variable is -1.292, which is statistically insignificant as they have a significance value of 0.839.

Lastly, examining the years of experience in singing, it is observed that 89 respondents have 13 years of singing experience, with a mean value of 146.96 and a standard deviation of 37.92. The t value of the variable is 0.509, which is statistically not significant as they have a significance value of 0.578 ($p > 0.05$).

In summary, the statistical data provides valuable insights into Music Performance Anxiety and Perseverative Thinking across different categories. The results are in accordance with the existing literature. A study conducted by (Stephenson et al., 2015), 67 college level music students participated in a study to measure trait and performance anxiety. Results indicated that males reported having stringer performance anxiety than females in the younger population as compared to the older college students. The study also indicated that the environment in which the data was collected did not provide social support for the students with music performance anxiety and that the years of experience played a major role in impacting music performance anxiety. Mor the years of learning experience, music performance anxiety gets lower. This study correlates with the existing study as the participants between the years of experience 4-6 years show lesser mean value of music performance anxiety scores. This could also be due to the similar age population from which the data for the current study was collected.

Table 5.0 shows the mean, standard deviation and T value of Perseverative Thinking with respect to age, gender, place of residence and education.

Variable	Age group	N	Mean	Standard Deviation	t
18-21	29	40.86	15.11		-1.714
22-25	143	35.93	13.89		(NS) .480
TOTAL	172	36.76	14.18		

Perseverative Thinking	Gender	N	Mean	Standard Deviation	t
Male	88	37.87	13.67		-1.048
Female	84	35.60	14.69		(NS) .575
TOTAL	172	36.76	14.18		

Place of Residence	N	Mean	Standard Deviation	t
Urban	152	36.51	14.65	0.630
Rural	20	38.65	9.95	0.029
TOTAL	172	36.76	14.18	

Education	N	Mean	Standard Deviation	t
UG	29	40.86	15.11	-1.714
PG	143	35.93	13.89	(NS) .480
TOTAL	172	36.76	14.18	

Years of Experience	N	Mean	Standard Deviation	t value
1-3 years	89	37.83	13.81	1.019
4-6 years	83	35.63	14.57	(NS) 0.944
TOTAL	172	36.76	14.18	

From table 4.9, Based on different factors, including age, gender, place of residence and education, the statistical data gives the scores for the variable Perseverative Thinking. The data shows that people aged 18-21 years (N=29), have a mean Perseverative thinking score of 40.86, with a standard deviation of 15.11, according to the age group analysis. The mean score of the age group 22-25 years (N= 143) is 35.93 with a standard deviation of 13.89. The t value comparing these age categories is -1.714, which is statistically not significant as it has a significance value of 0.480. (p>0.05)

In the Gender category, the Perseverative Thinking mean value in Male (N=88) is 37.87, with a standard deviation of 13.67, while the mean value of female (N=84) is 35.60, with the standard deviation of 14.69. The T value of the variable is -1.048, which is statistically insignificant as they have a significance value of .575. (p>0.05)

When it comes to area of residence, the mean value of people in the Urban area (N= 152) is 36.51, with a standard deviation of 14.65, whereas, the mean value of the people living in the Rural side (N=20) is

38.65, with the standard deviation of 9.95. The T value of the variable is 0.630, which is statistically significant as the significance value is 0.029. ($p < 0.05$)

Examining the Education, the mean value of respondents in UG (N=29) is 40.86 with a standard deviation of 15.11. The mean value of respondents in PG (N=143) is 35.93, with a standard deviation of 13.89. The T value of the variable is -1.714, which is statistically insignificant the significance value is .480. ($p > 0.05$). Lastly, examining the years of experience in singing, the mean value of the respondents in 1-3 years (N=89) is 37.83, with a standard deviation of 13.81 and between 4-6 years of experience (N=83) is 35.63, with a standard deviation of 14.57. The t value of the variable is 1.019, which is statistically insignificant, as they have a significance value of 0.944 ($p > 0.05$).

The results are in accordance with the existing literature. A study conducted by (G Gerardo., 2017), gender and age were considered to factors as facets of perseverative thinking. Results of the study revealed that there was negative association of reflective perseverative thinking in females, but not in males. This study also indicated that as the age increases, with more exposure and experience, perseverative thinking reduces.

Summary And Conclusion

The present study was conducted to assess the relationship between Music Performance Anxiety and Perseverative Thinking among trained singers. The focus was to assess any significant relationship between the variables and how they influenced one another. Based on the data that was collected, the principal investigator also aimed to explore the influence of the independent variable on the dependent variables under the study.

The purposive sampling method was used to recruit a sample of 172 trained singers who undergo Music Performance Anxiety associated with Perseverative Thinking in Tamil Nadu Government Music College, Chennai. All the participants were administered the following questionnaires:

1. Kenny Music Performance Anxiety Inventory (KMPAI, 2009) used to assess the Music Performance Anxiety.
2. Perseverative Thinking Questionnaire (PTQ) Ehring, 2011

The data thus collected was analysed on the SPSS version 20.0, using Descriptive Statistics and Inferential Statistics. The following result was drawn from the current study:

There exists a high positive correlation between Music Performance Anxiety and Perseverative Thinking across different categories, including age group, education qualification, Gender

The statistical data reveals that music performance anxiety scores measured by SPSS, has significantly varied across different categories such as age, gender, education qualification. These findings suggest that music performance anxiety may be influenced significantly by these demographic factors.

Summary

The present study was conducted to access the relationship between Music Performance Anxiety and Perseverative Thinking among trained singers. The main aim was to find if there is any significant relationship between the above said 2 variables and how they impact one another. Based on the data collected, the principal investigator also aimed to explore the influence of relevant baseline socio-demographic, dependent variables were also explored.

The study was carried out using Purposive sampling technique. This study involves 172 participants who met the criteria and were recruited from Tamil Nadu Government Music College, Chennai.

Each of the participant was administered the following questionnaire:

Kenny Music Performance Anxiety Inventory (KMPAI): Designed to assess the music performance anxiety among trained singers. It is constructed on a 6-point rating scale, from 0- strongly disagree to 6- strongly agree.

Perseverative Thinking Questionnaire (PTQ): To identify the levels of perseverative thinking based on questions about repetitiveness, intrusiveness and difficulty to disengage from thoughts. It is measured on a 5-point rating scale, starting from 0- never to 4- almost always.

The data thus collected was analysed using the SPSS version 20.0, using Descriptive Statistics and Pearson Correlation. The following result was drawn from the current study:

There exists a high positive correlation between Music Performance Anxiety and Perseverative Thinking among trained singers across different categories, including age, gender, place of residence and education. The statistical data reveals that Music Performance Anxiety and Perseverative Thinking scores measured by SPSS, has significantly varied across different categories such as Age, Gender, Place of residence and Education. These findings suggest that Music Performance Anxiety and Perseverative thinking maybe influenced by these demographic factors.

Strength Of The Study

- Gender: The study included both male and female respondents. This gives an account of studying how Music Performance Anxiety and Perseverative Thinking differs across gender.
- Sample Size: Large sample size of 172 participants were collected, making it easier to detect true effects of music performance anxiety on perseverative thinking.
- Questionnaire: Kenny Music Performance Anxiety Inventory and Perseverative Thinking Questionnaires are high in validity and reliability ensuring that the data collected is accurate and reflects the variable being studied.
- Analysis: Appropriate statistical analysis was used (Correlation) to study the relationship between music performance anxiety and perseverative thinking to interpret the data correctly and draw valid conclusions.
- Ethical guidelines: This study was conducted following all the ethical guidelines and protocol, starting from getting approval from the ethics committee, getting the informed consent from the participants before filling in the questionnaires, protecting and respecting their confidentiality.

Limitations Of The Study

- The study focused on a specific age group of young adults between 18 and 25 years, which may limit the generalizability of the findings to other age ranges. Different age groups might have different unique perspectives with music performance anxiety and perseverative thinking.
- The surveys depended on self-reporting, concerns regarding honesty, respondent's capacity for introspection and potential response bias are only a few of the known drawbacks of the self-report data.
- The study was conducted in a specific geographic location, and the findings may not be applicable to different cultural contexts.
- Despite efforts to ensure anonymity, participants might have provided responses that they felt were socially desirable or aligned with societal expectations, affecting the accuracy of the data.

- Studies on music performance anxiety have been conducted in western culture and it is not clear whether the findings would be generalized to other countries.
- The number of questions in the questionnaire could have been a drawback and it would have led the participants to pay lesser attention and skew the results

Implications

- This study holds practical implications as the findings provide a basis for a more holistic approach to understanding singers with music performance anxiety and perseverative thinking.
- There still exists stigma and taboo associated with the discussion of music performance anxiety and its impact on perseverative thinking among the population of trained singers. This study, therefore seeks to bring about awareness in the society regarding music performance anxiety that are neglected among this population.
- The study brings to the limelight the psychological, behavioural and emotional difficulties associated with music performance anxiety. Addressing these concerns adequately at appropriate times such as dryness of mouth before performance, shivering and trembling, forgetting lyrics or tunes will aid in emphasizing with the singers and facilitating better management of anxiety and perseverative thinking during a performance.
- This study gives an account on understanding the importance of impact of music performance anxiety on the singing career of the participants. Management of anxiety and perseverative thinking before performances can aid in career advancement in the field of music.
- The study gives a detailed account of the challenges faced by singers with music performance anxiety and the impact on perseverative thinking across diverse demographic details.

Recommendations Of The Study

- Longitudinal studies can be carried out to investigate the time-based trends in music performance anxiety and perseverative thinking.
- Future studies could investigate other variables such as social support, coping strategies, and personality factors.
- Qualitative studies can be undertaken to get better insight into these variables as most of the assessment tools currently available to study the psychological aspects of music performance anxiety in Indian context among the participants.
- Studies in the future can seek to explore these variables among more diverse age population and on a larger sample size.

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