Webology (ISSN: 1735-188X)
Volume 16, Number 2, 2019

Psychological Mechanism Is An Important Factor Of Music Performance As Music Recreation

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Abstract:

The paper aims to analyze the importance of psychological mechanisms in musical performance. According to this article, ensemble performance, movement in performance, and music performance anxiety are the causes which are affected music performance psychologically. Sensory information and expressive gesture are two dominant movements in music performance. This research paper provides this paper clearly and perfectly. A questionnaire survey is used for this paper. Samples are gathered from 125 respondents to examine the importance of psychological aspects in music performance. Instrumentalist [strings, piano, and harmonica] and vocalists [solo and group] are used for this survey. Sixty females and sixty-five males have participated in this survey. For a good concert the musicians have to be clear psychologically especially in ensemble performance, movement in performance, and music performance anxiety this is the outcome of the study. The psychological role of movement as sensory information and Expressive gesture in musical performance is [Eigen value=14.3%], the role of ensemble performance in musical performance [Eigen value=9.5%], and the role of Anxiety in musical performance is [Eigen value=12.5%]. As per the data collections of the respondents, ensemble performance is the major psychological thing which was related by musicians in music performance. Movement in performance expresses the emotions of the musicians. Music performance anxiety is a stressful factor. Therefore, this study explored ensemble performance, movement in performance, and Anxiety in music performance, which are the important psychological factors of music

performance as music recreation.

Keywords: Music Performance; music recreation; Psychological Mechanism

1. Introduction:

Method, systems, capacity, and institutions that are typically motivated by causal interpretations in psychology are referred to as psychological mechanisms. Psychological mechanisms, in a broader sense, provide a causal explanation for mental states and behavior. Basic processes, systems, functions, or organizations are frequently mentioned. Researchers have sought explanations for a wide range of psychological phenomena by designing and researching such algorithms. However, depending on the tradition of the individual school or psychology, this idea has been utilized in drastically diverse ways, with extremely distinct implications.

Music is a collection of sounds or sounds that have been blended. Putting sounds and tones in a row, frequently mixing them to make a cohesive system is the process of making music. Musicians who compose works such as Beethoven's Symphony or Duke Ellington's jazz compositions will arrange the sounds to achieve the intended effect [1]. Sounds, vibrations, and silent moments build up music, and they don't always have to be pleasant or beautiful. It can be used to express a wide range of feelings, events, and circumstances. Making music is a tradition in almost every human society. Music was employed in religious events by the ancestors. Playing drums for crucial events is a tradition in many traditional communities. Flute and drums are two examples of ancient instruments [2].

Nowadays, rocks, as well as pop singers, perform songs that have made them famous all over the globe. Music terms include melodic, harmonic, chords, rhythmic, tempo, largo, and allegro [3]. Singing appears to have a major positive impact on psychological contentment, according to emerging evidence. Recent studies, for example, have found that singing can improve a person's mood, reduce stress and anxiety [4], improve subjective satisfied state, and boost happiness. Furthermore, it is unclear whether these advantages are exclusive to vocalists or what underpins the apparent positive correlation between the singer's song and satisfaction levels. Increased confidence, concentration, taking deep breaths, social benefits, cognitive functioning, and daily commitment are six suggested explanations for the positive impacts of songwriting. However, it's unclear if these perceived advantages are due to the choral song's uniqueness .

Music performance is a fantastic lesson that can be approached in numerous ways. The combination of several elements, including heredity, surrounding inputs, individual experience, emotions, cognition, and behavior, causes musical performance anxiety. It takes three forms, each of which is unique to varying degrees: cognitive, physiological awareness, and behavioral. Although a certain amount of nervousness is normal and healthy, it can be debilitating and even qualify as a mental illness . Musical performance is a significant technique of conveying emotional responses since it encompasses the psychological features of music, behavior, emotion, and other factors. Music sentiments deeply ingrained in people's hearts can improve the musical expressions of limiting, repressing, and driving human own affections because musical emotions have various expressions of personal feelings related to their situations [5].

In musical performance, participants may stuck up in their task when confronted with a crowd, which might have a psychological influence on participants or artists. Surely, encouraging decreases participant's ability and reduces the psychological problems. Performance anxiety, which impacts the elderly, is uncommon in very young children. On the contrary, most young children enjoy performing, enjoy being in front of a crowd, and appear to be content. There are almost no shortcomings in their "presentation" [6]. Next, if someone recreates music that was done by another musician, the re-creator suffers psychologically. If the re-creator presents his best, that credit automatically goes to other musicians, the person who was done the same music earlier. It may be a drawback of recreating music and musicians [7]. The goal of this research is to figure out what psychological process plays a role in music performance as a musical reaction.

The rest of this paper is structured as follows section 2 discusses the literature review, section 3 indicates theoretical framework, section 4 expresses method, section 5 examines results, section 6 explains discussion, section 7 talks about limitations, section 8 provides the conclusion.

2. Literature review

Jun Jiang et.al [8] examined the methods through which music can help people cope with psychological stress. Data was gathered from 200 female undergraduate music education students. The result demonstrated that arousal and valence levels, as well as the degree of musical preferences, predicted tension and state anxiety and that the impacts of music valence and arousal on reducing stress were partly mediated by musical preferences.

Ellis Pecen et.al [9] investigated the musical performers' problems, coping methods and sources, influential beliefs, support preferences, and emergent qualitative distinctions between groups. By conducting interviews with 5 pre-elite performers, 3 transitioning elite performers, and 7 elite performers, data was gathered. Results revealed inductive content analysis that showed positive health habits, philosophical ideas of performance, and positive anxiety reappraisal were all reported by elite performers. Teachers had a huge impact, yet finding outstanding teachers was considered a "lucky" thing. Participants thought talent could be fostered and placed a high priority on health to performance. They utilized psychological methods as well, albeit they were not conscious of them.

Madalina Dana Rucsanda et.al [10] investigated the relation between pre-competition emotion and musical performance, with the function of singing experience as a mediating factor. Data was gathered from 146 children and adolescents who competed in international music competitions as singers. Positive emotions, reduced arousal, and increased domination were related to improved performance quality, while negative emotions were related to lower performance quality. Additionally, competitive experience may mediate the relation between emotions and musical performance in a singing competition.

Baptiste Barbot et.al [11] explored the number of factors that impact the music creation process and contribute to individual differences in musical creativity outcomes. The empirical study is used to focus on adolescents and children in the music creation process. Factors demonstrated the relationship between the musical process and product of novice adolescent composers as a primary requirement for a successful music creation process.

Andrew et.al [12] investigated whether body sway coupling between co-actors reflects the interpersonal joint emotional expression by using a professional piano trio, including a pianist, a violinist, and a cellist, as a model. Granger causality and cross-correlation were utilized in the study to assess the body sway coupling among the performers to quantify joint emotional expression. When performing compositions with emotional expressiveness, the overall Granger-coupling of body sway in the ensemble was higher than when performing works without. The study's findings revealed that Granger-coupling of co-actors body sways indicates joint emotional expression in a music ensemble, resulting in a novel approach to investigating joint emotional expression.

3. Theoretical Framework

Music is very close to human psychology . Music performance psychology methods are utilized to assist specialists at the top of the industry in producing superior results under the stress of challenge, participation, or spectator expectation. The music performance psychologist's, job is to assist people to achieve and sustain optimal output, build high levels of competence, gain motivation, and gain a better understanding of what they're doing. Musical performance, step in the musical method, during that musical plans are fulfilled and sent to a listener. In Western music, performance is most usually viewed as an explanatory skill, however, it is not always slightly that . Many researchers had delivered possible movements of music uniquely. Through the approaches and theories, the functions of music in performance and anxiety in music performance were delivered. With that readers may find the capacity of Music based on psychology both positively and negatively .

Psychological mechanisms are processes, systems, functions, and organizations that are frequently inspired by psychological causal theories. The sensory information mechanism is to merge information from various sensory systems, which is a basic peculiar of the brain. Because the various sample of information is derivative from the various sensory pathway, their combining decidedly improve the finding and labeling of extrinsic provocation[13]. The process of music performance and the performance of musicians should represent psychological mechanisms [14]. The psychological factors are producing proper music performance for a concert, both good intention and adversely. Ensemble performance includes musical and public interaction among a group of performers. Ensemble performance, movement in performance, and musical performance anxiety are factors that affect music performance. Emotional processing theory is also used for several types of research based on this topic.

3.1. Movement in music performance

The movement's role in music performance can be viewed from a variety of angles. According to the concept, movement of a performer during a music performance is affected by task requirements and psychological process, which may include morphological and physiological body alterations to best control the musical instrument, as well as sensorimotor adaptations to improve sensory feedback [15]. The manifestation of "inner motion," the music driving force related to the interpretation, is influenced by creative form and experience and is related to motion, a motion sensation, and communication [16]. This section discusses two aspects of the importance of movement in performance: Sensory Information and Expressive Gesture (EG). In sensory information, the exactness of movement depends on vision, touch, audio, balancing, and perspective information [17]. Actual audio, visual, sensory (tactile and kinematic), and movement-related information produced by numerous sensory systems are merged into a coherent percept and sent back to the motor system throughout a performance. Sensory information mechanisms play a key role in facilitating the fluency of music performance production. "Expressive gesture" refers to acoustic waves that distinguish everyone in the performance to offer the same entry point in music, while also referring to body and music instrument movement signs that regularly emphasize essential parts of the performance. In terms of tempo and synchronization stability, expressive gestures (EG) enhance interpersonal musical timing. In interpersonal musical interactions, expressive gestures (EG) moderate leader-follower in dynamic contrast. Anticipation mechanisms, supporting interpersonal communication of expressive intentions are facilitated by body gestures.

3.2. Ensemble performance

The majority of past studies on psychological aspects of performance have mainly focused on the subject of individual performance. Ensemble performance encompasses a group of artists interacting musically and socially. 'Ensemble' refers to the ability of musicians to work together. They quickly adjust to sensory input from other ensemble members' performances and their own.To match and fuse the temporal structures into a single temporal structure the musicians can coordinate their temporal structures with the temporal structure of other performers [15]. Musical ensemble performance is an advanced type of cooperative action that involves conveying information non-verbally about the structure of music and expressive intentions through the sounds and body movements of co-performers. To achieve successful musical communication co-performers must coordinate their actions across multiple musical dimensions, timescales, sensory modalities, and modes of interaction. Auditory feedback in the form of audio gives additional information regarding the timing of one's own and others' actions. Many studies of ensemble performance show how artists adjust their synchronization with other performers when auditory feedback changes.

3.3. Anxiety in music performance

Music Performance Anxiety (MPA) is a stressful experience that a musical performer has when required to perform music in an on-stage performance in front of an audience. It is known to have a variety of effects on musicians and it is a common issue for them. Some studies have found that anxiety can cause changes in nonverbal behaviors and that these nonverbal behaviors can make changes in how a musical performance is perceived and presented [18]. Anxiety has been considered as a possible cause of musical performance decreases or increases. Many musicians believe that anxiety reduces the quality of musical performance. According to anxiety theory statements which are based on the significant psychiatric and psychological study on anxiety, an increase in anxiety states can assist the progress of performance for subjects with high training or aptitude [19]. Researchers analyzed performance anxiety in instrumentalists and identified that it is a usual, and often significant, a condition that affects both pros and amateurs. A few studies on anxiety have focused on the performance of singers in particular. A few factors that increase anxiety in musical performers are the difficulty of the music, memory, importance, physical health of the performer, the response of the audience, mental health of the performers, etc [20].

4. Method

The survey was completed by 125 professional musicians. An online questionnaire was used to conduct the survey. Through Google forms, the questionnaire was formed. And we sent it through mails to collect the survey of experts in the music field. There were 60 females and 65 males among the respondents. There were a variety of instrumentalists [strings, piano, and harmonica] as well as vocalists [solo and group] that took part. Two qualification questions were formulated to select the respondents for this study, and they were asked to the experts in music fields. The first question is, "Do you have at least two years of experience in the music field?" The second question is, "Do you perform in at least two or more performances per year?" Participants who answer "no" to any question will be instantly removed from the study. On a scale of 1 (strongly disagree) to 5 (strongly agree), respondents were asked to indicate how strongly they agreed with each item statement was given under each factor.

Notice that in carrying out such a survey, we are presumptuous those respondents have instrumentalist and vocalist access to their individual experience in specific musical instrumentalist and vocalist and that they can correctly revise the suitable knowledge in the music performance. Surely, there exists abundant empirical research of respondents. While comparing Vocalists, instrumentalists were used a lot by the respondents. So we can collect the maximum details about Instrumentalists. The need for Instrumentalists is better than a vocalist. The respondents' limited options for collecting suitable empirical data however chose to follow a survey-oriented way for perfect music performance.

Table.1 Demographics of sample

Principle Instrument	**n**	**%**
Strings	35	28%

Piano	45	36%
Harmonica	12	9.6%
Vocalist		
Solo performers	22	17.6%
Group performers	11	8.8%

The demographics of the samples are shown in Table 1. Instrumentalists account for 73.6 percent of the responses (Strings=28%, Piano=36%, Harmonica=9.6%), while vocalists account for 26.4 percent

5. Result

The very first variable is 'Movement in performance' [eigenvalue=14.3%], statements about the psychological role of movement in musical performance are included under this category (e.g. While performance I express my emotions through movements). The second factor is 'Ensemble performance' [eigenvalue= 9.5%] statements about the role of ensemble musical performance are included (e.g. I can adjust to sensory input from other ensemble members; I can coordinate with co-performers to achieve successful musical communication). The third factor is 'Anxiety in performance' [eigenvalue= 12.5%] includes statements about how anxiety affects musical performance as a psychological component (e.g. Anxiety reduces the quality of musical performance). When we finished the survey, the ratings of each statement in each dimension are averaged to see which is the most important psychological component that determines musical performance.

Table 2 Factor Analysis

Variables	**Mean**	**Standard Estimation**	**Eigen Value (%)**
Movement	3.49	0.036	14.3
Ensemble	3.68	0.030	9.5
Anxiety	1.91	0.034	12.5

To analyze the significance of the three important psychological factors for the music performance based on the musical performers' ratings for all statements included in the psychological factors (Figure 1 represents the rating of the psychological factors). The role of ensemble in performance significantly proved the first major psychological factor of music performance as music recreation, and the role of movement in music performance significantly proved the second major important psychological factor of music performance as music recreation. Movement in performance (M =3.49) and ensemble in music performance (M =3.68) are the most potent psychological factors for music recreation in music performance (table 2 shows the mean value), but compared to the

other two psychological factors the role of anxiety in music performance (M =1.91) is a less important factor based on the ratings of music performers. According to table 3, there is a significant relationship between the role of movement in music performance and the role of ensemble in music performance (β=0.601;p<0.001), the role of ensemble in music performance, and the role of anxiety in music performance (β=0.381;p<0.001), and the role of anxiety in music performance and movement in music performance (β=0.546;p<0.001). Therefore, the three psychological factors (movement, ensemble, and anxiety) are significantly related to each other.

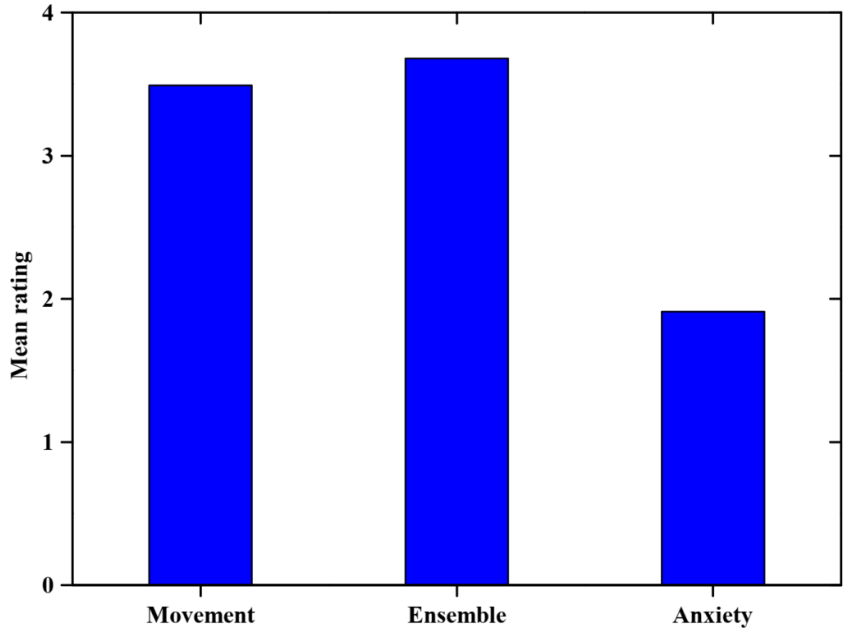

Figure 1 Rating of factors

Table 3 Structural analysis

Construct Relationship	Beta	P- Values	Decision
Movement – Ensemble	0.601	0.000	Supported
Ensemble - Anxiety	0.381	0.000	Supported
Anxiety-Movement	0.546	0.000	Supported

6. Discussion

A researcher in the field of music psychology has been writing since the early 1900s. Since the first writing on the psychology of music, researchers have been worried in many ways to apply music in people's own lives. People are worried in a variety of ways when it comes to the use of music in their life. An expression of emotion is considered a piece of music. In this paper, we reviewed, literature, psychological effects on music performance, musicological, on musical performance, especially we discussed a lot about ensemble, anxiety, and movement. The

significant psychological elements for a successful concert are discovered in this study. The findings of this study revealed that music recreation is one of the most important psychological elements influencing musical performance. Musical ensemble performance is an advanced type of team action that adds conveying information through gestures about the structure of music and expressive intentions through the sounds and body movements of co-performers. Ensemble performance expressed that many people come together in ensembles of various sizes and compositions to play music, which is usually a collective affair. Musical Performance Anxiety (MPA) is defined as a feeling of intense and continuous curiosity about musical performance which appears as a slew of psychological, physiological, and behavioral responses that are a major issue for many musicians. According to anxiety reports based on significant psychological and psychological research on anxiety, an increase in anxiety levels may help improve performance in highly trained or competent subjects. The difficulty of the song, memory, importance, physical health, audience status, and mental health are all factors that contribute to the artist's worry. Two dimensions of the relevance of movement in music performance are Sensory Information and an Expressive Gesture. In sensory information, the accuracy of movement depends on visual, tactile, audio, balancing, and perspective information. In terms of tempo and synchronous consistency, expressive gestures enhance individual music time. In personal music interactions, expressive gestures are a moderate leader-follower in dynamic contrast. The acoustic input that separates one rendition of the same music from another, as well as the physical and instrumental motion signs that constantly accentuate the vital components of the performance, is referred to as movement in performance. The online questionnaire takes a major part in this survey. With the help of Google forms, we conducted this survey through the mail. A survey of 125 professional musicians was conducted for this study. There are sixty professional female musicians and sixty professional male musicians. This study makes use of instrumentalists and vocalists. To identify skilled musicians, two important questions arose. Have you worked in the music industry for at least two years, and do you perform in at least two or more shows every year. We eliminated all other questions if responders said no. Music performers' ratings provide perfect value for each factor according to the respondents to build up valued concert. We discovered that ensemble performance is the most critical aspect in music performance as well as music recreation in this study. The second most significant factor is movement in performance. The last crucial component is music performance anxiety. As a result, ensemble performance, musical performance anxiety, and movement during the process, according to this article, are crucial psychological aspects for a concert.

7. Issues that may arise:

The flaws are that for this study, we used musical instrumentalists [strings, piano, and harmonica] and vocalists. For future experiments, the researcher may add more instruments. It may provide further benefits to the researcher. The next point to note is that in this study if those participants claimed to be unable to answer the first two questions, the researcher avoided the remaining questions. This could be a setback for the research. Finally, this research is regarded as critical for future generations. As a result, future scholars may be able to explain it in more depth.

8. Conclusion:

We revealed that the psychological process has a role in musical performance as a musical reaction in this research. The purpose of this study is to determine what psychological processes are involved in music performance as a musical reaction. The term ensemble means how well musicians collaborate: a good group is praised for its tight ensemble work, whereas a bad group may have sloppy ensemble work. Anxiety is suggested as a possible cause of decreased or increased musical performance. Many musicologists believe that it improves the quality of anxiety-inducing music performance. A few variables in the difficulty of music serve to heighten the creators' concern. They are Memory, significance, bodily well-being, audience status, and mental well-being. Movement in Performance is based on a corpus of artist gestures - motions that do not make sound but are linked to the performer's purpose influence it. The researcher seeks professional musicians for their models based on two important questions. A total of 125 samples were collected and examined, with 60 women and 65 males participating. For this research, they employed instrumentalists and vocalists. In this study, we discovered that ensemble performance is the most important part of music performance and music recreation. The second most important criterion is movement. The last and most important psychological aspect of music performance is anxiety. As an outcome, according to the result of this article, ensemble performance, musical performance anxiety, and movement during the process are critical psychological characteristics of a concert. Thus, the researcher gives the appropriate psychological effects based on the musical performance in this paper.

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