The influence of coordination of physical and psychological movements on music performance

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Abstract

This study aims to determine the effect of physical and psychological movement coordination on musical performance. This investigation also investigates the impact of mental tension on musical performance. This investigation has collected quantitative data on Likert scale 7-point questionnaire. This study's population consisted of trumpet players, and Smart PLS 3.0 was used to evaluate the measurement and structural models. This research has determined that the coordination of physical and psychological movements significantly affects musical performance. In addition, this study determined that when playing the trumpet, positive tension can make the performer concentrate and concentrate on performing, which is conducive to the play of the performance level and can also better interpret musical works. The research has demonstrated that in trumpet performance, the change of pitch, timbre, and intonation is primarily controlled by the coordination and cooperation of the physiological and psychological causes of stage tension in trumpet playing.

Keywords: Trumpet playing; Physiological mechanism; Breathing; Facial muscles; nervous; Scientific training; mental fatigue

1. Introduction

Considering the entire human and animal world, it is not difficult to conclude that all human activity is a "race" of controlled psychological and physical movement. In brief, it is the process of activating humans and external objects under the condition of reflection. In this process, researchers examine the relationship between body structure and abilities, determine the causes of its formation and developmental laws, and employ these laws to assist individuals in improving and surpassing themselves. For the performer, playing the trumpet is also a process of continuous development and transcendence; in this process, the coherence of music, the change in emotion, and the display of desire and imagination are closely related to psychological movement (Steenstrup et al., 2021). In general, psychological movement is most closely related to the coherence of music. In the initial phase of learning the work, the performer will concentrate on the division of mode and tonality and the solution of technical actions and will then engage in "integration training" of decomposition actions after solving various technical activities, i.e., after resolving several small and complex problems, and then connect them to play. The entire playing process necessitates that the performer eliminates all internal and external interference and effectively connects each paragraph of the work; regardless of the circumstances, the performer cannot cease playing at will (Gooty et al., 2009).

This demonstrates that the ability to play a piece of music wholly and smoothly is a priority for assessing fundamental skills and performance ability and a crucial link for psychological movement when playing the trumpet (Bianco et al., 2012; Cronenberg, 2023). Instrumental performance is a complex movement process in which the combination and link of movements are purposeful, organized, and formed through repeated exercises. Each skill action in response to stimulus perception is a process that commences with perception and concludes with action response. Various psychological activities, including perception, sentiment, will, and other factors, play a role in the execution of skill movements. According to psychological research, the psychological adjustment mechanism is of greater importance (Hatta, 2015). As is common knowledge, instrumental performance is a skill movement process in which the physiological movement and psychological activities are highly coordinated and unified, and the psychological state heavily influences the physiological signal. According to psychological theory, action is the conscious behavior of individuals and the movement of talent or body function. As one of the characteristics of mental activity, the mental state includes distraction, fatigue, passion, calm, tension, relaxation, restraint, desire, motivation, struggle, etc. (Pantev et al., 2001). These psychological activities significantly impact the formulation and execution of instrumental performance skills.

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"Relaxation" is the core technology of trumpet playing, and mastering the relaxation playing method is one of the most fundamental requirements for learning trumpet. It permeates the entire process of trumpet learning, and both beginning and advanced trumpet players seek "relaxation" (Roden et al., 2014). The relaxation action during the performance is strictly trained, controlled, and wholeheartedly coordinated for the music performance requirements; relaxation is inseparable from trumpet playing abilities. The trumpet's speed, vigor, tone, and emotional expression depend on relaxation. All playing abilities are inert, pale, and even painful without relaxation. Therefore, the issue of "relaxation" should always be set at the top and center of each link of trumpet instruction (Portowitz et al., 2009). In playing, emotion will play an essential role. When players analyze their psychological fatigue as being related to will and emotion, they must strengthen their willpower, cultivate the psychological quality of "not taking pride in victory or defeat," and perseverance to control and resist the negative impact of negative emotions on performance. Zhang (2022) describes the instrumental performance as a highly coordinated and unified process of physiological and psychological movements. Various psychological characteristics of psychological fatigue inhibit the instrumental version to a degree. Analyze the causes of psychological fatigue among the participants to treat the disease, control emotions, and cultivate willpower for optimal performance.

This study aims to determine the effect of physical and psychological movement coordination on musical performance. In addition, it investigates the physiological and psychological mechanism of trumpet performance from the perspective of philosophy and physiology, which is conducive to improving the physical function of trumpet players, enriching and developing the performance and teaching methodology of brass instruments such as the trumpet, and providing ideas and references for the scientific development and popularization of trumpet and steel pipe musical instrument performance e. The research has plausible and novel theoretical implications that prior studies have not reported. In addition, the findings of this research apply to practical applications. Similarly, the research identifies future study directions contributing to the literature.

2. Literature Review

Relaxation requires the correct critical touch method, the correct posture, a flexible brain, other material factors, and a good and stable psychological guarantee; thus, piano playing, physiologically and psychologically, is a complementary, mutual condition, essential dialectic unity. It is challenging to learn the piano well if you can only have the correct posture and contact the critical action but cannot move the correct playing psychological guidance (Juncos & de Paiva e Pona, 2018). The study of relaxation initially focuses on various physiological categories, such as finger and arm movements; however, in recent years, the focus has shifted to the psychological aspects of playing. In the past, relaxation training overemphasized physiological function, made learning mechanical imitation, disregarded coordination of psychology, overemphasized psychology's role, and descended into pure theory (Tsay, 2013). These two training and relaxation methods are unilateral. The correct understanding of relaxation is not the early imitation of pure physiological function nor the teaching method of pure psychological regulation but relaxation training with the combination of psychology and physiology and the dominant psychological macro-regulation. The correct and positive psychological state will have a direct impact on the physiological changes and adjustments of piano performance, and the primary objective of psychological macro-control when establishing a reasonable and scientific performance function movement state is for the two to become a complete and indivisible dialectical unity (Cohen & Bodner, 2019b).

Lack of personal skills and inadequate preparation are among the most significant causes of tension on stage. The technical expertise of trumpet performers is a crucial prerequisite for flawless performance (Dobos, Piko, & Kenny, 2019). When performing in public, many trumpet players chose recordings that did not match their actual level, resulting in a significant technical burden. As a result, the performance technology cannot reach the level of usability, there is no clear indication of whether the work can be completed, and there will be psychological tension and even dread. To guarantee the performance effect on public performance, choosing tracks with competent technical ability is essential. First, they should capitalize on their assets and avoid weaknesses to develop self-assurance and mental stability (Cohen & Bodner, 2019a). Frequently, trumpet players disregard their actual performance level and blindly pursue tracks with a broad range, rapid tempo, and dazzling skills. Suppose your technical performance ability cannot meet the requirements of the selected repertoire performance ability, even after a hard practice. In that case, the final technical ability is not proficient and cannot meet the requirements of music processing. As a result, if you cannot skillfully use the performance technology, you will

inevitably have no confidence in the performance, which will cause a tremendous psychological burden and tension, and ultimately you will be unable to perform. Whether the performance technology is guaranteed is fatal to the performance effect for trumpet performers (Terry et al., 2020). If it is difficult to guarantee the absence of technical difficulties during normal performance, the likelihood of problems occurring during public performances will increase dramatically.

The style selection of a recording is crucial for a trumpet player (Concina, 2019). Each trumpet performer has unique circumstances, technical characteristics, and preferences regarding the style of the work. In addition, each trumpet performer can comprehend and comprehend various musical styles (Wang, 2023). Therefore, selecting songs based on their technical characteristics and personal preferences is recommended (Clayton et al., 2020). Choosing your favorite style of music and music you understand uniquely is also a wonderful way to improve your performance. When performing, it can make the performer more engrossed and assured, so it is difficult to induce a state of anxiety. Imagine that if you don't like the chosen music, concentrating and playing calmly on stage will be difficult, inevitably leading to playing errors and then uneasy psychological conditions (Evans & Liu, 2019). Emotions are expressed through music. In such a stressful environment as a public performance, if you do not express music from the heart, it will be difficult to concentrate on the performance, you will be prone to errors and paper leaks, and you will eventually experience some excessive tension (Bartel & Thompson, 2021).

Everyone has diverse origins, educational and social backgrounds, temperaments and personalities, family environments, and social backgrounds (Du et al., 2020). When playing the trumpet in public, personality and temperament differences contribute to significant differences in response to the same event. Numerous trumpet performers frequently face this issue. They are highly skilled in practice and can technically satisfy the requirements but perform abnormally on stage.

Nonetheless, some trumpet players are capable of performing at a greater level in public. Leaving aside the technical issue, the difference between these two situations is the performer's temperament (Welch et al., 2020). For example, it is common to hear that a particular performer is a "crazy person"; this type of performer frequently gets enthusiastic when playing in front of an audience and teacher; the more people, the better. On the other hand, however, comparatively quiet people will experience a heavy mental burden when playing. This demonstrates that temperament and personality traits can sometimes reduce stage tension and improve a performer's technical performance; consequently, they should analyze and comprehend our temperament and personality traits from their perspective and use play to reduce stage tension during the public performance (Zhang, 2022).

Trumpet playing requires close cooperation between physiology and psychology, as it is a recreation of music (Tomporowski & Pesce, 2019). Putting on an excellent performance on stage requires both performance abilities and psychological qualities. According to the proverb, one minute on stage equals ten years off stage. This is not only a technical requirement but also a test of the psychological character of stage performance. Therefore, as soon as the trumpet player takes the stage, they must be trained in technology and psychology. The psychological will generate tension due to the conditioned reflex, and the performance will result in significant psychological pressure (Stork, Karageorghis, & Ginis, 2019). In addition to technical skills, the psychological character of the performer is crucial for delivering high-quality performance. If the playing psychology is not correctly adjusted, tension and anxiety will significantly impact the technical implementation of the performer, and some may be unable to complete the entire performance.

In addition to internal factors, numerous external factors contribute to the stage jitters of many trumpet performers (Fernholz et al., 2019). These objective factors, such as tension, distress, and other phenomena, frequently disturb players, resulting in physical and psychological discomfort and ineffective performance. The performer cannot alter the objective factors; they can only independently modify and adapt to the accurate environment. Consequently, the player's ability to adapt to the situation is crucial (Ericsson & Harwell, 2019). The author lists the following two objective factors frequently encountered by trumpet players during public performances. On weekdays, trumpet players typically practice in the piano room or at home; thus, they perform in a relatively closed environment without an audience. The venue is frequently much larger than the typical practice space when performing in public. When the performance environment changes from a piano room or home to a stage, it can be said that it changes from a familiar and adapted environment to a new and unfamiliar environment. Psychologically, they will often feel unaccustomed and unaccustomed, and they will feel nervous and anxious because they have no

base in their hearts (Firth et al., 2019). It is precise because trumpet players practice alone and often perform without an audience. When performing in front of a large audience, it is normal to experience nerves and anxiety.

When performing on stage, emergencies frequently arise at any time. Once an emergency occurs, it is likely to influence performance (Gordon et al., 2020). The performer cannot predict these accidents before taking the stage. During the performance, for instance, people are freely moving about and conversing. Interrupting a performer by, for example, inappropriate applause, children's cries, or using a lantern to take photographs is also possible. When performing on stage, these situations may occur at any time, which is also unexpected for the performer. Even though some situations can be forewarned to prevent their occurrence, many situations cannot be predicted in advance (Ericsson, 2020). When these incidents occur, the performer's attention is frequently diverted, and it is simple to make errors, resulting in tension, anxiety, and significant psychological fluctuations (Di Blasio et al., 2019). To minimize the interference of unexpected factors, the performer must demonstrate adaptability, eradicate distractions, and focus on his performance.

According to materialist dialectics, internal factors are the basis for the development of things, which holds that the development of things is the consequence of the interaction of internal and external factors. External factors are the conditions for change and development; external factors influence internal factors (Swarbrick et al., 2019). Internal and external factors interact and interact with each other during the performance of trumpet players on stage, resulting in stage tension and anxiety. The internal cause is the leading factor, and because of the differences in temperament, personality, psychological quality, and other aspects of each performer, the degree of expression varies (Roden et al., 2014). Due to the instrument's unique construction, the trumpet requires the coordination of facial musculature and breath (McPherson et al., 2019). Cooperation also requires a stable and positive psychological state to obtain a good performance effect. As a result, every trumpet player will experience stage tension when performing in front of an audience (Portowitz et al., 2009). This issue also affects many trumpet players who can play fluently offstage but cannot perform at their true level onstage.

Hypothesis 1: *There is an influence of coordination of physical and psychological movements on music performance.*

Hypothesis 2: *There is an influence of mental stress on music performance.*

3. Methodology

The quantitative data collected from trumpet players support this study's conclusions. Using a reasonable procedure, the scale items for data collection are devised for the Likert scale questionnaire. The scale development procedure began with a literature review and operationalization of the variables. After the variables were operationalized, a pool of scale items was developed. External researchers evaluated the facial validity of the scale items, and the recommended modifications were implemented to confirm the items' face validity. In addition, twenty respondents from the same population are surveyed to determine the validity and reliability of the scale items. Using AMOS 24, the collected data and the results of exploratory factor analysis and confirmatory factor analysis are evaluated. The results of exploratory factor analysis indicate that the scale items for this study are reliable and valid for measuring the relationship between variables.

Nevertheless, the confirmatory factor analysis is also tested to ascertain the relationship between variables in terms of the validity of the scale items. Similarly, the results demonstrated that the scale items proved the relationship between variables. Thus, these scale items are deemed suitable for data collection in this study.

However, during the final step of data collection, respondents from whom data were collected during the initial stage of measurement development are not considered. The final phase of data collection employs a random sample sampling procedure. Respondents agreed to provide information for this study. However, they were hesitant to provide their personal information. Nevertheless, 50% were male, and 50% were female. Therefore, the data is collected without regard to gender. This study's total number of respondents was 98, and cross-sectional data collection was used. Finally, Smart PLS 3.0 was utilized for analyzing these research data because it is an appropriate method for analyzing complex data collected for research.

4. Data Analysis and Results

This study examined the findings of skewness and kurtosis to ascertain the normality of the respondent-collected research data. After data is inserted into Smart PLS 3.0, skewness and kurtosis are calculated. In any research, skewness and kurtosis values between -1 and 1 are considered significant (Royston, 1992). As a result, the findings of skewness and kurtosis are between -1 and 1, indicating that the research data has attained normality as determined by the test. Additionally, the absent values are

verified, and this research data contains no missing values. In light of standard deviation, the data acquired for this study are also appropriate and reliable for use in future tests to confirm the findings of this study.

Table 1

Skewness and Kurtosis

Items	No.	Missing	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
CPPM1	1	0	4.075	4	1	5	1.073	0.873	-0.187
CPPM2	2	0	3.568	4	1	5	1.143	-0.319	-0.563
CPPM3	3	0	3.952	4	1	5	1.068	0.040	-0.836
CPPM4	4	0	3.945	4	1	5	1.029	0.197	-0.838
CPPM5	5	0	3.432	3	1	5	1.146	-0.474	-0.407
CPPM6	6	0	3.579	4	1	5	1.134	-0.465	-0.508
CPPM7	7	0	3.579	4	1	5	1.207	-0.562	-0.544
CPPM8	8	0	4.455	5	1	5	0.962	0.072	-0.901
MP1	9	0	4.219	5	1	5	1.06	0.053	-0.332
MP2	10	0	3.993	4	1	5	1.185	0.424	-0.129
MP3	11	0	4.072	5	1	5	1.176	0.568	-0.208
MP4	12	0	3.928	4	1	5	1.158	0.073	-0.950
MP5	13	0	4.065	4	1	5	1.134	0.590	-0.175
MP6	14	0	4.13	4	1	5	1.09	0.973	-0.281
MP7	15	0	3.774	4	1	5	1.284	-0.462	-0.782
MS1	16	0	3.658	4	1	5	1.196	-0.456	-0.630
MS2	17	0	3.983	4	1	5	1.048	0.257	-0.898
MS3	18	0	4.048	4	1	5	1.006	0.525	-0.990
MS4	19	0	4.007	4	1	5	1.037	0.618	-0.014
MS5	20	0	4.038	4	1	5	1.058	0.600	-0.071
MS6	21	0	3.952	4	1	5	1.128	0.328	-0.001
MS7	22	0	3.764	4	1	5	1.13	-0.067	-0.771

CPPM = Coordination of Physical and Psychological Movements, MP = Music Performance, and MS = Mental Stress

In addition, the findings of convergent validity are evaluated using measurement model evaluation. The convergent validity has examined the factor loadings used to determine the validity of items used for any variables in data collection. The findings of factor loadings greater than 0.60 are acceptable (Shevlin & Miles, 1998), and the research result demonstrated that the proper factor loadings had been achieved. In addition, the findings of composite reliability are examined to ascertain the reliability of the scale items utilized for any variable in the research. The findings of composite reliability greater than 0.70 are acceptable (Raykov, 1997), and this study's data revealed that each variable has composite reliability greater than 0.70. In addition, the findings of the extracted average variance are evaluated, and these values are used to measure the variance between scale items for any variable. Alarcón, Sánchez, and De Olavide (2015) state that the appropriate significance of average variance extracted is obtained when the results are more significant than 0.50. The data demonstrated that this test is significantly accepted. In any investigation, the findings of Cronbach alpha are used to assess the validity of the scale items. Cronbach alpha values greater than 0.70 are considered acceptable (Tavakol & Dennick, 2011), and the results of this study demonstrated that the Cronbach alpha was adequate. Figure 1 and Table 2 illustrate the effects of convergent validity.

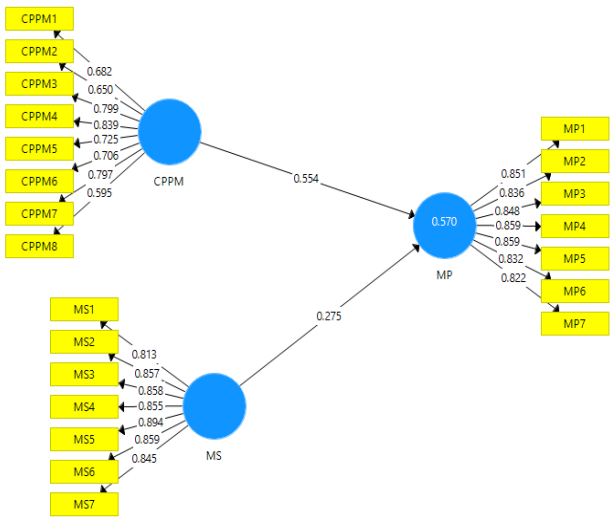

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Figure 1. Measurement Model

Table 2

Convergent Validity

Items	Factor Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
CPPM1	0.682	0.871	0.899	0.530
CPPM2	0.650			
CPPM3	0.799			
CPPM4	0.839			
CPPM5	0.725			
CPPM6	0.706			
CPPM7	0.797			
CPPM8	0.695			
MP1	0.851	0.933	0.945	0.712
MP2	0.836			
MP3	0.848			
MP4	0.859			
MP5	0.859			
MP6	0.832			
MP7	0.822			
MS1	0.813	0.938	0.950	0.731
MS2	0.857			
MS3	0.858			
MS4	0.855			
MS5	0.894			
MS6	0.859			
MS7	0.845			

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Also examined is the discriminant validity of these research data. The findings of discriminant validity are reviewed to emphasize how the measurement items representing one variable are distinct from one another and the measurement items representing other variables. In this manner, the recommended Heteritrait-Monotrait method is utilized in this study (Gold, Malhotra, & Segars, 2001). For this method, the results are only admissible when the available results in the matrix are less than 0.90. The findings in Table 3 demonstrate that the research has yielded appropriate results and that its data have evident discriminant validity.

Table 3

Heteritrait-Monotrait

Constructs	CPPM	MP	MS
CPPM			
MP	0.788		
MS	0.682	0.652	

CPPM = Coordination of Physical and Psychological Movements, MP = Music Performance, and MS = Mental Stress

Cross-loading is also employed to evaluate discriminant validity. The cross-loading method compares the items of one variable with the items used to collect data for other variables. Cross-loading findings are permissible when the findings of one variable's items are more significant than those of another variable's correlated items (Barlat et al., 2013). The cross-loading results in Table 4 demonstrated that the research had reached the recommended threshold and that the data have adequate discriminant validity.

The findings of this study are evaluated using structural equation modeling. This procedure is reasonable for determining path conclusions when complex data is collected. This method utilizes t-statistics to identify paths. The data analysis revealed that the t-values of both hypotheses are more significant than 1.96 and therefore accepted (Ringle, Wende, & Becker, 2022). The results of hypothesis 1 (β= 0.554, t = 9.492, and p = 0.000) indicate that coordination of physical and psychological movements significantly affects musical performance. Moreover, the results of hypothesis 2 (β= 0.275, t = 4.482, and p = 0.000) indicate that mental tension significantly affects musical performance. The outcomes are depicted in Figure 2 and Table 5.

Table 4

Cross Loadings

Items	CPPM	MP	MS
CPPM1	**0.682**	0.517	0.331
CPPM2	**0.650**	0.422	0.406
CPPM3	**0.799**	0.572	0.516
CPPM4	**0.839**	0.616	0.521
CPPM5	**0.725**	0.446	0.534
CPPM6	**0.706**	0.442	0.454
CPPM7	**0.797**	0.535	0.578
CPPM8	**0.595**	0.587	0.250
MP1	0.589	**0.851**	0.453
MP2	0.605	**0.836**	0.479
MP3	0.558	**0.848**	0.513
MP4	0.661	**0.859**	0.577
MP5	0.625	**0.859**	0.569
MP6	0.579	**0.832**	0.443
MP7	0.640	**0.822**	0.581
MS1	0.506	0.518	**0.813**
MS2	0.451	0.473	**0.857**
MS3	0.537	0.571	**0.858**
MS4	0.504	0.510	**0.855**
MS5	0.556	0.537	**0.894**
MS6	0.573	0.533	**0.859**
MS7	0.543	0.534	**0.845**

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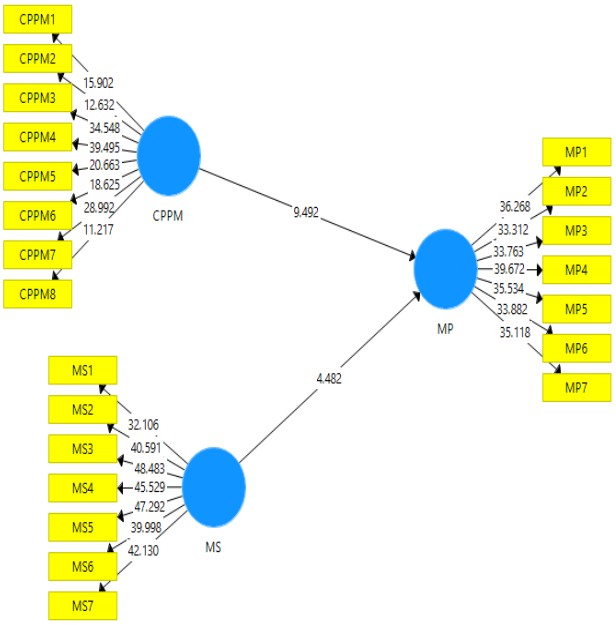

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Figure 2. Structural Model

Table 5

Hypotheses Findings

Hypotheses	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
CPPM -> MP	0.554	0.058	9.492	0.000
MS -> MP	0.275	0.061	4.482	0.000

CPPM = Coordination of Physical and Psychological Movements, MP = Music Performance, and MS = Mental Stress

5. Discussion and Conclusion

The empirical findings of this study supported the study's theoretically derived hypothesis. The research demonstrated that the coordination of physical and psychological movements affects musical performance. In addition, the research showed that mental tension affects musical performance. The empirical findings of this study supported the research's developed hypothesis. However, this developed relationship is consistent with the results of previous research. Trumpet performance is a natural and complex muscle movement process that requires the interaction and cooperation of physiological organs and psychological abilities; if the psychological burden is imposed during the performance, it will directly impact the performance effect (Steenstrup et al., 2021). In the actual stage performance, the influence of numerous factors, such as whether the performer is a seasoned veteran or a novice making their debut, will generate varying levels of stage tension (Zhang et al., 2023). The majority of the time, some trumpet players played well off the stage, and their skills were very skilled; however, once they stepped onto the stage, they gave a significant discount and couldn't even finish the performance; their lips were trembling, their arm and leg muscles were trembling, their timbre was trembling, and their treble was weak and tense (Gooty et al., 2009). Some trumpet players are more careful when performing on stage, but "jams" such as incorrect fingering, the wrong key, fingers not listening to the command, and even a blank mind can occur. All of these result from the apprehensive psychological phenomenon that occurs during a stage performance, which causes the failure of a normal performance. Some performers experience symptoms such as restlessness, insomnia, dyspepsia, etc., a few days before going on stage due to their desire to perform; however, these physiological symptoms are fictitious and subside after going on stage (Bianco et al., 2012). However, some performers carry their discomfort to the stage and typically eliminate it after their performance. In addition to amateur performers, professional performers, and performers also experience stage fright (Hatta, 2015).

As a melodic instrument in the brass family, the trumpet possesses distinctive instrument characteristics (Tsay,

2013). The trumpet is a natural musical instrument with approximately three and a half octaves of range. The high-pitched and low-pitched alterations of trumpet playing rely on the cooperation of the performer's mouth, musculature, and breath (Juncos & de Paiva e Pona, 2018). Carelessness will result in broken sounds and incorrect noises. The trumpet's voice is strident, passionate, penetrating, potent, and sweet. Therefore, it serves as a solo instrument and a solo main voice in symphony orchestras, wind ensembles, and jazz ensembles. Trumpet performers are subject to much pressure and weight (Zhang, 2022). If you wish to conquer this instrument proficiently, you must have a very high level of psychological endurance and physical strength. Psychological activities are also very complex (Roden et al., 2014). These characteristics place the trumpet player under tremendous psychological pressure while playing. It is difficult to fathom the psychological stress of intense concentration, playing flawlessly for at least an hour. Positive tension can make the performer concentrate and concentrate on the performance, which is conducive to developing the performance level and can result in a more accurate interpretation of musical works (Portowitz et al., 2009). However, excessive tension will result in the performer's inability to guarantee the quality of the performance, as well as more challenging situations that are fatal to the performer and should be avoided as much as possible (Pantev et al., 2001).

6. Theoretical Implications, Practical Implications, and Future Directions

This study has made significant contributions to the body of knowledge. The study has highlighted in the literature that physiological and psychological factors contribute to the stage tension associated with trumpet playing. Moreover, this study asserted that regular individuals would experience excessive epinephrine secretion, elevated blood pressure, accelerated heart rate, tracheal dilation, and digestive dysfunction under stress. On the other hand, this study reports in the literature that some individuals experience physiological reactions such as slow brain response, respiratory disorders, diminished auditory discrimination, dry mouth, tremor of large muscle groups, and stiffness or even loss of control over small muscle groups. In the meantime, this study demonstrated in the literature that the muscles surrounding the performer's lips would also appear rigid and quivering, significantly impacting performance quality. In addition, the findings of this study contributed to the literature by demonstrating that the trumpet player clearly understands his personality, temperament, and other characteristics. However, this study's findings indicate that to minimize the occurrence of accidents, it is necessary to pursue scientific and appropriate methods to adjust the psychological state of players, make complete preparations, and understand the external environment in advance.

This study demonstrated that trumpet players must practice positive tension to enhance their performance. They are motivated to improve their performance through positive pressure. Indeed, if the trumpet players were positively motivated, learning how to improve their performance critically would benefit them. The trumpet players should be encouraged to improve their performance by their parents, teachers, and the audience, as these factors are necessary to improve their performance effectively. The emphasis on better performance for the best way to play trumpet can influence the performers in a positive direction. Focusing on positive performance is a strategic approach to addressing the appropriate version properly. Before their final performance, the participants must have the proper training and control over their nerves. There is a direct correlation between players' performance during training and the implementation of players on the field. Therefore, more excellent exercises for the trumpet players may have contributed to their improved performance in front of the audience.

This study has demonstrated that a trumpet player can rationally comprehend his physiological state when anxious, which is conducive to scientific physiological regulation and training. However, there are avenues for future research to contribute to the existing body of knowledge. In this way, scholars will be able to study a higher level of music in future research if emotional expression provides strong technical support, allowing them to play piano in a healthy, positive mental state while employing the music's unique language in the process of emotional relaxation and tension. Furthermore, these studies should be conducted to demonstrate the expressiveness and appeal of dramatic music, resulting in more profoundly faultless music performance. To verify this research's results, the scholars must acquire data from distinct populations.

Similarly, future research is required to determine the function of psychological health in coordinating physical and mental movements during musical performances. In addition, researchers must address the research gap by comprehending the role of coaches in coordinating material and psychological activities in music performance. Consequently, future research in these areas would contribute important information to the body of knowledge.

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