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It is with pleasure that we inaugurate the reprint of the entire seven volumes of The Quarterly Journal of Music Teaching and Learning. The journal began in 1990 as The Quarterly. In 1992, with volume 3, the name changed to The Quarterly Journal of Music Teaching and Learning and continued until 1997. The journal contained articles on issues that were timely when they appeared and are now important for their historical relevance. For many authors, it was their first major publication. Visions of Research in Music Education will publish facsimiles of each issue as it originally appeared. Each article will be a separate pdf file. Jason D. Vodicka has accepted my invitation to serve as guest editor for the reprint project and will compose a new editorial to introduce each volume. Chad Keilman is the production manager. I express deepest thanks to Richard Colwell for granting VRME permission to re-publish The Quarterly in online format. He has graciously prepared an introduction to the reprint series.

# A Theory Of Music Performance Anxiety

## By Albert LeBlanc

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have good reason to be interested in music performance anxiety: I have suf-

■ fered from it to a greater or lesser extent for most of my life. My first research effort on this topic, a graduate student bibliography, was completed in 1972. I am gratified to see the accumulation of original research in this area that has taken place since that time.

I have evolved a formal theory that attempts to explain the variables that influence an individual's level of performance anxiety while preparing and presenting a musical performance that he or she considers important. 1 It is based on my own experiences as a performer and music teacher, on published research that I have read, on survey research that I and others have conducted, and on conversations with performers, teachers, and researchers. Within the theory, I seek to define important variables and suggest pos-

sible interactions so as to facilitate future experimental research in this area. I also hope that it will be useful to teachers as they work with students to prepare music performances.

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# The Theoretical Model Figure 1, "Sources of

I have evolved a formal theory that attempts to explain the variables that influence an individual's level of performance anxiety.... I seek to define important variables and suggest possible interactions so as to facilitate future experimental research in this area.

Variation in Music Performance Anxiety," charts a theoretical model in which I attempt to portray all the variables that might influence the level of performance anxiety experienced by a person who prepares and presents a solo performance that he or she considers important. The variables are arranged in a hierarchy, indicated by numerals on the left side of the chart. The passage of time is represented by the levels in the hierarchy. The process begins at Level 11, which contains the performer characteristics that must be considered when the commitment to perform is first made. Level 3 focuses on the act of performance; and Level 1 includes the subsequent feedback which becomes available after the actual performance. It is important to

note that this theoretical model represents the preparation and presentation of one major solo performance. Some variables in the theory have been the topic of published research, and this work will be cited as the variables are introduced.

The theoretical model represents the process of preparing and presenting a music performance, from beginning to end, in the following way. The variables in Level 11 all

1,	(Evaluation of Performance:) SUBSEQUENT FEEDBACK OF PERFORMANCE QUALITY								
2.	IMMEDIATE FEEDBACK OF PERFORMANCE QUALITY								
3.					e Act of Performance:)				
4.	Ĭ.	EVEL OF PSY	CHOLOGICAL AROU			LEVEL OF PHYSIOLOGICAL AROUSAL			
				(Perfo	ormer's Self-Perceptions	··)			
5.	PERCEIVED DIFFICULTY OF MUSIC	APP	PERCEIVED ROPRIATENESS OF MUSIC	PERCEIVED ADEQUACY OF PREPARATION	PERCEPTION OF OWN APPEARANCE	PERCEIVED AMOUNT OF INDIVIDUAL EXPOSURE	PERCEIVED IMPORTANCE OF PERFORMANCE	PERCEPTION OF AUDIENCE SUPPORT	
				(Per	forming Environment:)				
6.	MEASUREM DEVICES PROCEDUI	&	PHYSICAL COMFORT IN ENVIRONMENT	PRESENCE & I • Audience • Authorities • Educators	BEHAVIOR OF: • Family • Media • Peer Group	MEMORIZATION REQUIREMENT	DISTRACTIONS	TIME OF DAY	
				(Pren	aration for Performance	·)			
7.					RENT AFFECTIVE STATE	*			
3.	EMOTIONAL HEALTH					PHYSICAL HEALTH			
9.	ADEQU	ACY OF MUSI	CAL PREPARATION	ADEQ	ADEQUACY OF INSTRUMENT		ADEQUACY OF PHYSICAL CONDITIONING		
10.		DIFFICUL	TY OF OF MUSIC PER	FORMED	DRMED		APPROPRIATENESS OF MUSIC PERFORMED		
				(Performer's Ch	aracteristics and Learnin	na History:)			
11.	AGE	MUSICAL ABILITY	MUSICAL TRAINING	PERSONALITY	AMOUNT OF PERFORMING EXPERIENCE	QUALITY OF PERFORMING EXPERIENCE	MEMORY	CIRCADIAN RHYTHM	

The amount and quality of performing experience are important variables in relation to performance anxiety. In general, it will help to have more performing experience and it will help for that experience to be of a high quality.

concern the performer's personal characteristics and learning history. To increase their chances of success, both performers and music teachers should consider these variables carefully before making a commitment to perform. The variables included at this level have been studied by Appel (1976), Cox (1993), Craske and Craig (1984), Craske and Rachman (1987), Dews and Williams (1989), Freundlich (1968), Hamann and Sobaje (1983), Hutterer (1980), Kivimaki (1990), McCune (1982), Rothlisberger (1993), Steptoe and Fidler (1987), Sweeney and Horan (1982), Tartalone (1992), and Tobacyk and Downs (1986).

The age variable represents the performer's age. People do not seem to be equally vulnerable to performance anxiety at all points along the age continuum. I believe that the problem becomes greater as the performer enters adolescence, and for many people performance anxiety continues to be a problem for the rest of their lives. Music educators may be able to provide their younger students with favorable performance experiences that might forestall the development of performance anxiety as they grow older.

The musical ability variable is simple in operation. People with a greater amount of musical ability will find it easier to prepare and present a performance if all other variables in the theory are kept equal. Those with more musical training will also have an advantage in performance; but, again, this will only be true if all other things are kept equal.

The personality variable acts primarily as a source of optimistic or pessimistic attitudes toward performance. A pessimistic personality can be strong enough to offset the advantages conferred by a superior level of musical ability and musical training. The personality variable will also strongly influence the self-perception variables that appear in Level 5.

The amount and quality of performing experience are important variables in relation to performance anxiety. In general, it will help to have more performing experience and it will help for that experience to be of a high quality. The performing experience will be higher in quality if it has been acquired in relevant situations, and if it has been personally satisfying to the performer.

The memory variable refers to the performer's ability to memorize music. Some performance events require the memorization of music, while others do not. People who have difficulty memorizing music should try to avoid performance situations that require memorization. The memory variable should be considered when people select a performance area (for example voice, trumpet, or piano) because some areas require much more memorization than others.

The circadian rhythm variable refers to the time of day when the performer feels physically and psychologically optimized. Jazz musicians, for example, would have trouble if they were unable to play at their best in the late evening hours. Many performance events will not give the performer a choice of times, but when a choice is available it will help to select the individual's optimum time of day.

The variables in Levels 7, 8, 9, and 10 all represent factors that should be considered and optimized in making the preparations for performance. Level 10 focuses on selection of the music to be performed. The first variable is the difficulty of the music to be performed. Music that is too difficult will tend to raise performance anxiety.

A closely related variable is the appropriateness of the music performed, especially in terms of how the music is viewed by performance judges or by an audience. If judges or an audience consider the music inappropriate, their behavior is likely to signal their displeasure, with negative consequences for the performer. The actions of the audience and authority figures (judges, for example)

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are specifically represented in Level 6 as part of the performing environment.

The three variables in Level 9 refer to the adequacy of preparation for the performance. Adequacy of musical preparation refers to the process of study and rehearsal needed to bring a piece of music to a point at which one can give it a polished performance. There must be enough preparation, but it can be harmful to prepare too much.<sup>2</sup> Overpreparation has often been blamed for mechanical performances. Abrams and Manstead (1981) have studied this variable.

Adequacy of instrument means that the instrument is well tuned, adjusted, and generally capable of helping the player deliver a good performance. In some competitive situations, it may not be enough merely to have a capable instrument. If other performers have instruments of notably better quality, they will have an advantage.

Adequacy of physical conditioning refers to the overall physical conditioning of the performer. This includes the state of the physical sub-systems that are most important to the performer's medium of performance.

The Level 8 variables refer to the performer's emotional and physical health. It would be unwise to schedule a solo performance during a period of poor emotional or physical health. Those who do are more likely to have problems with performance anxiety.

The sole variable in Level 7 is current affective state. This refers to the current mood of the performer. Because of the time needed to prepare for an important solo performance, it will not be possible at the beginning of the process to predict the performer's mood at the time of actual performance. However, the performer's current mood can strongly influence the level of anxiety associated with performance. It is important for the performer to do whatever is necessary to

bring about a favorable mood at the time of the performance. A study by Stanton (1993) is relevant to this variable.

The Level 6 variables all relate to the performing environment. These variables will have an effect at the time of performance, and this is unavoidable. It is possible, however, for the teacher and performer to anticipate their effect and prepare countermeasures if necessary.

Measurement devices and procedures can range from the innocuous presence of microphones at a performance to intrusive physiological instrumentation that must be worn by volunteers who take part in certain kinds of research. The presence of measurement devices and the application of measurement procedures will tend to increase the anxiety of a person who is already prone to performance anxiety. Two things can be done to deal with this problem: the performer may practice with simulated or real measurement devices present, and a performer who is vulnerable to performance anxiety can avoid performance situations that call for intrusive measurement equipment.

Physical comfort in the performing environment is the topic of a great many stories that have been passed down by musicians over the years. It seems that a countless number of stages have been too hot, too cold, too dark, or too brightly lighted. These problems can be combatted with the same strategy of advance preparation. The performer can try to determine what to expect before the time of the performance and then practice under similar conditions. A judicious choice of clothing will often help the performer to deal with this kind of problem.

People who are relevant to the performer for various reasons form a crucial set of variables in the performing environment. They can have an effect by simply being there, All performance events will feature distractions, though it is difficult to predict exactly what they will be. The best preparation will be to practice the performance in the presence of numerous unanticipated distractions.

and their specific behavior can intensify and alter the effect of their presence. This is why the model shows the central element of the performing environment as being the presence and behavior of the audience, authorities, educators, family, media, and peer group.

These central elements are defined as follows. The presence and size of an audience can have an effect on the performer. In general, a larger audience, or one slow to show approval of the performer, will lead to more anxiety. I consider authorities to be the people in charge of administering music festivals or contests, as well as the judges in these contests and in graded recitals. Educators are the performer's own music teacher as well as other music teachers or classroom teachers known to the performer. Even music teachers who are not personally known to the performer can have some bearing on anxiety level, if the performer knows that they are music teachers. Performers usually expect authorities and educators to be more critical of their efforts than an ordinary audience would be.

Family refers to the performer's family; presence and behavior of the family can have a strong effect upon performance anxiety. Parents are probably the most important element of the family, and the effect of their presence depends on the pattern of interaction they have established with their child. Some parents are extremely difficult to please and continue to establish goals for their child which the child sees as virtually impossible to reach. This kind of parent will tend to heighten the child's anxiety if he or she is present at a performance. Other parents are consistently accepting of the results their child brings home. This kind of parent may actually reduce the child's level of performance anxiety if he or she is present.

The media can be as unobtrusive as radio,

which will only need a microphone to capture the performance. Television, on the other hand, usually requires bright lights to accomplish the same thing. Media representatives may single out certain performers for close up shots or interviews. This will make some performers very happy, but may contribute to performance anxiety in others. Those vulnerable to performance anxiety should practice under conditions that simulate media attention, and they should be prepared to decline to be interviewed if this might increase their anxiety level.

The peer group is vitally important to most school age performers. It is probably fair to say that young people consider their own peer group to be the source of many value judgments that matter to them. It is to this group that young performers will look for approval of their efforts. By the same token, the peer group will be the source of considerable performance anxiety for those who are susceptible to this problem. Teachers and performers can help this situation by encouraging the most supportive members of the peer group to attend performances, and also by encouraging open display of approval for the performer.

Some performance events have a memorization requirement, and this will be a source of anxiety to some.<sup>3</sup> Practice in memorization of music will help a performer to meet this requirement. All performance events will feature distractions, though it is difficult to predict exactly what they will be. The best preparation will be to practice the performance in the presence of numerous unanticipated distractions.

As I mentioned in the discussion of the Level 11 variables, different people will be optimized for performance at different times of day. Time of day appears in Level 6 as one of the performing environment variables.

Individuals should try to schedule their performances at their most favorable time of day. The variables in Level 6 have been studied by Abel and Larkin (1990), Abrams and Manstead (1981), Brotons (1994), Cox (1993), Craske and Craig (1984), Hamann (1982), Kivimaki (1990), Leglar (1978), Neftel, Adler, Kapeli, Rossi, Dolder, Kaser, Brugesser, and Vorkauf (1982), Stanton (1993), and Tartalone (1992).

Level 5 introduces the performer's self-perceptions of the magnitude of the performance task, the adequacy of his or her preparation, the amount of audience support, and his or her probable capability of delivering an excellent performance. These perceptions do not necessarily have to be grounded in reality. If the performer thinks there is a problem, the amount of anxiety generated by this perception will be roughly comparable to the amount of anxiety generated by a problem that actually exists.

Perceived difficulty and appropriateness of the music means the same thing in Level 5 that it did in Level 10, except that these variables are defined entirely by the performer's perceptions in Level 5. If the performer thinks the music is too difficult or inappropriate, then it may as well be too difficult or inappropriate. The same is true for the perceived adequacy of preparation.

The perception of own appearance variable refers to the performer's feelings about his or her physical appearance and/or the clothing worn for a performance. The performer's gender and age may very much influence his or her sensitivity to this variable. Younger students tend to enjoy wearing a uniform, while older ones may feel awkward in it. Some performers may feel uncomfortable in formal wear.

The perceived amount of individual exposure is generally more important in group or chamber music performance settings than in solo work, because any kind of solo playing will feature a relatively large amount of individual exposure. The perceived importance of the performance is relevant because the events considered most important are more likely to be accompanied with a higher level of anxiety.

The importance of the presence and behavior of the audience was discussed with

the Level 6 variables. The perception of audience support variable appearing in Level 5 is based entirely on the feelings of the performer. It will be an important element of the performer's overall self-perceptions.

In general, the Level 5 variables should all be interpreted in the same way. All are determined by the perceptions of the performer. A good teacher can provide a great deal of help here by pointing out fears that are groundless or exaggerated. The variables in Level 5 have been investigated by Appel (1976), Craske and Craig (1984), Iwanaga et al. (1986), Kendrick et al. (1982), Leglar (1978), Lund (1972), McCune (1982), McKinney (1984), Nagel, Himle, and Papsdorf (1989), Plott (1987), Rider (1987), Stanton (1993), Steptoe and Fidler (1987), Sweeney and Horan (1982), Tobacyk and Downs (1986), Wardle (1970), and Whitaker (1984).

Level 4 contains variables representing the level of arousal which characterizes the performer as he or she prepares to begin the actual performance. Psychological arousal refers to cognitive processes while physiological arousal refers to biological processes. The Level 4 variables have been examined by Brantigan and Brantigan (1984), Craske and Rachman (1987), Cutietta (1986), Garrison (1978), Grishman (1989), Kjelland (1985), Lockwood (1989), Lund (1972), Neftel et al. (1982), Plott (1987), Steptoe and Fidler (1987), Sweeney and Horan (1982), Riffe (1988), Troutman (1987), and Whitaker (1984).

Level 3 represents the beginning of the actual performance. The performer's attention should be focused on the musical task at hand, and the performer's success in focusing this attention will greatly help to control performance anxiety. The more focused the performer's attention, the less of a problem he or she will have from performance anxiety. The focus of attention variable has been studied by Craske and Rachman (1987), Kendrick (1979), and Kendrick, Craig, Lawson, and Davidson (1982).

Level 2 represents the most immediate feedback of performance quality, that which is available during the performance. This will come through the performer's ears, and it will come as a perception like the perceptions of Level 5, except that it arrives during Where might this theory lead in the future? Performers and music teachers could begin to use it immediately as a guide.... The theory would appear to be immediately useful in the planning of performance anxiety research.

the actual performance. An overly pessimistic performer will probably think he or she sounds worse than is actually the case. The performer will either be encouraged or discouraged by immediate feedback of performance quality.

Level 1, the top level of the theoretical model, represents subsequent feedback of performance quality. This is delayed feedback which reaches the performer after the event is over. Published reviews by music critics would be one form of this feedback, but photographs, tape recordings, and comments from people who were present at the performance constitute another form of subsequent feedback of performance quality. This variable is important in performance anxiety because it sets the stage for the performer's next music event. If the feedback obtained is favorable, it will give the performer more confidence, and correspondingly less anxiety, in undertaking the next public performance.

### **Summary and Implications**

What does this theory contribute to those who are concerned about performance anxiety? I think it offers a completeness of view, an organization of variables, and an immediate accessibility for use by music teachers and performers. When I say "completeness of view," I mean that this theory, in my opinion, incorporates all the major variables that influence the development and treatment of music performance anxiety. The theory addresses the treatment of performance anxiety in the following ways. Three prominent avenues of treating performance anxiety would be educational, psychological, and pharmacological intervention. Educational intervention typically strives to prepare the performer so that he or she will be less inclined to worry about the coming performance. This would be represented in a number of variables in the theory, especially those in Levels 9 and 10.

Psychological intervention typically strives to prevent or minimize negative cognitions and to help the performer focus on the task at hand instead of on needless worries. This would also be represented in a number of variables in the theory, but especially in those of Level 5 and Level 3.

Pharmacological intervention typically uses medication to lower or prevent attainment of an excessively high level of physiological arousal, though mood-influencing drugs have also been developed. Pharmacological intervention would be especially represented in the Level 4 and Level 7 variables.

When I say the theory contributes an organization of variables, I mean that it groups comparable or related variables, and it presents them organized in a logical hierarchy which runs according to the time line of a normal preparation for an important performance. With its completeness and organization, this theoretical model allows researchers, teachers, and performers to hypothesize possible interactions among the variables. Thus the theory should be immediately accessible for use by music teachers and performers because it is presented at an application level rather than at a high level of abstraction.

Where might this theory lead in the future? Performers and music teachers could begin to use it immediately as a guide to possible considerations in preparing for a performance. The theory would appear to be immediately useful in the planning of performance anxiety research. Finally, I would hope that this theory will stimulate further thought and analysis in the study of music performance anxiety.

#### Notes

1. The development of this theory was supported by Yamaha Corporation of America as part of the National Music Education Research project.

- 2. It is difficult to define "too much preparation," because it will vary with each individual. "Too much" will be the point at which the performance becomes automatic in a cognitive sense and musical expression becomes minimized.
- 3. The "memory" variable in Level 11 refers to the performer's level of ability in memorizing music. It probably would not change unless the performer made a concerted effort to develop his or her musical memory over a period of time. On the other hand, the "memorization requirement" in Level 6 is the requirement that people perform from memory in certain musical events. A performer with a weak musical memory could choose to avoid many events that require memorization

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