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A STRUCTURAL ANALYSIS OF THE PERFORMANCE ANXIETY  
SYNDROME AS EXPERIENCED AMONG SOLO MUSICIANS

*City University of New York*

PH.D.

1980

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A STRUCTURAL ANALYSIS OF THE PERFORMANCE ANXIETY SYNDROME  
AS EXPERIENCED AMONG SOLO MUSICIANS

by

JEFFREY HUTTERER

A dissertation submitted to the Graduate Faculty in  
Clinical Psychology in partial fulfillment of the  
requirements for the degree of Doctor of Philosophy,  
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1980

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1980

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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## Abstract

### A STRUCTURAL ANALYSIS OF THE PERFORMANCE ANXIETY SYNDROME AS EXPERIENCED AMONG SOLO MUSICIANS

by

Jeffrey Hutterer

Adviser: Dr. Arthur Arkin

In order to conduct a descriptive study of the features of Performance Anxiety as experienced among professional solo musicians, a questionnaire covering a broad range of anxiety-relevant issues was completed by 46 eligible subjects. It was accompanied by the Cantril Self-Anchoring Scale and the Rotter Locus of Control; the latter was included on the assumption that extent of perceived mastery of life events might bear on the areas under investigation.

The ensuing data prompted the formation of an Anxiety Index comprised of each individual's scores summed over a multitude of symptoms and fears. These components were then correlated with the Index as a whole, and the contingent Refined Anxiety Index matched against all other questionnaire variables and the two appended scales.

Results indicated that High-Anxiety subjects were most discriminable by a gestalt primarily concerned with the need to openly communicate emotions to responsive listeners. These artists were also more likely to: 1) employ

more of a spectrum of coping devices to reduce anxiety; 2) perceive themselves as "nervous" and more so than colleagues; 3) worry longer prior to, and during, performance; 4) have anxiety hamper their playing level; 5) be distracted by irrelevant intrusions; 6) evaluate their performances as inconsistent; 7) rely on others for preparatory aid and validation of musical efforts; 8) respond negatively to unfavorable criticism and experience more of a host of adverse personal reactions in the event of failure. They were particularly conspicuous in protracted recovery from a variety of stressors.

It was hypothesized that early disturbances in musically-specific interpersonal relations constitute a prominent dimension in the etiology of the syndrome: negative attitudes towards the artist's initial endeavors on the part of significant others are internalized, then projected upon the audience during concerts; the latter is then perceived as "out to get" the performer.

In contrast, the Low-Anxiety subject appeared to have consolidated a sense of internal worth which could sustain him through disturbing conditions and events; it was suggested that such an artist might be motivated by his Ego-ideal.

The fear of Disappointing Oneself was posited as connoting a somewhat discrete anxiety domain, one governed by the dictates of the Superego.

An attempt was made to discriminate between the cor-

related realms of frightened performers who nevertheless play well, from those impeded by their anxiety. Results for this differential diagnosis indicated that the hamper-aspect was selectively high in distraction by difficulties extraneous to music, as well as the external pole of the Rotter Locus of Control. Furthermore, inverse correlations between the hamper variable and certain coping devices, suggested that it might be the function of such mechanisms not to reduce anxiety, but harness it in order to impel a more convincing performance.

It was concluded that the solo musician's attitudes and behavior, as disclosed through this study, meshed most congenially with a social-humanistic model of personality. This assesses him as motivated primarily by ego-autonomous needs which do not reduce to either biological, or conditioned-reflex substrates.

Suggestions for further research included: additional validation of the questionnaire parameters, content analysis for significant areas, refinement of the questionnaire as both diagnostic and predictive tool, and the attempt to establish causal vectors for correlated domains.

ACKNOWLEDGMENT

To Joanne, with admiration  
and gratitude

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## Chapter I

### INTRODUCTION

#### The Nature of the Problem

The vital subject of performance anxiety among professional solo musicians has not received any systematic study. Neither behavioral scientists, nor those directly involved in the art, have subjected the phenomenon to organized analysis.

The prestigious music institutions offer numerous courses dealing with the structure and function of music, its aesthetics and history. Comprehensive technical instruction is given in its expression through a variety of instrumental media. The lives of those who have composed the masterpieces of the literature are meticulously scrutinized. However, little or no attention is devoted to the crucial demands upon the interpreter faced with the responsibilities of transmitting these works to an audience, and whose lifelong aspirations are contingent on how well he succeeds.

Similarly, a perusal of the music section in any library discloses a slew of books and periodicals specializing in all aspects of the art with, again, the notable exception of the performer's role. In those instances when the latter is discussed, it is usually in terms of how he should strive to convey the intentions of the composer.

The trenchant factor of the performer's own personality, and the ways in which it interacts with music and listeners, is rarely considered. It sometimes appears as though the artist himself is being treated as a kind of instrument, merely a passive, impersonal medium for disseminating the achievements of others.

The general suppression and denial that seems to permeate the domain of performance anxiety suggests a kind of "Pandora's Box" orientation. I.e., trying to examine or analyze the problem will probably just tend to make it worse; it should thus be treated as a taboo area, and its manifestations ignored in the hopes they might then go away.

It is doubtful that this approach is of much benefit to a talented artist, for whom the weeks, even months, preceding a concert can become the setting for a battleground of harrowing conflicts. In the estimation that analysis of the problem will help rather than hinder its alleviation, this investigation is offered.

During the construction of this study, the question arose as to whether it should be restricted to classical musicians, or broaden its purview to include musicians of other disciplines. The decision to limit the domain to classical performers was made on the assumption that they - by virtue of their specialty - were disposed to both greater and qualitatively different anxieties. This premise was based on the following rationales:

1. The ambiance in which the classical soloist performs is very conservative and formal, governed by prescribed rules of etiquette. Therefore, little room is allowed for verbal patter, or other impromptu behaviors that can help to dispel tension.
2. The music itself does not permit embellishments by the performer. This expressive constraint is unique to classical music; by distinction the jazz musician, as one example, is free to do anything he wishes with a piece, so long as the basic structure is maintained. Though this sort of improvisation can exhibit the flexibility of a gifted instrumentalist, it also provides a convenient subterfuge for those with little to say.
3. The classical performer is required to bring something unique and personal to compositions that have been heard thousands of times. This formidable demand rarely confronts musicians in other categories. Furthermore, it greatly enhances the artist's chances of being critically compared to the highest standards of both live and recorded work.
4. It is generally recognized that even the most talented artists can only approximate the profundities of the music they are called upon to interpret; thus the classical virtuoso must deal not only with anxieties concerning audience reaction, but the vast responsibility of doing justice to the music. Conversely, performers in other categories often find their gifts equal, or even superior to, the

material they purvey.

The following study is primarily a descriptive examination of the Performance Anxiety syndrome as it manifests among musicians. It confronts the "what," rather than "why," of the phenomenon, in the judgment that it is premature to delve into issues of causality or remedial therapy, until at least some of its parameters have been defined. The research therefore sought to articulate the structure of the entity; once identified, its constituents might then undergo other modes of experimental treatment.

No species of anxiety is exclusive to others. Yet, it might be argued that, in perhaps no other field of endeavor is the coordination between emotional, intellectual, and physical aspects so interwoven - or the consequences of anxiety so manifold - as in the performing arts.

Since there exists no specific data on the type of performance anxiety addressed by this study, the review of the literature will be two-fold: 1) A general survey of theories of anxiety as encapsulated in some of the cardinal psychological systems; 2) An anthology of narrative accounts in which the anxiety experience is subjectively described by a number of prominent musicians.

### Theories of Anxiety

#### The Freudian Model

The Freudian model of personality is an energetic one,

in which the buildup of tension is intrinsically aversive, and its discharge consequently satisfying (the "pleasure principle"). Anything which increases, or threatens to increase tension, will thus be sensed by the organism as anxiety - provoking.

Though environmental sources of excitation were acknowledged, they were considered secondary to inner pressures. As Hall and Lindzey note, this was because Freud felt that "external stimuli make fewer demands upon the individual and require less complicated forms of adjustment than do the needs. One can flee from an external stimulus but it is impossible to run away from a need" (Hall and Lindzey, 1970, p. 36). Ordaining innate biological drives as the primary source of tension was crucial: it designated the human organism as fundamentally anxious.

Whereas the contemporaneous social environment received little attention, its early impact was apparent in the formation of the Superego. This entity, an aggregate of moral injunctions whose chief function was to restrain the instincts, constituted the internalized representation of authority.

Implicit in this orientation was the view that "... the individual's interests are ... intrinsically opposed to the interests of any and all other individuals" (MacKinnon and Maslow, 1951, p. 641). By definition therefore, society was the enemy of personal gratification. In such a perspective, human relationships tend to be perceived in

utilitarian terms. Thus, e.g., a young child's fear of separation from his mother revolves less around deprivation of a loved person, than the loss of an effective stimulus mediator.

It is basic to Freudian theory that any source of anxiety whose recognition is too traumatic for the ego can be banished from consciousness. This act of repression, however, does not extinguish the valence of the object and its attendant conflicts; both continue to influence behavior from below the level of awareness.

Through the intercession of a variety of defense mechanisms, the aversive pressures of unconscious contents might achieve partial expression; the condition for this release was that the primary source of anxiety remain disguised. The symptoms of a phobia, for example, illustrated the way in which fear could be displaced onto an innocuous target which yet symbolized the repressed object.

In a paper entitled "Inhibitions, Symptoms and Anxiety," (1926), Freud set forth his basic theory of human fear experiences. It proposed that the effects of the original birth trauma, in which the organism is expelled from the homeostatic security of the womb into a world of overwhelming stimulation, was the prototype for all subsequent anxiety. The later developmental elaborations of this primal trauma were: 1) Actual anxiety - in which fear has a realistic basis in the environment; 2) Neurotic anxiety - dread of augmented instinctual pressures themselves;

3) Moral anxiety - fear of harsh superego retribution in the event taboo impulses escaped into consciousness or overt behavior.

### The Interpersonal Model

Beginning with the later efforts of Alfred Adler, and culminating in the formulations of Sullivan, Horney, Fromm and others, there emerged an interpersonal school of psychology. While acknowledging the great contributions made by Freud, these theorists nevertheless rejected many of his cardinal tenets. Common to all of them was an increased emphasis on the social determinants of human behavior.

The general science of psychiatry seems to cover much the same field as that which is studied by social psychology because scientific psychiatry has to be defined as the study of interpersonal relations ... From such a standpoint, personality is taken to be hypothetical. That which can be studied is the pattern of processes which characterize the interaction of personalities in particular recurrent situations or fields (Sullivan in Hall and Lindzey, p. 138).

The interpersonalists strongly objected to Freud's depiction of individual egos as "mere defensive buffers and vulnerable layers between this substance (libido), and a vague surrounding 'outer world' of arbitrary and hostile social conventions" (Erikson, 1963, p. 64). This emancipation of the ego, granting it an autonomous integrity apart from biological imperatives, was the most significant innovation of these humanistic psychologists. For them the ego (for which the more holistic term "self" was often preferred), had its own needs; they neither derived from the biological instincts, nor were reducible

to them. Accordingly, Adler spoke of "social values instead of drives," values instead of pleasure" (Ansbacher, 1956, pp. 64-65). And Erikson, perhaps the most biological of the interpersonalists, replaced the psychosexual stages propounded by Freud with "social modalities" (p. 75).

The social psychologists saw Freudian philosophy as hedonistic and static. The individual's paramount drive was regressive, a "backward orientation ... urges to reinstate the past ... the state of 'absolute, primary narcissism'" (Ansbacher, p. 116). In their opinion, the introverted and ambivalent ego of Freud, with its yearning for tranquility, was pathological. The assessment of a healthy ego was that of a continuously active impetus, outer-directed from birth. And its essential motivation was not simply pain avoidance, but a positive striving toward "perfection" (Adler), "self-actualization," (Maslow), "self-realization" (Horney).

The interpersonal theory of anxiety derives from its corresponding model of general personality. Hence, anxiety is not a phenomenon endogenous to man, but reactive to disturbed relations with other people. Any experience, particularly in the vulnerable and impressionable years of childhood, which hampers the ability to establish loving and trustworthy affiliations with others, will damage self-esteem. In turn, this deficiency of "selfhood" predisposes to a multitude of anxiety reactions.

The distinction between biological drives and the social problem of anxiety is apparent when Erikson speaks of a human being as both organism and ego, and notes that, whereas the body is exposed to pain and tension, it is the ego which is the exclusive province of anxiety (1963, p. 36). Sullivan echoes this theme when he asserts:

The tension called anxiety primarily appertains to the infant's as also the mother's, communal existence with a personal environment, in utter contradistinction to the physicochemical environment (1953, p. 42).

In summary, Horney's paradigm for the acquisition of "basic anxiety" in childhood affords a useful resume of the interpersonalist philosophy:

... through a variety of adverse influences, a child may not be permitted to grow according to his individual needs and possibilities ... the people in the environment are too wrapped up in their own neuroses to be able to love the child, or even to perceive him as the particular individual he is; their attitudes toward him are determined by their own neurotic needs and responses ... they may be dominating, overprotective, intimidating ... hypocritical, indifferent, etc. It is never a matter of just a single factor, but always the whole constellation that exerts the untoward influence on a child's growth. As a result, the child does not develop a feeling of belonging ... but instead a profound insecurity and vague apprehensiveness, for which I use the term basic anxiety (Horney, 1950, p. 18).

#### The Behavioral Model

For the behaviorist, complex inner processes, being refractory to direct observation and quantitative measurement, are considered suspect. That autonomous intrapsychic forces might motivate and sustain behaviors which depart from, and even run counter to, the manifest reinforcement contingencies, is an unacceptable proposition.

When the actual social-learning history of maladaptive behavior is known, principles of learning theory appear to provide a completely adequate interpretation of psychopathological phenomena and psychodynamic explanations in terms of symptom - underlying disorder becomes superfluous (Bandura, 1969, p. 10).

In this framework, a phobic object is not a reification of abstract conflicts in which both instinct and defense are symbolized; it is rather the direct result of association.

Learning theorists prefer to avoid inferences of holistic psychological constructs. People, objects, and events are distilled into their molecular stimulus components, which latter are devoid of "meaning," "value," or any other emergent properties. Thus anything, regardless of its hypothetical "significance," can become anxiety laden simply through temporal contiguity with a few unconditioned fear stimuli.

If a learned fear response is reinforced, it will continue to hold sway. If it is not reinforced (or antagonistically reinforced with pleasurable stimuli), it will extinguish. A fundamental postulate of learning theory is that conditioned fear, especially if intense, is likely to generalize. Thus, not only the initial conditioned stimulus, but various objects which resemble it, may acquire fear-inducing effects. It is important to note, however, that the generalized stimuli are located on a sensory gradient, in which those most similar to the original noxious source elicit the greatest fear. The conservative

learning model has therefore encountered difficulty in trying to explain instances of pervasive anxiety reactions to situations with apparently no direct linkage to unconditioned fear stimuli.

It is integral to the behavioristic view that the most apprehension is evoked by the initial conditioned stimulus itself. This stands in sharp contrast to the psychoanalytic position that overt fear in the presence of the source object is much inferior to that aroused by the symbolic displacement.

#### The Existential Model

The existential interpretation of anxiety is unique and particularly engrossing. It is expressed by Rollo May as follows:

Anxiety is not an affect among other affects such as pleasure or sadness. It is rather an ontological characteristic of man, rooted in his very existence as such. It is not a peripheral threat ... or a reaction which may be classified beside other reactions; it is always a threat to the foundation, the center of existence. Anxiety is the experience of the threat of imminent non-being (1958, p. 50).

This view of anxiety as ontological illuminates the difference between anxiety and fear. The distinction is not one of degree nor of the intensity of the experience. The anxiety a person feels when someone he respects passes him on the street without speaking, for example, is not as intense as the fear he experiences when the dentist seizes the drill to attack a sensitive tooth. But the gnawing threat of the slight on the street may hound him all day long ... whereas the feeling of fear, though it was quantitatively greater, is gone forever as soon as he steps out of the dentist's chair. The difference is that the anxiety strikes at the entire core of his self-esteem and his sense of value as a self, which is one important aspect of his experience of himself as a being. Fear, in contrast, is a threat to the periphery of his existence... Anxiety is ontological, fear is not (ibid., p. 51).

Existentialism thus reinstates the Freudian dictum that anxiety is intrinsic to man, but from a completely anti-theoretical perspective. The Freudian life-drive, (i.e., the pleasure principle), placed in an existential model, actually impels the person toward that very "nothingness" which is the basis of Angst. In contrast, those biological drives which Freud postulated as the primal source of anxiety, would be regarded by the existentialist as affirmations of existence. This suggests that fear might often represent a desireable state, one that defends against the greater terror of an anaesthetized indifference.

The existential philosophy, with its stress on the value of phenomenological experience, and its depiction of a continuously striving Self which is not bound by the past, is most akin to the social model discussed previously. However, it appears to place more emphasis on the internal concerns of the subjective life-space; relations with others, unless founded upon personal actualization, may deter the struggle for individuality.

#### The Constitutional Model

The initial distaste of most psychologists in the post-Freudian era for biological etiologies in the shaping of human behavior, has given way to a more moderate view, one in which the role of inherited factors again receives attention. An outstanding example of research along these lines is that conducted by Thomas, Chess, and Birch (1969). These workers, by way of an assiduous longitudinal study,

examined the effects of inborn "temperamental traits" on the behavioral development of children.

In the following passage, the authors describe the nature of their approach, the resistances it encountered, and their reasons for persisting:

It was our repeated experience in the early and mid-1950's to find most of our colleagues reproaching us for returning to an outdated and discredited constitutionalist position when we expressed the view that individual organismic behavioral differences important for development might exist in young children. In a period when behavioral disturbance was most generally considered to be produced by the environment, to pay attention to the intrinsic characteristics of the reactor was viewed as a return to a static and almost Lombrosian constitutional typology. It was indeed the period of the 'empty organism' for many workers in psychiatry.

In spite of the prevailing atmosphere, however, a set of facts could not be neglected. These were: 1) the lack of simple relationship between environmental circumstances and their consequences; 2) individual differences in susceptibility to stresses and pressures; 3) differential responses to similar patterns of parental care (p. 6).

As a result of the data their research elicited, the authors concluded that each child is born with a unique constellation of temperamental attributes. While not definitive in themselves, they interact with each other and environmental forces to influence the formation of personality.

Though certain individual traits (e.g., withdrawal to novel stimuli, high intensity of response, distractibility, etc.), were predictive of later behavioral disturbances, it was the opinion of Thomas et al. that even the most potentially unfavorable temperamental gestalts could be

detoxified by sympathetic parenting. The worst consequences they found to ensue in cases where the child's constitutional endowment conflicted with parental needs and expectations.

These findings are crucial for any model of anxiety. They show that the dynamics of fear reactions should not be evaluated solely in terms of instinctual drives, conditioned reflexes, or social interactions. An indispensable organismic variable is the person's unique physical substrate. It is likely to affect not only the degree of anxiety experienced, but the symptomatic expressions such anxiety may take, as well as the behaviors invoked to defend against it.

At this juncture, it should be emphasized that none of the foregoing models of anxiety are really exclusive of the others. Modern psychoanalysts and humanistic psychologists recognize the validity of conditioning principles, in addition to the need for empirical verification of psychological constructs. Similarly, learning theorists have given much greater latitude to the range and number of internal mediations deemed available to the individual; even such higher-level needs as "loss of affection" have been alluded to as unconditioned stimuli (Maher, 1966, p. 174).

Thus, a given anxious person might represent a composite of several, or even all, of the salient models. Nevertheless, in the interests of brevity, and to help

facilitate comparisons, the paradigms have been presented in their more traditional forms.

### The Experiential Testimony

Due to the paucity of "hard" data, the review of the relevant literature will depend upon anecdotal evidence, drawn from biographical and autobiographical materials. These excerpts will depict not just anxiety per se, but the entire milieu of the performing experience.

The majority of quotations derive from singers and pianists. This is not because they seem to differ significantly from other instrumentalists in the kind or extent of their fears. Rather, they have traditionally been the two most "visible" musical categories. Their observations are thus most likely to receive coverage.

The following anthology, presented with little intervening commentary, is designed to convey a broad impressionistic flavor of the complex performing experience. It is hoped that such phenomenological content may help to enrich and vivify the nomothetic categories discussed in the ensuing chapters.

The other shy pianist, Adolf Henselt, was no misanthrope. He was merely terrified of the public, and it was a pathological terror. Once he was recognized in a cafe, and the band gave him an ovation. The horrified, suddenly galvanized Henselt blindly raced through the crowd and escaped through the kitchen. When playing with an orchestra he would hide in the wings until the opening tutti was over, rush out and literally pounce on the piano. On one occasion he forgot to put aside the cigar he was nervously chomping - this was in Russia - and played the concerto cigar in mouth, smoking away, much to the amusement of the Czar. The mere

thought of giving a concert made him physically ill. He gave very few throughout his career, far fewer than any of the great pianists .... He was offered fabulous sums to appear but turned down all offers. He just could not control his fingers when he knew people were listening. William Mason, who admired Henselt, has a story to tell about his nerves:

An anecdote of Adolf Henselt, also related to me by Dreyschock, is entertaining as well as suggestive, especially to piano-forte players, who are constantly troubled with nervousness when playing before an audience. Henselt, whose home was in St. Petersburg, was in the habit of spending a few weeks every summer with a relative who lived in Dresden. Dreyschock, passing through the city, called on him one morning, and upon going up the staircase to his room, heard the most lovely tones of the piano-forte imaginable.

He was so fascinated that he sat down at the top of the landing and listened for a long time. Henselt was playing repeatedly the same composition and his playing was specially characterized by a warm, emotional touch and a delicious legato, causing the tones to melt, as it were, one into the other, and this, too, without any confusion or lack of clearness. Henselt was full of sentiment but he detested 'sentimentality.' Finally, for lack of time, Dreyschock was obliged to announce himself, although, as he said, he could have listened for hours. He entered the room and after the usual friendly greeting said, 'What were you playing just as I came up the stairs?' Henselt replied that he was composing a piece and was playing it over to himself. Dreyschock expressed his admiration of the composition, and begged Henselt to play it again, but alas! his performance was stiff, inaccurate, and even clumsy, and all of the exquisite poetry and unconsciousness of his style completely disappeared. Dreyschock said that it was quite impossible to describe the difference; and this was simply the result of diffidence and nervousness, which, as it appeared, were entirely out of the player's power to control.

All this may have come about because at his debut, according to Alice Diehl, he had a memory lapse, left the stage and refused to return (Schonberg, 1963, p. 199).

The curious thing was that Godowsky, headliner though he was, never could make the public impact his extraordinary gifts entitled him to make. Perhaps there was something of Henselt in him. Before an audience his playing, according to some of the best judges of his time, seemed to lose color and strength. Hypnotized by perfection as he was, it may be that in public he re-

fused to take a chance, worried about marring the unruffled perfection of his pianistics. That goes for his recordings, too .... They are beautiful as far as they go, but in only one case ... does the playing begin to suggest the purity, elegance, authority and transcendental pianistic command of the man. His effects were noted by all professionals in his audiences, but there could be no denying that concert work inhibited him. George Bernard Shaw indicates this in an 1890 review. Godowsky had played Schumann's Etudes Symphoniques, and though he rippled through them with no trouble at all, 'a certain shyness, rather engaging than otherwise, prevented him from standing on his merits emphatically enough to get full credit for his performance.' His colleagues, who knew what Godowsky could really do, regretted this inhibition. Josef Hofmann once told Abram Chasins, after leaving Godowsky's home, 'Never forget what you heard tonight; never lose the memory of that sound. There's nothing like it in this world. It is tragic that the public has never heard Popsy as only he can play' (ibid., p. 319).

From an article in The New York Times of June 10, 1978, entitled "Moscow Piano Competition: Strong Nerves Are the Key:"

Today was a day when young pianists needed strong nerves, but not everybody had them. Only 76 of the 89 young men and women who had signed up for the Moscow Tchaikovsky piano competition showed up this morning for the opening - and among them were 22 Americans.

'I just know I'll draw the opening time,' said Janis Weber, a 28-year old pianist from New York who dreaded the prospect. She didn't get it.

William DeVan 29, from Tuscaloosa, Ala. developed a headache. Not so Jerome Malry, a 28 year old plumber from San Francisco, who has been telling the others he is convinced he would win - as the first black man to duplicate Van Cliburn's feat at the original Tchaikovsky competition in 1958 .... 'It's mostly a quixotic voyage,' said one of the Americans who did not want to give her name because, she pointed out later, 'it's embarrassing if you don't win ....' Charles Munch, who once conducted in this hall, said once that if you don't see a pink haze and feel something approaching panic you are finished as an artist,' said Andrei Eshpai, chairman of the pianoforte jury, today. 'Good luck.'

Although a successful, long career has its rewards, (Eugene) Istomin balks at one aspect, what he calls 'the anxiety for success. In order to function, I need a public. We all need it. And there is none of us who

is free of that anxiety for one reason or another ... That's the greatest problem of the performing artist - we need an audience and performances to refine our work. So there is a primordial anxiety that one day, perhaps, they won't want to hear me' ....With all the problems, the defeats, the frustration, had he ever thought of giving up his pursuit? 'Often,' he laughs heartily. 'But I never had any doubt that I was a musician from the start and that would never change. What prevented me was the fact that I wasn't anything else but a part of music. That was my identity, it was me. I couldn't live without music. I never said to myself, 'You are music,' but what I was saying was 'You are, however infinitesimal, you are a part of music.' He talks of a certain conscious anguish every time he walks out on stage as being part of a loss of innocence. 'But it's important to try to regain it through one's art, and that's the process of etherealization.

Does the anguish increase with the years? 'No, it becomes more simple. I say to myself that this may be the last time I'll ever play. I may die. And it seems more realistic every time I play. As days and years go, it becomes more true and I gain greater tranquility inside myself. I'm able to shut out the anxieties more successfully than I used to. When I was younger, I was aware of certain gifts, but not of myself. I was much more anxious as to whether I was being accepted or recognized. How do people like what I'm doing, am I good enough? Well, today I have these anxieties - it's perfectly normal - but I'm much more able to credibly control them. My thing is reaching the stage where there isn't anything to do but play. This happens more often. Come what may, I take my risks and am resigned to them. There is nothing that's gained of any value in human existence without risks ....Now I'm more aware of the limits of time left to sing my tune. And I'm more resigned to the inevitability that I must sing - and therefore there's nothing to do but sing, make music ....And that's what gives me the courage to go on the stage, because I'm not impelled to be accepted to have the success - that is not my ambition. I have enough of that now. My first ambition is to speak, to communicate the truth as best I can, in the music that I'm playing. After a performance that's really what I wanted it to be, I feel a wonderful light sense of having spent myself, having fulfilled myself. The moment of truth is the doing.'

And how does he handle the inevitable critics? 'When the reviews are good, I'm inutterably happy for a few minutes. And when they're bad, I'm unspeakably depressed and furious for the whole day. But rarely has a review corresponded with what I actually thought about a concert. I'm enormously susceptible and anxious for obser-

vations someone makes to me personally. But in the nature of a review, very few are constructive' (Jacobson, 1974, pp. 96-98).

There is, apparently (according to so many of the world's leading concert soloists), no real easing of stress with time and experience. For Vladimir Ashkenazy, 'It occasionally does get better, but sometimes it gets worse. You have to work at yourself all the time. Sometimes it's wonderful and the pressure, in fact, makes you play better; other times ... not so good!'

An immediate impression one gets watching Ashkenazy, is that his playing seems super-secure and effortless and this in spite of relatively small hands. 'That's wonderful! Great to hear that it comes out that way! In fact, everything is a problem! Because everything is subject to what you want to express, and once that is the objective, it becomes very difficult. Each note has a meaning. If you just play the notes, well then, it's rather easy' (in The Piano Quarterly, Fall 1978, No. 103).

I have struggled very hard during the last thirty years to secure my neutralization on the platform when I perform, for I am in the service of music each time. If, rightly or wrongly, I have the impression that the audience is not a very good one, I might become influenced by that, play badly and make music suffer.

A concert manager once told me that an artist should sense, the very second he comes out, how his audience is that night. He mentioned a famous singer and said: 'Look at this man! He feels it with his first step on the platform, and in accordance with this impression he then decides to be serious, half-serious, or non-serious'...So I say it is better not to be too conscious of the audience. If you are playing in a town where you have not been before, it is very difficult to judge anyhow. Only if you are very familiar with a place, have often played there, might you distinguish better. Yet I say it would always be advisable for the performer not to be dependent on that.

It should be taken for granted that the performer is in the service of music, and that the listener is in the service of music; then, if both are sufficiently in the service of music, they will meet somehow, vibrate together (Schnabel, 1961, p. 188).

Sometimes the boredom of an audience, intense boredom - I suppose it must be that - has such a force that it creeps up to the performer and becomes a menace to him. Isolation from the audience is a protection against that menace - which is already a good reason to strive for it.

I have very often been disturbed or interrupted in my concentration while playing. And as I was always afraid that my concentration would be interrupted, by one or the other occurrence or condition, I have struggled so intensely to secure isolation for myself .... If you have played for the same audience very often, you might develop a feeling for their reaction and their response. But we should do better not to pay too much attention to that, for, you see, we should be fully occupied with the music. The music should occupy our whole capacity .... Music gives us enough to do ... and we have really no time to find out what kind of people the audience is composed of and how they react (ibid., pp. 212-213).

You know, so many people go to a concert to see what a colleague does bad ... and the teachers, too ... he doesn't go with a kind heart to hear his colleagues, he goes to see what he will do wrong. And, you know, these people cannot play in public; because when they play they see in every corner all the people who are looking to see what they will do wrong. Many stop playing because they have absolutely no control, they are sick. I (Rosina Lhevinne) have played so little in my life, but the very first time I played in Aspen I remember I said in my mind, 'I know you are all my friends,' because when I go to a concert I really, truly, am a friend of the person who is playing. That is why I can almost always, if I want to go backstage, find something very good and speak of that, I don't speak of the places that were bad .... I played very little but I was never nervous. A certain nervousness must be ... I was excited but it is a great difference to be excited or to have stage fright (Jacobsen, p. 123).

(Glenn Gould) is convinced that audiences are in the concert hall mainly in the hope of witnessing a spectacular disaster of which the performer will be the victim. Debussy put it this way:

The attraction of the virtuoso for the public is very like that of a circus for the crowd. There is always a hope that something dangerous may happen.

In a circus the acrobat might slip, fall off his wire, and be horribly mutilated. In a concert the horn might crack, the pianist might forget his notes and be horribly humiliated. 'Blood-lust,' Gould calls it. 'At live concerts I feel demeaned, like a vaudevillian.'

In his concert-giving days Gould overcame his strong negative feelings towards audiences by adopting what he called 'an attitude of healthy indifference' to them, pretending to himself that what he was doing up there on the platform he would be doing anyway for his own

pleasure, whether or not anyone wanted to hang around and listen.

Gould acknowledges that not all performers share his negative attitudes toward audiences. He mentions Menuhin and Rubinstein as artists who need the stimulus of a live audience (Payzant, 1978, pp. 21-22).

Gould's citation of pianist Arthur Rubinstein as someone who enjoys audience contact is reinforced by the latter's own words:

The well-lit hall, filled with people, looked twice as big as in the morning. My appearance was greeted with a warm applause. As I made my bows I became aware of a gift which served me well through my entire concert career: the bigger the hall, the larger the audience, the more confidence and self-control I felt, and I had none of the paralyzing stage fright which afflicts so many of the best concert performers (Rubinstein, 1973, p. 187).

On no account, however, should the lack of "paralyzing" stage fright be taken to imply a complete absence of nervousness. A case in point is Rubinstein's experiences in a piano competition he entered as a young man:

After Fischer, I heard Sirota, Pyshnov, and an Englishman. They depressed me - they played too well. All four had the kind of technical polish which I never possessed. And they never missed a note .... It is better for me not to listen to the others, I decided, lest I run away from the competition, police or no police. As a matter of fact, I am afflicted with an inferiority complex with regard to my playing; any youngster who performs properly a Scarlatti sonata makes me feel that he is a better pianist than I (ibid., p. 347).

While readily acknowledging his anxieties, Rubinstein broaches a pivotal issue when he states that, for him: "Curiously enough, the atmosphere of tension and excitement is favorable to a good performance" (p. 347).

'A few days later we heard her (soprano Angelica Catalini) again at the rehearsal for her second con-

cert ....She seemed on this occasion much less pretentious, much more engaging. She was also most gracious to the orchestra and to the people who had crowded in to hear her. Thus, I was quite ready to believe what various persons told me; namely, that her pretentious bearing at her first appearance had proceeded rather from embarrassment than from pride, and was essentially a device for disguising her anxiety. A young man who had been backstage at that first concert assured me that at her first entrance she had trembled from head to foot, and had hardly been able to breathe, so intense was her nervousness' (Pleasants, 1966, pp. 117-118).

Tenor John Vickers:

'We travel for the job, and for the most part, an opera singer is a lonely person. If there is one thing all singers must learn to cope with, it is personal loneliness. This is intensified by the enormous contrast between the stage and the hotel room. We stand onstage, interpret our roles, rip our emotions wide open, and are exceedingly sensitive to every influence. If you've been a success, there is a tremendous sense of unity between yourself and everybody involved in the performance. Then you scrape off your makeup, have a shower, sign some autographs, and suddenly it's all over. You are just another person in a big city, in a strange place, where your only home is a hotel room' (Ardoin in Breslin, 1974, p. 76).

'I was so ashamed,' (Franco) Corelli winces. Then the excuses begin: 'I ate some salami, and late in the afternoon I began to have a pain in my liver. That night my head began to spin and my stomach' - he pauses then resumes, his jaw set firmly. 'It was a bad performance,' he admits quietly. 'I was one bar ahead of the conductor all evening. Every moment I was afraid. When I was at the start of my career, do you know what thought ran through my mind the moment I stepped onstage? I hoped I would arrive at the end of the opera ... that I would have the strength to sing every note, that I would be onstage when the final curtain fell' (Downes in Breslin, 1974, p. 89).

'... I live on nerves. Someone told me it is a good thing for an artist to have nerves - otherwise he sounds mechanical. Ninety-nine percent of all artists get nervous; for me, however, sometimes I think I am ninety-nine percent nerves' (ibid., p. 91).

Two hours before curtain time Corelli warms up with some mild vocal exercises ....As the time draws near for him to dress to leave for the theater, his face

grows taut and a muscle twitches in his neck, commencing a neural mutiny that erupts in the teeth-rattling, leg-trembling fear that grips him before he sings. 'I am never happy when I sing,' he asserts convincingly. 'Maybe when I'm shaving' (p. 94).

Leonie Rysanek:

Her marriage was the turning point in realigning her life and career. 'One critic,' she notes, 'wrote that something had changed in me with the new Fidelio in New York. Something has changed in the voice. Happiness - I am very happy ... means a lot. It makes you quiet. I am not so unhappy if a performance isn't as good as I would have liked it. I am still unhappy about it, but in former days I was destroyed. I was always afraid to think of what will be when I retire. I thought I would die without the stage. I know I won't be happy without it, but I don't think I'll be that unhappy ... I think there hasn't been one performance - let's be very modest - in the last two years that I could say, 'Boy, you were bad!' Some phrases I didn't sing as I wanted, but it wasn't like the years before when I was depressed' (Jacobsen, 1974, p. 178).

Luciano Pavarotti, asked why his father - in Pavarotti's own words, "a fantastic tenor" - never sang professionally, simply replied: "Because if he see somebody in front of him, he die ....And when you are afraid, the first thing you lose is the diaphragm, and if you lose that you lose everything" (Rubin in Breslin, 1974, p. 176).

On February 26, (Pablo) Casals wrote to Julius Rontgen from the Hotel Bristol in Warsaw, thanking him first of all for his letter and a sample of some pills, presumably a variety of tranquilizer Rontgen thought would help Casals through his devastating stage fright: 'Please send me a whole box with instructions for use' (Kirk, 1974, p. 279).

Beforehand had been terror. Even before playing solo at the Cafe Tost, Pablo had suffered a constricted stomach and clammy hands, but this always passed when he began to play. Just before he went on ... he was struck by severe pain in his chest, as he would be the rest of his life when it was time to perform. And for the first time another monster gripped him: he was

certain he could not remember the music. He told his father and Professor Sanchez, his pianist. Together they pushed him toward the stage (ibid., p. 61).

Barbirolli's greatest memory of Casals was of the Catalan's last solo appearance with the Royal Philharmonic in London ... Barbirolli remembered it in 1969 as though the performance had been the night before: 'He was a very nervous man in those days. Ooh! He told me of his sufferings. He used to grunt out of sheer nerves, trying to control them, and yet he played with all his emotions - marvelous ....The orchestra was completely transfixed' (p. 364).

The proclamation that a certain artist "never" undergoes performance anxiety should not necessarily be taken at face value. Defenses such as repression and denial may camouflage sizable accumulations of fear. Furthermore, since the phenomenon can manifest in obliquely unsuspected ways, it is imperative to clarify just what is denoted by "anxiety."

The great violinist Jascha Heifetz claims to be totally free of nervousness before performance. Yet, the resultant portrait of a serene and untroubled artist is graphically belied by the following:

Jascha Heifetz believes in luck. Luck believes in him, too - but Heifetz takes it not at all for granted. In spite of more than thirty years on the concert stage, he still worries about that string which is always about to break. The lights in the concert hall - they are just about to go out, in his imagination. Of course, the lights never have gone out in Heifetz's musical world. He says that is only luck, and meanwhile he lives in unhappy anticipation.....He is certain that 'music is a most unrewarding profession,' believing that only genius can suffer so much. He is glad that his children, Robert and Josepha, have no sparks of genius. He merely wants them to be happy, ordinary, blithe (Axelrod, 1976, p. 428).

In the case of Heifetz, the customary personalized

anxiety of performing appears to have been subjugated,  
only to re-emerge through externalization as a non-human  
environment of malevolent and unpredictable forces.

### Areas of Investigation: A) The Morphology of Anxiety

What are the physical Symptoms and psychological Fears endogenous to the state of premonitory Anxiety, and how might they relate to one another. Do they vary haphazardly from person to person, or exhibit some cohesiveness; in the latter case, what might be the significance of such cohesions.

### B) Coping Mechanisms

What are the Devices used by frightened musicians - both before and during performance - in the attempt to quell anxiety. Do they display any systematic affiliation with either individual or collective Symptoms and Fears.

### C) Attendant Hypotheses

It was predicted that Performance Anxiety, as operationally defined through a composite of Symptoms and Fears, would correlate (in the stipulated direction), with the ensuing factors:

#### 1. The Facets of Anxiety

This heading pertains to variables intended to gauge anxiety along the quantitative axes of magnitude and duration. They included: a) the person's assessment of his own degree of nervousness; b) self-comparison of his stress level with that of colleagues; c) length and amplitude of prior anxiety; d) tendency for nervousness to hamper performance; e) frequency with which premonitory fears actually materialize; f) extent to which anxiety obtrudes into the

performance itself.

In addition to substantiating alternate measures for Performance Anxiety, the anticipated correlations would also provide trenchant endorsement for the validity of the Symptom-Fear scale. (Q<sup>1</sup>, 7, 8, 10, 11, 12, 18); (+ direction)

## 2. Distractibility

Distractibility, perhaps the leading manifestation of anxiety during performance, would be assessed in both its internal and external aspects, with regard to susceptibility and ease of recovery (Q13, 14, 15, 16, 17, 19, 20); (+)

## 3. Musically-Specific Character Traits

High-Anxiety subjects were hypothesized as more likely to:

a) believe that nervousness before performance constitutes an abnormal phenomenon, with the concomitant implication it is therefore ego-alien and unacceptable; (Q9); (+)

b) appraise their performances as unpredictable and inconsistent over time, both in terms of "intra-comparative" judgments, and discordant evaluations between self and listeners; (the "Consistency" items, Q21-25); (+)

c) rely on others for preparatory coaching, validation of musical opinions and values, and approval for efforts;

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<sup>1</sup>The descriptive phrases within parentheses indicate the identity of the categories, and their labels throughout the discussion.

(the "Self-Other" items, Q26-29); (+)

d) perceive themselves as strongly competitive with fellow instrumentalists; (Q30); (+)

e) be severely critical of themselves and others, sensitive to adverse criticism, and slower to recover from its disconcerting effects; (the "Criticism" items, Q31-34); (+)

f) undergo a variety of distressing repercussions in the event of an unsuccessful performance; (the "Adverse Reactions" Q35 a-h); (+)

4. Age at which the individual first began studying his instrument; age at which he first performed in front of an audience. Ostensibly, the higher these initial ages, the more consequent anxiety. (Demographic variables); (+)
5. Amount of performing experience in childhood. (Q38); (+)
6. The feeling of having been pressured to perform in childhood against one's will. (Q39); (+)
7. Number of performances given in the course of an average year. (Q40); (-)
8. The musician's sense of having options, and alternative areas outside of music for soliciting self-esteem. This category was assessed by number and range of non-musical hobbies, as well as other career choices. Presumably, the greater the investment in such extrinsic pursuits, the less chance of the individual's sense of worth and identity being exclusively dependent on the vagaries of his musical profession; consequently, the lower his anxiety. ("Alternatives, Q41-46); (-)

9. The tendency for a respondent to add extra items to the given lists of Symptoms, Fears, and Adverse Reactions. (Q1 t-v, Q2 u-w, Q35 i-k); (+)

#### D. The "Data-Gathering" Variables

Several other domains were selected as worthy of attention. Either because they did not seem directly related to the criterion of Anxiety, or due to equivocal inferences as to the nature of the relationship, they were not linked to particular directional hypotheses. Nevertheless, they were construed as of vital general applicability to the subject of performing. It was therefore likely that any significant findings would harbor heuristic value for further research in the area.

1. Demographic Variables of age, sex, place of birth, birth order, number of siblings, parents' socio-economic status and whether either or both parents were themselves musicians; the Cantril Self-Anchoring Scale, designed to compare an individual's level of aspiration with his appraisal of his past and present general life status.

2. The Exogenous Factors - variables, "extra-curricular" to the musician himself, and inherent in the physical circumstances under which a given performance takes place. Interest attached to whether such factors might increase, decrease, or be simply unrelated to the artist's degree of anxiety. (Q4 a-k)

3. A List of Ingredients which might be deemed of importance in the attainment of a successful solo career.

(Q5 a-k)

4. Whether the musician, in concert, would tend to adhere to a pre-determined plan of interpretation, or succumb to the emotions of the moment. (Q36)
5. The proclivity to offer any Additional Examples to the furnished lists of Devices, Exogenous Factors, and Ingredients; the content of such additions. (Q3 u-w, Q4 1-n, Q5 j-1)
6. Number of self-motivated Comments ventured by a respondent, concerning either the questionnaire itself, or the general province under investigation.

#### E. The Rotter Locus of Control

As an independent standardized measure that might have bearing on aspects of the Performance Anxiety Syndrome, the Rotter Locus of Control was appended to the questionnaire. Two feasible, but diametrically opposed hypotheses accompanied its inclusion.

a) an individual whose sense of control was primarily internal might be expected to have a secure and consistent appreciation of his abilities. This would help insure him against distractions, the upheavals of adverse criticism, and absence of consensual validation for his work; hence, he should experience less anxiety;

b) someone whose locus of control was largely externalized would tend to attribute any failures to circumstances beyond his jurisdiction; delegating blame to ulterior forces would enable him to avoid depression,

guilt, and other intro-punitive reactions which might be expected to enhance preliminary anxiety; ergo, the less sense of personal control, the less apprehension.

At this juncture, it should be cautioned that, since a correlation does not specify direction of causality, any significant relationship between Anxiety and the Rotter could not, in itself, verify either of the foregoing etiological hypotheses. Thus, a positive coefficient between the Index and the External pole of the Rotter might also connote that a high level of antecedent Anxiety can engender feelings of helplessness. Again, the etiology might lie with some other variable that embraces both parameters. Nevertheless, a viable correlation would be of interest as a first step toward substantiating a deterministic framework.

Questionnaire item 37 ("To what degree do you feel in control of how well you play - in contrast to the influence of circumstances possibly beyond your control"), was constructed specifically in the attempt to apply the Locus of Control dimension to the restricted area of performance; it will henceforth be referred to as the "Rotter Musical Representative." This variable was expected to mirror the trend of the Rotter vis a vis the Anxiety Index.

## Preamble to Chapter II

In order to narrow the range of issues germane to Performance Anxiety that might be suitable for quantitative analysis, an initial pilot study was conducted.

Ten solo musicians were interviewed. The methodology involved an informal discussion, structured around certain specific questions, but allowing leeway for unanticipated input. Subjects were also encouraged to offer any suggestions of their own as to the topics such research might profitably canvass.

The resultant information, in conjunction with the kind of narrative data synopsis in the Introduction, formed the nucleus of this investigation.

Its implementation is described in the subsequent chapters.

## Chapter II

### METHOD

#### Subjects

The sample was composed of 46 subjects, 21 male and 25 female. They ranged in age from 23 to 42, with an average of 31. Criteria for inclusion were that the person be a professional musician with solo experience, and that his main financial support derive from the practice of his craft. The eligible categories chosen were those of: singer, pianist, and any of the orchestral instruments. In the event the musician was familiar with both individual and ensemble playing, he was asked to confine his responses exclusively to the solo experience. Precise instructions regarding the self-administration of the questionnaire are contained in its Preface (see Appendix D).

#### Procedure

The questionnaire was mailed to each participant, along with a stamped, self-addressed envelope for return to the researcher. Subjects were also given the latter's phone number, and told to contact him should any problems arise. In those few instances wherein a subject had neglected to fill out some of the questionnaire items, he was phoned by the examiner, read the pertinent items, and asked to furnish appropriate responses.

### Data Analysis

In order to distinguish between the multitude of areas explored by this study, the following lexicon will be employed: 1) Any of the variables comprising the Anxiety Index will be referred to as either a "member" or "component;" 2) The Devices will be addressed simply as themselves; 3) All variables not encompassed under the rubric of the two prior categories (including Add-symptom, Add-fear, Demographics, the Cantril Scale, and the Rotter Locus of Control), are designated the "extrinsic items;" 4) The term "variable" or "element" will indiscriminately reference any constituent of the questionnaire.

Two preliminary indices were compiled as tentative Anxiety Measures, with which the remaining questionnaire elements might then be correlated. Respectively, these were: summation of an individual's scores across all Symptoms; another summation across all Fears. The substantial covariance between these two measures (Spearman Rank Order Correlation of .646,<sup>1</sup>  $p < .001$ ), justified their amalgamation into a conjoint scale, entitled the "Preparatory Anxiety Index." To establish the intra-consistency of this composite, each of its individual members was correlated with the Index as a whole. Consequent to this operation, three Symptoms and four Fears were deleted from the scale. The part-whole correlations were then recomputed in the

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<sup>1</sup>The fourth decimal place has been rounded off.

absence of the extraneous components. The resultant edited instrument, designated the "Refined Anxiety Index," served as the operational definition for Performance Anxiety throughout this investigation.

The Index was next correlated with each of the coping Devices, and the same procedure was applied to ascertain the order of the significant extrinsic items.

A correlation between the Anxiety Index and either a component or variable extraneous to it determines the amplitude of the coupling. It does not, however, specify which Index members are most implicated in the particular relationship, nor the comparative degrees of their participation. To help clarify this issue, all of the Index members were individually correlated with one another. Likewise, the significant Devices were matched in pair-wise fashion with each component, and the relevant items subjected to the same form of analysis.

As is apparent from the introductory citations, the amount of premonitory anxiety is not necessarily predictive of impaired performance. Thus arose the crucial issue of what factors might differentiate the domain of anxiety from that of its effects. The single variable "Hamper" (Q7), was therefore correlated with all other elements of the questionnaire. Resulting significant interrelations were then enumerated, and compared to the obtained correlations between those same variables and the criterion of Anxiety.

## Chapter III

## RESULTS AND DISCUSSION

The chief findings of this investigation are embodied in Tables 1 - 6. They present complementary forms of data analysis which can be referenced to disclose two primary modes of information:

1) Quantitative Analysis

a. Magnitude - the degree or strength of a given correlation

b. Order - the positional ranking of significant correlations

2) Qualitative Analysis

a. Individual configuration for any one member of the Refined Anxiety Index, with respect to other members, Devices, and extrinsic items

b. Specific elements which may discriminate between two or more correlated variables, in the sense of being systematically associated with one, while independent of the other(s)

c. "Supplementation of content" for any given element through its alliances with other elements.

Application of the foregoing treatments to every significant association revealed by statistical computation would represent a task of forbidding proportions. In the following exposition, therefore, vital examples will be furnished for each mode of analysis. These will illustrate

both the means by which they can be extracted from the data, as well as the special relevance inherent to each approach.

### The Refined Anxiety Index

Table 1 illustrates the hierarchy of those components significantly correlated with the Refined Index in its entirety. It is noteworthy that, of the original 39 assorted Symptoms and Fears, only seven (see Appendix A), proved inadequate for differentiating between pervasively Low and High Anxiety subjects at  $p < .05$ .

If one wanted a single optimum indicator that best encapsulated the overall Index, asking a musician to what extent he feared disappointing friends through an inferior performance (F15) would serve the purpose most succinctly.

There are 21 other members, however, whose  $p < .001$  correspondences with the Index also stamp them as effective individual representatives. The profusion of weighty correlations evident in Table 1 would also seem to imply that the Anxiety experience is, to considerable extent, a unitary phenomenon. Among the sharpest discriminators it is the Fears, and especially those Fears which seemingly concern the interaction between the performer and others that exert greatest leverage upon the whole Index. The latter set of variables appears to constitute the quintessence of the Performing Anxiety entity, and will henceforth be addressed as the "Interpersonal Fears."

When several variables correlate highly with another

TABLE 1

Ordered Correlations Between the Refined Anxiety Index and  
its Individual Members

<u>Name of Member</u>	<u>M number</u>	<u>Q number</u>	<u>Corr</u>	<u>P level</u>	<u>Dir</u>
Disappoint friends	F15	2o	.778	.001	+
Disappoint teachers	F17	2q	.755	.001	+
Cold audience	F10	2j	.708	.001	+
Communication	F9	2i	.669	.001	+
Cold	S17	1q	.663	.001	+
Boring performance	F13	2m	.651	.001	+
Disappoint relatives	F16	2p	.641	.001	+
Memory slip	F1	2a	.623	.001	+
Wrong notes	F2	2b	.597	.001	+
Bad review	F18	2r	.583	.001	+
Muscle tension	S11	1k	.568	.001	+
Headaches	S14	1n	.539	.001	+
Disappoint self	F14	2n	.504	.001	+
Diahhrea	S6	1f	.497	.001	+
Tripping	F4	2d	.479	.001	+
Sweating	S13	1m	.474	.001	+
Shaking or trembling	S12	1l	.467	.001	+
Appetite loss	S2	1b	.448	.001	+
Compared to others	F12	2l	.447	.001	+
Dry mouth	S7	1g	.445	.001	+
Nausea	S4	1d	.432	.001	+
Self-conscious-paral	F19	2s	.405	.003	+
Dizziness or faintness	S9	1i	.403	.003	+
Stomach pain	S3	1c	.385	.004	+
Shortness of breath	S8	1h	.382	.004	+
Hot	S16	1p	.365	.006	+
Exhaustion	S15	1o	.348	.009	+
Lose control	F3	2c	.322	.015	+
Twitching	S19	1s	.307	.019	+
Energy loss	F8	2h	.275	.032	+
Insomnia	S1	1a	.272	.034	+
Audience laughs	F11	2k	.253	.045	+

Abbreviations: M = Member of Index; Q = Questionnaire;  
P = Probability; Dir = Direction of correlation

variable which subsumes them, the expectancy is that they will, in turn, correlate highly with one another. The broad homogeneity intimated by Table 1 is indeed confirmed by the matrix of qualitative correlations (see Table 2). The inter-correlational density is thick in the upper left quadrant, but attenuates with those components less tied to the overall Index.

From Table 2, it is also apparent that all of the significant correlations between members of the Index are positive. Therefore, there are seemingly no instances in which a heightening of any particular Symptom or Fear is "compensated" by diminution of some other(s). The tenable assumption that Low-Anxiety instrumentalists might suffer from other types of stressors than their High-Anxiety counterparts can be similarly discounted due to the absence of any inverse correlations.

Though, as noted above, there is likelihood that components of high standing in Table 1 will tend to inter-relate, the pairwise data of Table 2 precisely delineates those variables which do conjoin, as well as the comparative strength of each significant bond. It also indicates the exceptions - i.e., those anticipated correlations which do not manifest.

If, as one example, the chiefly affiliated F15 (Fear of Disappointing Friends), is canvassed for its selective configuration across the other components, the following trends are revealed:

TABLE 2

Ordered Intercorrelations Between Members of the Refined Anxiety Index

		F	F	F	F	S	F	F	F	F	S	S	F	S	F	S	S	F	S	S	S	S	S	S	S	F	S	F	S	F	S	F			
		15	17	10	9	17	13	16	1	2	18	11	14	14	6	4	13	12	2	12	7	4	19	9	3	8	16	15	3	19	8	i	11		
Dspt friends	F15	1	a	a	b	a	a	b	b	a	b		c	a	b	b		c	a	c	c	b	c	c	c								c		
Dspt teachers	F17	a	1	a	b	a	b	a	b	a	a		b	b	b	c	b	c	c	c	b	c	a	c	c								c		
Cold audnce	F10	a	a	1	a	a	a	b	b	a	b	c		a	b			b	a	c	c	c											b		
Communication	F9	b	b	a	1	b	a	b	b	b	c	a	c	a	c	b		b	c	b	a	c						b					b		
Cold	S17	a	a	a	b	1	b	c	a	a	c	c		b	c			b	c	b	a	c	c	c	c	c	c	c					c		
Scoring perfm	F13	a	a	a	a	b	1	a	c	b	a		c	b	a	c	c	c		b		b						c					c	b	
Dspt relatvs	F16	a	a	a	b	c	a	1	c	a			b	a	c	c		a	b		c		c	c	c										
Memory slips	F1	b	b	b	b	a	c	c	1	a			c	b		c	c		a		c							c	b						
Wrong notes	F2	b	a	b	b	a	c	c	a	1	b	c		a		c	c		c	c	c	c					c	c							
Bad review	F18	a	a	a	c	c	b	a		b	1		c	a	b			a	c	c	c	c				b	b						c		
Muscle tensn	S11	b		b	a	c	a		c			1	b	c	b	c	c	b		c		c					c	c					b	c	
Headaches	S14		b	c	c		b	c		b	1	b	c	b	c			b		c					b		a	a	c				b	c	
Dspt self	F14	c	b		a	c	b	a	c	c	b	1	b	c	c	c		c		c	b						c	c							
Diahrrea	S6	a	b	a	c	b	a		a			c		1	b			c	b								b								
Tripping	F4	b	c	b	b	c	a	c	c	b	b		b	b	1		e				c	c					b							b	
Sweating	S13	b	b				c	c	c	c			c				a		c			c				c	b						b	c	
Shaking	S12		c			c		c	c	c			c		c	a	1					c				b		b					b	c	
Appet loss	S2	c			b			a			b	c					1		a						b		b	c							
Compared	F12	a	c	b	c	c	b		c	a	b			c	c			1		c							c	c						c	
Dry mouth	S7	c	c	a	b	b		c	c	c				b						1	c				b	a	c							c	
Nausea	S4	c		c	a	c	b		c			c						a		c	1			b				c							
Self-con-par	F19	b	b	c	b		c	c	c	c				c	c			c				1				c	b							c	
Faintness	S9	c	c	c	c	a	b		c					c							b	b	1			c	c								
Stomach pain	S3	c			a		c				b	c	b					b	c						1		c								
Short breath	S8	c			c		c	b					c	c				c	a	c	c				1		c								
Hot	S16		c		c		c	b	c					b	b	b					b	c				1		c	c						
Exhaustion	S15				e		c		c	a			b					b	c							c	c								
Lose control	F3				b	c	c	b	c		a	c						c			c						c	1						c	
Twitching	S19										e				b	b						c						c							
Energy loss	F8					c			c	b		b	b	c	c													c							
Insomnia	S1		c																																
Audnce laughs	F11	c		b	b	b					c	c																							

Note. - Abbreviations: a = p<.001; b = p<.01; c = p<.05

Symptoms -  $p < .001$ <sup>1</sup> with Cold, Diarrhea;  $p < .01$  with Muscle Tension, Sweating;  $p < .05$  with Appetite Loss, Stomach Pain, Nausea, Dry Mouth, Shortness of Breath, Faintness

Fears -  $p < .001$  with Cold Audience, Compared to Others, Boring Performance, Disappoint Relatives, Disappoint Teachers, Bad Review;  $p < .01$  with Memory Slips, Wrong Notes, Tripping, Communication, Self-Conscious-Paralysis;  $p < .05$  with Audience Laughs and Disappoint Self.

Correspondences with F15 notable for their absence were (in order of deviation from expectancy): Symptoms - Headaches, Shaking, Hot, Exhaustion, Twitching, Insomnia; Fears - Loss of Control, Energy Loss.

In addition to delineation for any specific Index member, the qualitative mode is especially relevant to the area of differential diagnosis. For the therapist asked to treat a nervous performer predominantly afflicted with selective Symptoms or Fears (or, alternatively, an otherwise Low-Anxiety client who evinces just a few components), and for the researcher desirous of examining a single constituent in relative isolation, the ability to distinguish between correlated signs of Anxiety is indispensable.

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<sup>1</sup>For comparisons among the 5-point scales, exact correlation coefficients may be misleadingly precise. Strength of relationship for the pairwise data is thus expressed in terms of probability levels.

The technique of qualitative differentiation can be usefully applied to any interdependent members of the Index. Sweating and Shaking, for example, covary at  $p < .001$  and would therefore seem closely allied Symptoms. Though they do, as anticipated, correlate with many of the same members, there are some discrepancies. Probably the most striking is Sweating's  $p < .01$  link to F15, in the absence of a significant connection between the latter and Shaking.

Thus, Table 2 may be employed as a sort of resolving lens for discrimination of details among component parts which have been shown to possess overall commonality.

Among those Fears at  $p < .001$  with the Anxiety Index, one stands out as somewhat anomalous. F14, the Fear of Disappointing Oneself, exhibits the least attachment with the tightly clustered world of the Interpersonal Fears. This is especially true when it is counterposed to the three Fears which involve Disappointing Others (F15, F17, F16). The hypothesis that F14 does connote a somewhat autonomous domain, with an individual complex of dynamics, will become a vital theme of this discussion; it will be more fully explored in the following pages.

One other perspective regarding the Anxiety Index may be included here. Symptoms 17 and 11 (Cold and Muscle Tension) are, respectively, most commingled with the Index as a whole, and hence with the Interpersonal Fears.

The term "Cold" has often (as with F10 of this study)

been metaphorically invoked to describe someone who is aloof, isolated, and ungiving. And one subject in the pilot study spoke of difficulty in "reaching out" to an audience expressing itself through a literal sensation of muscular constraint. For this person, any manipulations that dispelled the physical rigidity seemed to concomitantly reduce the emotional inhibitions; (the  $p < .001$  correlation between Muscle Tension and Fear of non-Communication is especially striking in the context of her observations).

Such metaphorical transmutations suggest that the diverse Symptoms and Fears comprising the Anxiety Index might most aptly be characterized not in terms of interacting aspects of a common experience, but rather as unitary expressions of a psychophysical holism.

#### The Devices

Table 3 illustrates the magnitude relationships between the Refined Index and techniques used to alleviate anxiety. Of the 20 such mechanisms provided in the questionnaire, 11 proved to be significant differentiators (at  $p = .05$  or less) for levels of anxiety. Two more Devices were disclosed as Trends.<sup>1</sup> Again, as with the Symptom-Fear amalgam, all correlations were positive. Thus, High-Anxiety subjects can be described as using significantly more of a wide assortment of coping Devices. Prima facie, the absence of any negative correlations would seem to preclude speculation that Low-Anxiety performers might

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<sup>1</sup>For this study, a Trend is defined as  $p = .05 - .06$ .

TABLE 3

Ordered Correlations Between the Refined Anxiety Index  
and Significant Devices

<u>Name of Device</u>	<u>Q number</u>	<u>Corr</u>	<u>P level</u>
Distract self	3b	.434	.001
Superstitions	t	.415	.002
Rapport with audience	r	.398	.003
Support from others	a	.356	.008
Other surroundings	q	.355	.008
Exercise	d	.334	.012
Cynical humor	n	.314	.017
Imagine no audience	o	.304	.020
Imagine someone absent	p	.297	.023
Perspective	g	.282	.029
Positive pep talk	k	.265	.037
Push fear away	h		Trend
Ridicule fears	i		Trend

be using different (and perhaps therefore more adaptive) strategies. There is, however, a possible flaw in such an argument; it will be elaborated upon when Hamper is discussed as a separate entity.

Qualitative inspection (see Table 5) reveals that Distract Self and Rapport with Audience - two of the Devices most associated with the Index do, as expected, exhibit the greatest consanguinity across the Interpersonal Fears. However the third Device in the paramount triad - that of Superstitions - shows a marked departure from the expected disposition.

Among its four highest loadings, three consist of Memory Slips (F1), Wrong Notes (F2), and Loss of Control of Tempo and Dynamics (F3). Unlike the Interpersonal Fears, these trepidations seem to hinge on a collapse of the individual's regulatory faculties, a breakdown of his psychophysical defenses against panic.

In a sense, perhaps all three can thus be regarded as "Loss of Control Fears." Their selective alliance with Superstitions may thus arise from a proclivity for individuals menaced by their own disruptive impulses to attempt curbing them through irrational, but repetitively comforting behaviors.

#### Confirmed Hypotheses

The fact that six of the seven Facets of Anxiety correlated significantly with the Refined Index is compelling evidence for the legitimacy of the latter as an operational

measure (see Table 4). Three of the six: Length Advance Worry ( $r^1 = .636$ ;  $p < .001$ ), Degree Advance Worry ( $r = .622$ ;  $p < .001$ ), and Nervous ( $r = .472$ ;  $p < .001$ ), were the extrinsic items pre-eminently affiliated with the Symptom-Fear Index.

An intriguing qualitative observation concerning the Facet set (see Table 5), is that Insomnia, the Symptom least bound to the Index, showed its most pronounced ties with two of the six Facets - namely Nervous and Compare ( $p < .001$ ). Thus, performers who introspectively assess themselves as nervous and to greater degree than the majority of their colleagues, are also more likely to be troubled with Insomnia than any other Symptom.

The premise that Hi-Anxs<sup>2</sup> would encounter more general Distractibility during performance received partial corroboration. Of the seven initial items in the set, Internal Distraction ( $r = .381$ ;  $p = .004$ ), Recovery from Internal Distraction ( $r = .376$ ;  $p = .005$ ), Recovery from Slip ( $r = .323$ ;  $p = .014$ ), and Recovery from External Distraction ( $r = .278$ ;  $p = .031$ ), were significant in the order given. The individual Symptoms most widely dispersed across this category were: Muscle Tension, Nausea, and Insomnia; the prominent Fears: Disappointing Friends, Bad Review, and Unfavorable Comparison.

Of the five Consistency variables only one - the sub-

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<sup>1</sup>"r" = Spearman rank order correlation coefficient.

<sup>2</sup>"Hi-Anxs" and "Low-Anxs" respectively denote High and Low Anxiety Subjects.

TABLE 4

Ordered Correlations Between the Refined Anxiety Index  
and Significant Extrinsic Items

<u>Name of Item</u>	<u>Q no.</u>	<u>Category<sup>1</sup></u>	<u>Corr</u>	<u>P level</u>
Length advance worry	10	Facet	.636	.001
Degree advance worry	18	Facet	.622	.001
Nervous	6	Facet	.472	.001
Guilt	35c	Reactn	.421	.002
Confidence loss	35h	Reactn	.417	.002
Anger at others	35g	Reactn	.411	.002
Cold audience	28	Slfoth	.399	.003
Internal distraction	13	Dstrct	.381	.004
Recover from criticism	34	Critic	.376	.005
Recover from int dstrct	14	Dstrct	.376	.005
Depression	35e	Reactn	.374	.005
Embarrassment	35d	Reactn	.372	.005
Affected by criticism	33	Critic	.355	.008
Age		Demog	-.336	.011
Satisfy self vs. others	27	Slfoth	.334	.012
Others help prepare	26	Slfoth	.326	.014
Swayed by others	29	Slfoth	.326	.014
Recover from slip	20	Dstrct	.323	.014
Hamper	7	Facet	.321	.015
Hobbies	43	Altern	.355	.018 <sup>2</sup>
Anxiety subsides	12	Facet	.281	.029
Recover from ext dstrct	16	Dstrct	.278	.031
Importance of concert	4d	Exogen	.276	.032
Compare	8	Facet	.266	.037
Ladder past			-.262	.040
Proximity of audience	4b	Exogen	.258	.042
Comments	45		-.258	.042
Self-consistency	21	Consist	.256	.043
Addfear	2u-w		.256	.043
Difficulty of pieces	4h	Exogen	.252	.046
Anger at oneself	35f	Reactn		Trend
Strangers in audience	4f	Exogen		-Trend

<sup>1</sup>Abbreviations: Facet = Facet of anxiety; Reactn = Aversive reaction; Slfoth = Self vs. other; Dstrct = Distraction; Critic = Criticism; Demog = Demographic variable; Altern = Alternative; Exogen = Exogenous factor; Consist = Consistency

<sup>2</sup>Two-tailed test



jective impression that playing level fluctuated capriciously across performances - showed significance. This suggests that Hi-Anxs do perceive their output as more labile. However, the lack of differentiation implies that once they have performed, their retroactive self-judgments and consensus of those judgments with the opinions of others, are not likely to diverge markedly from corresponding evaluations by the Low-Anxs.

The hypothesis that Hi-Anxs would be more dependent on others for help and for validation of their musical ethos, received emphatic confirmation. Of the four Self-Other items, all were verified.

Sensitivity to Criticism ( $r = .355$ ;  $p = .008$ ), and attendant delay in Recovery ( $r = .376$ ;  $p = .005$ ), both correlated significantly with Anxiety. The Fears of Unfavorable Comparison and Bad Review were most connected with the former variables, and thereby provided some clues as to the kinds of criticism primarily dreaded.

The assumption that Hi-Anx performers would exhibit more of a spectrum of Aversive Reactions in the event of failure, was graphically supported. Of the eight reactions in the questionnaire, five (plus one Trend) proved significant. In decreasing order of covariance (see Table 4): Guilt ( $r = .421$ ;  $p = .002$ ), Loss of Confidence ( $r = .417$ ;  $p = .002$ ), Anger at Others ( $r = .411$ ;  $p = .002$ ), Depression ( $r = .374$ ;  $p = .005$ ), Embarrassment ( $r = .372$ ;  $p = .005$ ), and Anger at Self (Trend), were all more prominent among the Hi-Anxs.

The following salient correlations (see Table 5) involving the Aversive Reactions deserve emphasis for their possible dynamic implications: Embarrassment with Fear of a Cold Audience; Depression with Muscle Tension and Fear of Energy Loss; Anger at others with Headaches and Shaking. The Symptoms of Muscle Tension, Sweating and Twitching, and Fears of Disappointing Friends and Running out of Energy during performance, generalized to greatest extent across the Aversive Reactions.

Perusal of the extrinsic item data consequent to analysis suggested formation of a "post hoc" category that had not been part of the original framework: though frequency and susceptibility to a variety of noxious impingements were characteristic of the HI-Anx group, they were perhaps most cogently epitomized in their protracted recovery from such stimuli.

In accordance with this view, a retrospective category, captioned the "Recovery Index," was assembled from those elements which had suggested the proposed dimension. In rank order with the Anxiety Index, these were Recovery from: Criticism, Internal Distraction, Slip, and External Distraction.

To ascertain whether these items did, in fact, constitute a viable gestalt, they were correlated with one another. The resulting network is depicted in Table B (see Appendix). It strongly implies that the parameter of Recovery is crucial for any schema of Performance

## Anxiety.

A tendency to volunteer Additional Fears was shown partial to Hi-Anx subjects. Their content is replicated in Table C.

Of all the questionnaire variables tied to predictions, only one evinced significance in a direction opposite to anticipation. Alternative Q43 - Number of Hobbies - expected to yield an inverse relation to Anxiety, actually correlated positively ( $r = .355$ ;  $p = .018$  two-tailed). The available data does not provide any firm clarification for this anomaly. However, it is feasible that a plethora of extra-curricular activities may represent an effect of Anxiety - a kind of escapism. If this interpretation has merit, then Hobbies might result from the same kind of motivation that impels a defense such as Distract Self (Q3b).

## Unconfirmed Hypotheses

In a study concerned with articulation of structure, the irrelevant variables are also of importance for delimiting the boundaries of the phenomenon. Those variables initially hypothesized as linked with Anxiety which did not attain significance were:

1. Demographics: Age when first began studying instrument;  
Age when first performed
2. Appraisal of nervousness before performance as abnormal
3. Facets of Anxiety: Materialization of Fears

4. Distractibility: sensitivity to external distraction; ability to maintain concentration in the face of prolonged outer distraction, disruption by life problems extraneous to music
5. Consistency: self-appraised objectivity of judgment; coincidence of own judgment with listeners; agreement between expectation and actual performance
6. Competitiveness with others
7. Criticism: severity regarding self; regarding others
8. "Rotter Representative" of self vs. external control of playing skill
9. Frequency of performance in childhood; feeling of having been pressured to perform in childhood
10. Number of concerts and auditions per year
11. Alternatives: ease of transition to other vocations and number of surrogate choices; time spent on outside interests
12. Inclination to add Symptoms or Aversive Reactions
13. The Rotter Locus of Control

The Data-Gathering Variables: positive findings

This research, as noted earlier, posed a number of questions to which no specific predictions were attached. They were included to discern whether certain issues applicable to the general performance milieu might have special relevance to the province of Anxiety. Significant findings were as follows:

1. Demographics: negative correlation of Anxiety with increasing Age ( $r = -.336$ ;  $p = .011$ )
2. Exogenous Factors: positive for Importance of Concert ( $r = .276$ ;  $p = .032$ ), Proximity of Audience to Performer ( $r = .258$ ;  $p = .042$ ), and Difficulty of Pieces ( $r = .252$ ;  $p = .046$ ). The positive correlations for the latter three factors indicate that escalation in each area was experienced as aversive. A negative Trend appeared for Number of Strangers in the audience
3. Comments: a negative correlation ( $r = -.258$ ;  $p = .042$ ) with the Refined Index. This suggests that the ability to speak with comparative freedom and openness about the discomforts of performance anxiety may, in itself, be therapeutic. Conversely, those artists who choose to "hold in" their feelings may pay a price for this reticence.<sup>1</sup>
4. A negative correlation between Anxiety and the Past scores of the Cantril Scale ( $r = -.262$ ;  $p = .040$ ). This intriguing link requires further exploration.

The Data-Gathering Variables: negative findings

1. Demographics: no correlation for Number of Siblings, Birth Order, Parents' SES
2. Exogenous Factors: uncorrelated with Size of Audience, Size of Hall, Number of Pieces, Familiarity of Pieces, Familiarity of Surroundings, Number of Prior Performances

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<sup>1</sup>In this context, see also Device 3a ("Seek Support and Reassurance from Others").

3. Ingredients: all elements insignificant
4. Extent to which performances were perceived as molded by prior design, rather than immediate feelings: no correlation
5. No statistical connection between Anxiety and the tendencies to provide extra responses to the lists of Devices, Exogenous Factors, or Ingredients
6. No correlation with the Present or Future rungs of the Cantril Scale.

#### Portrait of the High Anxiety Performer

Before subsequent issues are broached, the main attributes of the High Anxiety solo musician, as thus far elicited, will be summarized.

The performer afflicted with excess nervousness perceives himself as besieged by a multitude of Symptoms and Fears. Of these, the most unified seem to concern the artist's need to share intimate emotions with others in whom they will encounter a sympathetic acceptance.

To cope with his fright, he uses more of a wide diversity of tactics, both before and during performance. Increased proximity of an audience affects him adversely, as does the respective importance of a performance and inherent difficulty of the compositions he is to play. He sees himself as nervous, and more so than others. His premonitory anxiety is greater in both degree and duration, and takes longer to subside once a performance has

begun. He is more distractible, particularly by impingements of internal origin.

The Hi-Anx musician feels his playing to be inconsistent from one performance to the next, and is dependent on feedback from others as to the merit and validity of his work. Markedly bothered by adverse criticism, he also recovers more slowly from its effects. In the event of an unfavorable recital, he is prey to more of a broad range of adverse personal reactions.

He is likely to be younger than his Low-Anx counterpart, express interest in a greater number of hobbies outside music, and possibly exhibit more reluctance to discuss his experiences with anxieties surrounding performance.

In appraising his general life status of five years ago, he is likely to assign it a significantly lower rating.

The High Anxiety instrumentalist may also be evaluated in a chronological paradigm of: 1) Pre-performance, 2) Trans-performance, and 3) Aftermath, phases. In this framework he can be said to suffer from more of a greater amount of Symptoms and Fears over a longer span in phase 1, experience prolonged nervousness and distractibility in phase 2, and, after an inauspicious audition or concert, be more hurt by external disapproval as well as a host of covert repercussions. Though his equilibrium is easily disrupted by many kinds of unsettling events, he is even more conspicuous with regard to the extended intervals

needed to regain stability.

#### Hamper as a Separate Subset

As was obvious from the excerpts quoted in the Introduction, degree of antecedent anxiety confers no predictive power as to talent. However, the association between Anxiety and Hamper ( $r = .321$ ;  $p = .015$ ), does affirm that very anxious performers are more likely to be impeded by their nervousness. This is especially the case for those who fear Disappointing Relatives, Teachers, and being Unfavorably Compared to Others - along with the physical symptoms of Headaches and Sweating.

Cardinal interest affixed to what variables, extraneous to the Index itself, might serve to discriminate between the correlated domains of Hamper and Anxiety; in pursuit of this objective, the qualitative technique of differential diagnosis was employed. Results of this operation can be seen in Table 6.

Since the entire realm of Hamper - unlike the Refined Index - derives from a single five-point measure, the contrasts, however intriguing, should be viewed in terms of divergent tendencies rather than statistical "facts." Accordingly, they will be considered with respect to their generalized significance.

The two relevant variables were found to coincide in a number of areas, of which the most evident involve distractibility, dependence on others, and sensed inconsist-

TABLE 6

Correlations of Hamper with Devices and Extrinsic Items  
 Compared to Anxiety Index Correlations for the  
 Same Variables

<u>Name of Item</u>	<u>Q number</u>	<u>Category</u>	<u>Hamper P</u>	<u>Index P</u>
Relaxation	3c	Device	- c	
Exercise	3d	Device	- c	+ c
Perspective	3g	Device	- c	+ c
Number of pieces	4g	Exogen	+ c	
Difficulty of pieces	4h	Exogen	+ c	+ c
Internal distraction	13	Dstrct	+ b	+ b
Recover int distret	14	Dstrct	+ b	+ b
Recover ext dstrct	16	Dstrct	+ c	+ c
Degree advance worry	18	Facet	+ c	+ a
Outside problems	19	Dstrct	+ b	
Recover from slip	20	Dstrct	+ b	+ c
Self-consistency	21	Consist	+ c	+ c
Others help prepare	26	Slfoth	+ c	+ c
Satisfy self vs. others	27	Slfoth	+ b	+ c
Guilt	35c	Reactn	+ c	+ b
Rotter Locus of Control			.065	

ency. A notable departure in the first category, however, resides in the inclination for the Hamper - aspect to be bothered by intrusions extraneous to music (Q19).

The absence of relation between Hamper and, both the Sensitivity to Criticism and Aversive Reaction items (Guilt being the sole exception), constituted a striking disparity. Since these elements were ordained as comprising the "Aftermath" stage, it might be hypothesized that, in comparison to Anxiety, Hamper is more enmeshed with Trans-performance happenings than repercussions of the performance itself.

Another salient difference is that one Device not common to anxiety, along with two that are, manifest negative correlations with Hamper. Though correlation, as repeatedly stressed, does not specify causality, some sequences are more likely than others. The apparent paradox may be reconciled through an hypothesis that the data reflects a temporal series, wherein escalation of anxiety motivates increased use of several Devices; in turn, their effects serve to reduce both Anxiety, and its consequent expression in Hamper.

An alternative speculation is also plausible. Device 3g (Putting Things in Perspective) tries to shrink overwhelming anxiety to manageable proportions by lengthening distance between the person and the dreaded object. As such, it appears the mechanism most implicated with the attempt to directly control the feared event - as opposed

to either suppressing it, or endeavoring to deny aspects of its presence.

In conjunction with the techniques of Relaxation and Exercise to "work off excess energy" differentially allied with Hamper, 3g suggests that the goal of the Devices may be not so much to alleviate anxiety as to harness it; free-floating (consequently disruptive) anxiety may therefore be canalized into "fuel" for a more impassioned and convincing performance. The dichotomy drawn by Rosina Lhevinne between nervousness and stage fright (p. 20) is very apposite in this regard.

Before the Anxiety - Hamper contrasts can be definitively assessed, one interpolation not included within this questionnaire would be mandated: to what extent might anxiety diminish consequent to utilization of various Devices, and how might such mitigations (if any) compare with their respective effects upon Hamper.

Support for the conjecture that the Devices tend to selectively relieve Hamper would also suggest that some of the mechanisms positively correlated with both Anxiety and Hamper, might be construed as not only ineffective, but maladaptive tactics capable of engendering stress.

In any case, Devices 3d (Exercise) and 3g (Perspective) seem to afford a convenient tool for anyone wishing to examine aspects of either criterion variable "uncontaminated" by the other. I.e., they render differential diagnoses not just by indicating systematic linkage with one

element and random distribution with the other, but in identifying an area of "mutual antagonism" between them. Thus, a musician high in 3g would also tend to be exclusively high in Premonitory Anxiety (i.e., proportionately low in Hamper); just the reverse would be anticipated for someone reporting little use of that Device.

On p. 51, it was noted that, of seven initial Facets of Anxiety, only Materialized failed to correlate with the Refined Index. Even more remarkable is its lack of affiliation with Hamper, a variable that would seem to be registering similar events. This anomaly, together with the observation that, among 46 cases, Materialized received the lower score of the two in 27 instances (with 12 other pairs being equal), implies that the Premonitory Fears do, indeed, tend to hamper performance, but more through "latent discomfort" than actual occurrence. As an example, someone worried about striking wrong notes during a concert might rarely do so; however just the threat of possible eventuation might impair his efficiency in other, perhaps more subtle ways.

The preceding suggests that many anterior Fears are "irrational" insofar as the time and effort spent ruminating about them seem out of proportion to their true manifestation. This disparity in turn connotes a pervasive need, among Hi-Anx performers, to bind their agitation through an obsessive focussing on concrete fears which, though distressing, are much preferable to a free-floating

panic. The localized phobia may thus represent a screen or euphemism for other and greater traumas. They embody the advantage of redirecting anxiety into a relatively circumscribed area, and one over which the individual can exert some influence.

A cogent illustration of this postulated dynamic was furnished by a subject in the pilot study. For many years, this artist had persistently dreaded having a memory "blackout," this, despite the fact that her memory had never yet failed her. Yet, just the encroaching fear that it "might" happen led her to adopt the seemingly logical antidote of playing from the printed score. To her surprise and chagrin, this maneuver not only intensified the pre-occupation about memory lapses, but incited the presence of other and more disturbing anxieties which she described as having been "hidden behind" the ostensible fear. She was thus relieved to resume performing from memory, and to the comparatively mild and direct stresses it entailed.

Perhaps the most provocative finding involving Hamper resided in the latter's  $p = .065$  correlation with the Rotter Locus of Control. This probability level lies slightly outside the restricted criteria for a Trend imposed by this study. Nevertheless, the pivotal importance of the Hamper dimension, together with the firmly established power and applicability of the Rotter, strongly advocates continued exploration of the relationship between the two areas. Replication with a

greater number of subjects and, if possible, the construction of a more substantial and variegated Hamper scale akin to the Refined Index is recommended.

If the differential tendencies for Anxiety and Hamper vis a vis the Rotter can be verified, they may be linked to the following conditions. The Refined Anxiety Index served to distinguish individuals whose control over their musical endeavors was self-localized, from those whose inner stability was derived from others, but others over whom said individuals have some degree of influence. By contrast, the realm inhabited by Hamper and the Rotter counterpose self-control against large-scale, often impersonal forces, in the face of which the subject feels helpless.

The affiliation between Hamper, the Locus of Control, and permeability to Outside Conflicts (Q19), and yet Hamper's lack of correspondence with the Rotter representative further delineates the nature of the relationship: it seems to imply that the Hamper - Rotter overlap concerns matters extraneous to specifically musical difficulties.

#### Suggestions for Further Research

Now that so many of the constituents of the performance anxiety syndrome have been identified, they may be further explored through a multitude of treatments.

### Content Analysis

There is probably no significant variable educed by this study which could not benefit from more detailed inspection of its properties. Several, however, seem especially fitted for this type of analysis. Among the Symptoms: Cold, Muscle Tension, Shaking, and Self-Conscious-Paralysis require clarification as to the body parts involved. Are the somatic sensations generic, or limited to those organs focally implicated in the act of performing.

The Interpersonal Fears contain the gist of the Anxiety experience, and any of them could be profitably explored as to their attributes and dimensions. Of special interest are the presumed consequences of any given Fear's materialization. E.g., re Fear 9: in what ways is the artist worried about not communicating; how, in his opinion, are both he and listeners affected by such inability; which specific emotions seem hardest to express; what factors seem to hinder or facilitate self-expression.

Though any of the Devices can be subjected to qualitative elaboration, Q3t perhaps constitutes the case of greatest interest. What is the content of the Superstitions? Do they display commonality or vary arbitrarily from person to person. And, can qualitative information furnish clues as to the psychodynamic conflicts with which the superstitious person might be wrestling. The world represented by this single Device could, in itself, serve

as the topic for an entire thesis.

The causes of Internal Distraction, the "others" implied in the Self-Other items and their relationships to the performer, the types of Criticism sensed as most pernicious, the substance of the Aversive Reactions, and further explication of the Cantril "Past" rating, all merit additional contentual analysis.

#### Chronological Differentiation and Causality

The correlations of any variable with others may give indications as to its content. Fear of Memory Slips, for instance, covaries strongly with prolongation of anxiety during performance (Facet Qi2). It is therefore tenable that this apprehension may be fundamental to the trans-performance phase. Similarly, F12 is the highest ranking component with Recovery from Slip and so the Fear of being Unfavorably Compared to Others may play a prominent role in the latter interval of Distractibility. Numerous other examples of such bondings have been cited throughout this discussion.

Though correlations do not stipulate direction of causality, they are often precursors for its elucidation. Establishment of deterministic sequences traditionally necessitates a research design in which the experimenter can manipulate one variable and then assess its impact on some other.

In the realm of Performance Anxiety, there are a few

parameters amenable to such treatment. The three significant Exogenous Factors might be independently altered, and their effects upon anxiety evaluated; among them, Proximity is probably the physical circumstance most accessible to measurement. In like fashion, a researcher interested in possible causal liasons between Muscle Tension and expressions of anxiety, might be able to vary the symptom and monitor consequences on the dependent variables.

Most of the relationships divulged through this study, however, seem much too subtle and complex for the classical experimental format. A more reliable and direct approach would invoke a re-examination of the Anxiety Index along a more clearly discriminated temporal gradient.

The yet unsettled question of whether certain Devices reduce agitation simply entails ascertaining if the various components of the Refined Index do, in fact, decline after their use. Similarly, the amount of consonance between anticipatory Fears and actual repercussions of failure could be gauged by asking about each Fear both prior, and subsequent to, performance. Such information is especially germane to the anomalous findings for Facet Q11 ("Materialized") previously recounted.

The general subject of anxiety-reducing strategies could be broadened to encompass the duration much preceding performance. This addresses the important issue of style of practicing. It is the artist's daily regimen that

perhaps best epitomizes his attitudes toward his craft and the demands it entails. This as yet largely unexplored area should harbor great import for all aspects of the solo musician's task.

In summary, it is a time-scale approach, perhaps extending into wide ranging longitudinal surveys, that seems to offer the optimum path for transforming correlational relationships into causal ones.

#### Brass Instrument Documentation

With use of such mechanical adjuncts as the EMG, GSR, and Thermocouple, it might be possible to validate a subject's introspective assessment of selected physical symptoms against a standard of objective measurement. Furthermore, contrasts of both baselines, and departures from those baselines for performers, might provide an impersonal technique for discriminating levels of anxiety. It is the widespread ubiquity of certain Index Symptoms across so many forms and manifestations of anxiety that renders the prospect of such instrumental corroboration so intriguing.

#### Further Validation and Delineation of the Phenomenon through Standardized Tests

Whether the significant parameters disclosed by this inquiry are limited to the artistic sphere, or extend into global personality, is of vital consideration. It is therefore urged that a variety of relevant tests already

in the literature be administered to performers whose differential degrees and types of anxiety have been diagnosed through this questionnaire. Any areas exhibiting convergence between musical and "extraneous" characteristics could then be further probed with other appropriate tools. Among those established tests which seem especially pertinent: the State-Trait anxiety forms might be used to contrast pre and post-performance concerns, as well as musical vs. extraneous anxieties; the Defense Mechanism Inventory in conjunction with the Devices for further articulation of stress-reducing strategies and their possible psychodynamic implications; any personality test yielding a measure for dependency on others for the Interpersonal Fears and Self-Other items; the Embedded Figures test for Hamper and the indices of Distractibility.

#### Age

The equivocal testimony as to relation between age and performance anxiety was touched upon in the Introduction. This research disclosed mitigation in several Symptoms and Fears over time. However, it should be noted that this sample was made up of comparatively younger performers (average age of 31), and the questionnaire might therefore be profitably readministered to an older and more experienced group of musicians. Perhaps some kind of curvilinear function might help to resolve the ambiguity surrounding the two criterion variables.

A related proposal advocates a longitudinal examination of the anxiety constituents using repeated measures of the same subjects. It would be edifying to determine which variables might remain constant, and which shift with time (as well as the direction of those shifts).

#### Related Categories

The questionnaire can be given to individuals in allied fields. Comparative data obtained from actors, dancers, even athletes, would be welcome. The latter group may, in fact, offer the chance to scrutinize the physical manifestations of anxiety in their purest form.

In this regard, any musician who has encountered performance anxiety would likely resonate with these comments by tennis player Arthur Ashe:

Of course, I never look like I'm choking. I'm a slasher, a free swinger, so I always appear loose - but that can be very misleading. Like right now, when I'm nervous on the court, I have an actual difficulty in breathing. And that problem is compounded when I try to run. My legs move stiffly, and soon my whole body offers only the most deliberate movements. It's as if I've lost all instincts for playing tennis so that my mind must repeatedly explain to my body what it already knows how to do (1975, p. 101).

#### The Gratification of Performing

This dissertation occupied itself chiefly with the negative features of performing; ergo, the Hi-Anxns reported more of a diversity of unpleasant experiences. But, in what ways are the less frightened musicians "higher?"

The kinds of intense fulfillment obtainable through the

partaking and sharing of an art-form also deserve attention. This realm is perhaps epitomized by what might be termed "peak experiences" in artistic communion. Many musicians have designated the quest for these exalted moments as a prime incentive of their work.

Their descriptions for these transcendental (and apparently unpredictable) interludes seem remarkably similar to those used by exponents of the mystical disciplines to characterize attainment of Union. Apparently crucial to these states is the impression of self-dissolution. This fosters a melding in which performer, music, instrument, and audience are absorbed into an undifferentiated oneness, an organic identity.

Of many such representatives, the following may be singled out:

He uses 'ecstasy' indiscriminately for a quality of the music, a quality of the performance, an attitude of the performer, and an attitude of the listener. But this lack of discrimination is intentional and is the essence of Gould's meaning: that 'ecstasy' is a delicate thread binding together music, performance, performer and listener in a web of shared awareness of innerness...On rare occasions at a concert performance there is a moment of powerful magic in which performer and audience seem to merge in oneness, in total sympathy. This can be felt, but it cannot be explained. Gould has experienced it, as have many performers and listeners. He values it highly but is uneasy with it because he cannot control it ....For ecstasy, there must be not just a merging of self with other selves, but of self with the innerness of the music (Payzant, 1978, p. 65).

Compare with these statements:

This other kind of knowledge is based on something which can only be called 'union.' The more subject and object, the observer and that which is observed, merge

into each other, that is, are 'united' with each other, the more profound and illuminating the knowledge becomes; and the less it becomes capable of description (Happold, 1973, p. 62).

In the state of Contemplation there is found a self-forgetting attention, a humble receptiveness, a still and steady gazing, an intense concentration, so that emotion, will, and thought are all fused and then lost in something which is none of them, but which embraces them all. Gradually, by a deeper and deeper process of self-merging, a communion is established between the seer and what is seen, between him who feels and that which he feels (ibid., p. 70).

There was awareness of undifferentiated unity embracing perfect identification of subject and object; logic was transcended ....The concept 'I' had ceased to be; I was at once the audience, the actors and the play' (Blofeld, 1970, p. 33).

And perhaps the ideal symbiotic intimacy between the artist and his medium of expression is eloquently depicted by D. T. Suzuki in his introduction to Eugen Herrigal's "Zen in the Art of Archery:"

If one really wishes to be master of an art, technical knowledge is not enough. One has to transcend technique so that the art becomes an 'artless art' growing out of the Unconscious. In the case of archery, the hitter and the hit are no longer two opposing objects, but are one reality. The archer ceases to be conscious of himself as the one who is engaged in hitting the bull's eye which confronts him. This state of unconsciousness is realized only when, completely empty and rid of the self, he becomes one with ... his skill (1964, Intro).

A less esoteric matter apropos the rewards of performing is whether there exists a "performer's personality" among artists of various disciplines. This hypothetical type would serve to distinguish those individuals whose enjoyment derives less from the intrinsic values of the craft, than the chance to exhibit their own talents. I.e., the art-form, by serving as a vehicle for self-aggrandizement,

enables them to become cynosures for the admiration of others.

The legitimacy of this supposed performing style, together with its possible relation to anxiety, needs investigation.

#### Pragmatic Applications

The value of this questionnaire as an adjunct to any ensuing research on etiology or therapeutic aid, hinges on refinement of its practical use in three main areas:

1. As a diagnostic tool to ascertain degree of overall anxiety, as well as the specific difficulties likely to accompany various mixtures of Symptoms and Fears.
2. Utilization as a prophylactic instrument: detection of the syndrome in its early stages would likely augment the efficacy of any consequent therapeutic interventions.
3. Implementation of the questionnaire as a predictive tool for descreying individuals prone to abandon a solo career due to inability to manage its inherent pressures. This would entail a longitudinal survey geared to correlating the parts of the questionnaire with the criterion variable of vocational change.

#### Taxonomy and Etiological Hypotheses for Three Proposed Anxiety - Related Categories

At this point, an attempt will be made to integrate the vast expanse of biographical and research data thus far amassed into an encompassing system of tri-partite classi-

fication. Its features, while provisional, deserve thorough corroborative inquiry. It should be emphasized, however, that the hypotheses to be presented refer solely to musical traits and dynamics; extrapolation into general personality would be premature at this juncture.

### 1. The Interpersonal Fear Group

The prospectively High-Anxiety musician, early in his performing history, receives ambivalent messages from the persons most invested in his musical strivings. These reinforcements are outwardly favorable and supportive, but harbor undercurrents of hostility in which jealousy and competitiveness may figure prominently. These conflicting attitudes are introjected, and thus come to personify a large part of the artist's erratic perceptions of his own work.

When he is confronted with an audience, the negative aspects of the self-image are then projected outward, and onto the unstructured stimulus represented by the faceless multitude; it is therefore seen as "out to get" the performer.

The inconsistent feedback assimilated in the early years has prevented the artist from establishing a secure core of intrinsic self-esteem; his sense of musical identity is therefore tenuous. Because of this, he becomes excessively reliant on others for their support and reassurance, and for affirmation of his musical judgments and beliefs. His fears therefore revolve around how others

will evaluate him, rather than on how he evaluates himself.

This "outer-directed" orientation renders him hyper-vigilant to external cues. In turn, this is responsible for his inordinate distractibility.<sup>1</sup> Sensitivity to criticism and the plethora of aversive reactions to failure, coupled with an especially marked delay in recuperation from stress, also seem to bespeak a kind of person whose sense of musical worth is externally derived and requires continuous replenishment by outside agencies.

If the preceding formulation is viable, then comparisons between the Hi-Anx individual's view of: the attitudes of parents and initial teachers, self-attitudes, and presumed audience attitudes toward the artist, should exhibit substantial consistency. Since these are hypersensitive areas, their probing might best be conducted through unstructured media, such as the Thematic Apperception Test. Instructions for the latter might even be modified so as to more closely approximate the performance situation. The attempt to design a set of TAT-like cards specifically attuned to the musician's environment should also receive serious consideration.

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<sup>1</sup>Though the internal pole of distractibility was disclosed as most significant, its affiliation with several of the Interpersonal Fears suggests that some ruminations of external origin may affect the person indirectly, i.e., by precipitating internal distractions which then disrupt concentration. This is relevant to the "screen fear" defensive machinations propounded earlier (p. 61). Additional content analysis for this anxiety manifestation is needed in this context.

Ancillary support could be furnished by content analysis of pertinent variables. Who might be the persons indigenous to such elements as Devices 3a (Support from Others), p (Imagine Playing for Someone Absent), r (Seek Rapport with Audience); the four Self-Other items; Sensitivity to Criticism (Q33), Recovery from Criticism (Q34); and the whole domain of Aversive Reactions. Proximity of Audience (Exogenous Factor Q4b), in conjunction with the inverse correlation between Anxiety and Strangers in Audience (the Q4f Trend), suggests that it is enhanced proximity between the artist and people he knows which is threatening; specifically who are they, and what sort of discomforts are engendered by their increased closeness?

If the persons central to the Interpersonal Fears, and their attitudes toward the musician, are perceived as the same or similar as those implicated in these "outer-directed" variables, then the core of the Anxiety phenomenon may be reducible to the performer's ambivalent relationships with just a few crucial individuals.

## 2. The Low Anxiety Group

In contrast to the previous category, Low-Anxiety performers are exemplified through remarks such as the following:

'Success isn't all-important. It is fine, of course, to step before an audience. But the enjoyment that the artist gets from doing his work well and trying to do it better that really matters. That satisfaction an artist who believes in himself - and every true artist must - gets whether the public appreciates him or not. I was once an unsuccessful artist. I had almost no

money and very little appreciation. Nobody wanted to hear me play, but I enjoyed doing it and I felt that I could make people listen to me, so I kept on working until I did' (Kreisler in Lochner, 1950, p. 230).

I'm Janet Baker and no one else. What I believe is one aspect, one view of a work - mine - and it must be valid. You can admire what someone else does, but ... you cannot imitate. It's a very personal thing. I can't be someone else, only an individual. So, as I said before, the problem of jealousy is a complete waste of time ... I don't want to be somebody else, with what somebody else has. I want to be me and as good as I can be (Jacobsen, pp. 10-11).

There was also the period in which Sills gave up singing altogether, because of her two children's needs at home. When she returned, however, something important had happened. 'I really stopped caring what people thought about my voice and I decided to sing for myself ....I've always said I have great joy in singing and if the audience has it, it's a happy coincidence (ibid., p. 215).

These artists have apparently been able to consolidate an autonomous sense of esteem which can withstand external vicissitudes. A sense of optimism pervades their strivings. They perform for their own enjoyment (see Self-Other item Q27), and are thus considerably less preoccupied with the interpersonal aspects of their endeavors. And, judging by their tendency to also worry less about disappointing themselves (F14), they play not just to avoid self-censure, but for the gratification of the experience. This movement toward pleasure also manifests in the comparative absence of intropunitive reprisals subsequent to unsatisfactory performances (the Aversive Reactions). Such "fear" as they do experience seems more that of tackling challenges in the service of the music. E.g.,

For her (Myra Hess), a public performance was an occasion confidently and happily shared with people

she regarded as friends. She was nervous, but not because she sensed hostility on the part of her hearers. Rather it was because she feared that she might fail to rise to the greatness of the music she was to play (Payzant, p. 22).

At first glance, the absence of a positive correlation between the Anxiety Index and Harshness of Self-Criticism (Q31), would seem to militate against the foregoing interpretations; one might anticipate that the Low-Anxs should score markedly less in this variable, and that it would therefore differentiate them from the Hi-Anx performers.

Inspection of the relevant frequency distribution confirms that it was the uniformly high ratings for Q31 across the entire sample which was responsible for the lack of expected covariance. Assuming the validity of the preceding hypotheses, two conjectures may be ventured to account for the unexpectedly severe self-criticism rankings among the Low-Anxs:

1. Low anxiety musicians, while directing less rigorous criticism toward their own efforts, might feel that minimal scores on this parameter would be equated by others with inferior personal standards and laxity of discipline. They therefore biased their assessments to conform with what they regarded as the "proper" response.

2. A more likely alternative is that the Low-Anxs did, indeed, accurately convey their perceived degree of self-criticism. For this species of performer, however, it may be that such evaluations are utilized in a positive and constructive manner, for the greater benefit of the music.

Placed in a psychoanalytic schema, such artists might be portrayed as motivated by the demands of the Ego-ideal, perhaps symbolically represented by the music itself.

#### The "Inner-Directed" Anxiety Group

On page 42, it was noted that F14, the Fear of Disappointing Oneself - among all those Fears correlated at  $p < .001$  with the Refined Index - seemed to diverge most appreciably from that dense gestalt of Interpersonal Fears which constitute its essence; this was especially obvious when it was contrasted to the latter's Disappoint Others segment.

The proposal that these contrary directions of anxiety are somewhat dissociated along the continuum of fear, gains credibility from the observation that F14 is unconnected with any of those Recovery Items deemed organic to the Interpersonal Fear cluster.

Embarrassment, the feeling of having been made to appear foolish in the eyes of others is, fittingly, the only Aversive Reaction associated with all of the Disappoint Others members (F15, 16, 17), but shows no systematic affiliation with F14. Conversely, Guilt, said to result from a sense of transgression against internal moral strictures, attains its highest correlation with F14 (actual probability of .003), while being relatively less interwoven with the Disappoint Others components.

If F14 does connote a differential province of anxiety

then, in sharp contrast to the Low-Anxiety class, the individuals it subsumes may function under the auspices of a rigorous Superego. Their efforts would then not be motivated by active pursuit of an idealized and ego-syntonic goal, but derive from the need to avoid the traumas provoked by a "bad" performance.

A curious incongruity between the purportedly different anxiety vectors is worth examining; it concerns the use of Devices. The mechanism of Distracting Oneself (Device 3b) is most pervasive across the Interpersonal Fears. Those instrumentalists whose forebodings primarily involve interactions with others are thus more likely to attempt "blotting out" the prospective concert or audition prior to its occurrence. Once on stage, however, they reverse this inclination, actively seeking to establish Rapport (3r) with the audience.

By contrast, musicians whose apprehensions most concern Disappointing Themselves prominently seek Support from Others (3a) before performing. Once the recital actually begins, however, they try to pretend there is No Audience Present (3o).

These behaviors in the trans-performance interval seem to run counter to expectations. I.e., it appears sensible that those who most dread offending others would adopt preliminary defenses that serve to remove them from people. But a corollary anticipation is that, once faced with the direct objects of stress, they would persevere - to even

greater extent - with the policy of striving to remain within themselves. And, reciprocally, those whose aversive stimuli are presumably of internal origin would be expected to move toward others in the attempt to escape them. Thus, their differential proclivity to withdraw from the presence of their listeners is similarly discordant.

A possible resolution for this paradox lies in the ensuing hypothesis. Whereas the Devices mobilized by the two groups in the interval preceding performance are appropriate to their differential conflicts, actual contact with the threatening situation precipitates a decompensation - a reversion to maladaptive behaviors. Thus, the trans-performance defenses, ostensibly invoked to lessen anxiety, may more accurately be described as reflecting the dynamics of the two Fear categories. As such, they would symbolize manifestations of the very conflicts they are intended to relieve, and perhaps even exacerbate them.

In any case, the antithetical defensive postures intrinsic to the two groups supports the contention that they inhabit separate realms. A tool such as the Myers-Briggs Type Indicator, designed to evaluate personality along a dimension of introversion-extraversion, might have special applicability to these issues.

Another conspicuous difference between the two postulated anxiety categories lies in their relation to F3. This member, almost totally lacking in affiliation with

the Interpersonal Fears, correlates at  $p = .01$  with F14. Perhaps, therefore, the attempt to defend against intrapsychic threats has more to do with expenditure of psychophysical energy.

Since the F14 category is predicated on a single five-point variable, both the cautions and recommendations made in regard to Hamper apply to it as well. It is advocated that the content and boundaries of the Disappoint Self orientation be further explored with a more comprehensive and multi-faceted index. This would help to demarcate both its areas of consensus and autonomy with respect to the Interpersonal Fears.

#### Relation of the Research Findings to Established Models of Anxiety

The importance attributed by Freud to the function of tension-reduction seems at least partially relevant to artistic motivation. There does appear to be a preliminary buildup of internal pressures, which are greater and more prolonged among High-Anxiety performers; the act of performance, whatever its outcome, substantially discharges these pressures.

However, the reduction of the artistic experience to the sublimation of libidinal desires seems overly simplistic. If sex and aggression do play a part, it is likely that they do so within the context of larger holistic values which have transformed their primal nature. The

needs and contingent fears of the performing artist revolve much more around sharing and communication, than in tension-reduction. And that view which portrays the solo artist as desperately seeking narcissistic gratification through adoration from a multitude of others is also untenable. It is refuted by the observation that the optimum musical attitude is one in which the performer has completely subjugated his own needs to the demands of the music.

From the available evidence, there seems no justification for assuming that the central fears reported by the musicians in this study represented a symbolic displacement for other latent concerns (i.e., interpersonal fears as a euphemism for sexual and aggressive conflicts). They seem instead to accurately mirror the performer's main apprehensions.

Perhaps the closest approximation between this research and Freudian theory lies with those performers who worry most about Disappointing Themselves. The dynamics postulated for this group strongly resemble those operations said to underlie "moral anxiety."

In summary, it might be said that the results of this study disagree not so much with the Freudian doctrine of intrapsychic processes, or the interactions ascribed to them; rather, it takes issue with the motivations held to engender their activity.

The role of simple learning theory in the acquisition of performance anxiety is graphically displayed by the pianist Henselt's dramatic response to a memory slip. It does not, though, explain why the same type of mishap taken in stride by so many instrumentalists, brought about the collapse of his career.

The great disparities in magnitude of anxiety experienced by musicians with apparently similar recent performing histories, changes within the same individual over time which do not easily attribute to environmental reinforcements, and the incongruity between feared events and their actual manifestation, all present difficulties to the conventional learning model of anxiety.

A particularly vexing problem in this context is the seeming lack of mitigation in either global or specific performance fears with repeated, and non-reinforced, exposures to the same situation. Three hypotheses, of varying congruence with the conditioning paradigm, may be suggested to account for this anomaly:

1. Extinction depends on the physical mechanism of habituation - the organism's ability to become innured to repeated presentations of the same neutral stimulus. For the solo instrumentalist, however, it is necessary to struggle against habituation, so that recurrent performances of the same compositions do not become boring or stereotyped. The most convincing interpretations are those which convey the impression that the pieces are "fresh,"

and being played for the first time. This effort may well benefit the artistry of the musician, but at the price of nullifying those mechanisms that ordinarily help to reduce anxiety.

2. A good deal of the trepidation experienced by the performer is not exorbitant, but based on rational concerns. The intrinsic demands of any concert place immense strain on all aspects of functioning; and the external contingencies are such that even one unsuccessful recital can seriously damage a musical career. Thus, the soloist may be likened to a professional soldier. No matter how many times the latter may have emerged unscathed from the field of battle, there is always the risk of injury in the next campaign. In this schema, a moderate, perhaps even high degree of anxiety affords the optimal defense against failure. Hence, anxiety does not extinguish because it is an adaptive drive, required for coping with unusually stressful situations.

3. The anxieties of performing derive not from simple fears, but a complex of internal, ongoing, and meaningful needs, i.e., the artist is not concerned with avoiding but "obtaining." Whereas physical fears may extinguish, ingrained psychological needs - requiring continuous fulfillment - do not.

In general, it may be said that the frequent lack of correlation between the degree and content of performance anxiety, and the observable reinforcement contingencies,

place a great strain on the traditional learning model. This strain can be appreciably lessened by interpolation of such constructs as vicarious conditioning, higher-order habit formation, etc. Such a plethora of inferred variables, however, is foreign to the essential philosophy of behaviorism.

Nevertheless, the information obtained through this research strongly bespeaks the existence of a network of molar internal processes which do not reduce into simple reflexes, and which are not in isomorphic correspondence with environmental factors.

This investigation neither corroborated nor discounted the existential theory of anxiety. The absence of voluntarily offered fears of "non-being" among the sample subjects does not, of course, prove that such apprehensions might not reside beneath conscious awareness. Perhaps specific questions directed at this area might elicit more conclusive data.

If a primal dread of "nothingness" does underlie human anxiety, then the following might be asserted: it would be hard to suggest any field of endeavor in which the existence of the Self is more vitally reaffirmed than through the actualization of great works of art. The discomforts surrounding performance would be a small price to pay for subjugation of the much greater Angst.

The possibility that innate temperamental traits might play a role in performance anxiety is borne out by this

survey. The enhanced distractibility among anxious performers, together with their protracted rate of recovery from a multitude of stresses, suggests that differences in constitutional endowment might well be a vector in the etiology of the syndrome. An intriguing corollary is that some of the very sensitivities which are perhaps indispensable to artistic achievement may be the same characteristics that increase susceptibility to anxiety. The relationships between temperament, artistic talent, and performance anxiety well merit examination.

It seems apparent that the complex life style of the performing musician, with both its rewards and disadvantages, fits most congenially into a social-humanistic model of personality.

A fundamental conclusion of this study was that a major cause for excessive anxiety resided in early conflicts with those most involved in the performer's musical life. These conflicts result in a distressingly labile sense of artistic esteem. The afflicted musician therefore needs constant reassurance from the social environment that his expressive attempts are understood and appreciated.

This formulation comes close to that "neurotic need for affection and approval," provoked by disturbed interpersonal relations, which Horney designated a primary defense against "basic anxiety:"

This need is characterized by an indiscriminate wish to

please others and to live up to their expectations. The person lives for the good opinion of others and is extremely sensitive to any sign of rejection or unfriendliness (1942, p. 46).

Yet, judging by the dynamics attributed to the Low-Anxiety performer, it would not seem that direct repair and enhancement of interpersonal relationships is the correct therapy for such problems. Rather, emphasis should be placed on an ego-supportive approach which seeks to enfranchise the artist from the often fickle and biased reactions of others. He should be encouraged to search for his unique individuality, to reify his own inner convictions, before trying to convey these values to others. Paradoxically, it is this cloistered immersion in subjectivity that is likely to make any ensuing transactions with others more authentic and fulfilling.

Of course, this is not to imply that constructive criticism should be ignored. But such evaluations should be utilized in a way that actualizes the artist's own musical personality, and not as imperatives to conform to the wishes of others.

It is a crucial advantage of the humanistic model that it views anxiety as not only contingent on direct psychological traumas, but also upon the frustration of positive goals in an otherwise untroubled individual. This "struggle toward realization" appears especially germane to the efforts of the performing artist. It should be part of any model which seeks to clarify his psychological parameters.

## APPENDIX A: Table A

Members Deleted from the Preparatory Anxiety Index  
Due to Insignificant Correlations

<u>Name of Member</u>	<u>M number</u>	<u>Q number</u>
Vomiting	S5	1e
Heart palpitations	S10	1j
Skin rashes	S18	1r
Fainting on stage	F5	2e
Vomiting on stage	F6	2f
First one to break silence	F7	2g
Sabotage own playing	F20	2t

## APPENDIX B: Table B

Intercorrelations among Constituents of the Retrospective  
Recovery Index

	Q 34	Q 14	Q 20	Q 16
Recover from criticism (Q34)	1	.064	.001	.012
Recover from int dstret (Q14)	.064	1	.001	.001
Recover from slip (Q20)	.001	.001	1	.001
Recover from ext dstret (Q16)	.012	.001	.001	1

## APPENDIX C

Contents of the List Categories Most Frequently Selected for  
Volunteered Additional ResponsesSymptoms

1. Stomach "butterflies" in anticipation 2. Can't stop pacing the floor 3. Feeling of numbness 4. Sensation of choking 5. I have a muscle coordination problem which affects me particularly when I get nervous or excited - usually the day before a performance; I have glasses that help control the blurred vision which usually occurs 6. Yawning 7. Sharp pains in chest at beginning of performance 8. Muscle spasms (chills?) up center of tongue, starting near rear of mouth 9. Biting nails 10. Sleepiness 11. Feeling you need to urinate when you don't 11. Kidney pains 12. Gagging

Fears

1. The fear that every mistake you have ever made in practicing and playing the piece will occur in one performance 2. The fear that if something goes wrong, you will not be in control of the situation and will not be able to recover smoothly and quickly (fear of unpredictability) 3. Fear of losing return engagements if you don't play well 4. Fear of technical breakdown 5. Playing with an ugly sound 6. Fear of a "dead" hall 7. Getting hiccups; losing control of technique 8. Fear of losing muscular control in arms and hands 9. Desire to die rather than proceed with what appears to be momentary masochism; this occurs at the point of stepping on stage and leaves after the performance is underway 10. The fear that you might have to face a noisy audience

Devices

1. "The audience is only there to enjoy the beauty of the music" (convince yourself of this backstage before the performance) 2. Meditation in the form of a technique of concentration on the work 3. Ask friends to send "good vibes" from the audience 4. To share the beauty of the music with the audience, offering them a gift 5. Hoping that I can do the best of my ability 6. Play through the program for friends numerous times before actual performance and "get used to it" 7. Practice rehearsing at the same time and in the same clothes as will be used at concert 8. Feel you want to make the audience love the pieces as much as you do; giving a gift to someone; sharing something beautiful 9. Having an underlying confidence and belief in oneself 10. Do manual labor; iron, scrub 11. "Over" rehearsing 12. Play passages of the pieces very slowly and quietly 13. Prepare as thoroughly as possible, including memory reinforcements 14. Try and enjoy the music making of fellow performers, to interact with them 15. Do actor's trick of "going into character" before beginning

## APPENDIX D

Dear participant,

Thank you for cooperating with this study. Its purpose is to help delineate and clarify some of the psychological factors that affect the performing artist in his work. Though the lives and music of the great composers have received much detailed investigation, little attention has been paid to the experiences of the interpreter; the attempt to remedy this striking lack is a prime goal of the present research,

It should be stressed that there are no "right" or "wrong" answers to any of the items which follow. Your own experience - whatever it may be - is just as important and valid as anyone else's. Since treatment of data will be in terms of group trends rather than individual cases, the names of those who take part in this survey will be kept confidential. Once the results have been analyzed they will - should you be interested - be available for your inspection. It is hoped that the information derived from yourself and others will help performers in a variety of disciplines to more effectively utilize their abilities.

All you have to do is complete the enclosed inventory, put it in the stamped self-addressed envelope I have provided, and mail it back to me. Should you have any questions, please don't hesitate to call me at 544-1050.

Reminder: please do not omit any questions in the forms you are about to fill out.

Thanks again for your help.

Sincerely,

Jeff Hutterer

Name:

Instrument:

Date of birth:

Place of birth (city/state/country/):

Number of brothers and/or sisters you have that are younger than you are (circle one): 0 1 2 3 more

Number of brothers and/or sisters you have that are older than you are: 0 1 2 3 more

Mother's occupation:

Father's occupation:

Age at which you first began studying your instrument:

Age at which you first performed in front of an audience (more than ten people):

1. The following is a list of physical symptoms and changes in functioning that have been associated with performance anxiety. Please circle the appropriate number corresponding to the degree to which each of them affects you. (The number "1" represents no effect at all, and the number "5" a very great effect.) In the event you experience physical sensations that are not on the given list, please enumerate them in the blank spaces that have been provided; be sure to also circle the degree to which you experience them.

- |                                      |         |   |   |   |   |   |           |
|--------------------------------------|---------|---|---|---|---|---|-----------|
| a. Insomnia                          | a. none | 1 | 2 | 3 | 4 | 5 | very much |
| b. Loss of appetite                  | b.      | 1 | 2 | 3 | 4 | 5 |           |
| c. Stomach pains or cramps           | c.      | 1 | 2 | 3 | 4 | 5 |           |
| d. Nausea                            | d.      | 1 | 2 | 3 | 4 | 5 |           |
| e. Vomiting                          | e.      | 1 | 2 | 3 | 4 | 5 |           |
| f. Diarrhea                          | f.      | 1 | 2 | 3 | 4 | 5 |           |
| g. Dry mouth                         | g.      | 1 | 2 | 3 | 4 | 5 |           |
| h. Shortness of breath               | h.      | 1 | 2 | 3 | 4 | 5 |           |
| i. Dizziness or faintness            | i.      | 1 | 2 | 3 | 4 | 5 |           |
| j. Heart palpitations                | j.      | 1 | 2 | 3 | 4 | 5 |           |
| k. Muscle tension or stiffness       | k.      | 1 | 2 | 3 | 4 | 5 |           |
| l. Shaking or trembling              | l.      | 1 | 2 | 3 | 4 | 5 |           |
| m. Sweating                          | m.      | 1 | 2 | 3 | 4 | 5 |           |
| n. Headaches                         | n.      | 1 | 2 | 3 | 4 | 5 |           |
| o. Feelings of exhaustion            | o.      | 1 | 2 | 3 | 4 | 5 |           |
| p. Feeling unusually hot or feverish | p.      | 1 | 2 | 3 | 4 | 5 |           |
| q. Feeling unusually cold            | q.      | 1 | 2 | 3 | 4 | 5 |           |
| r. Skin rashes                       | r.      | 1 | 2 | 3 | 4 | 5 |           |

s. Nervous twitching or other sensations of physical restlessness

(Any more?)

t. \_\_\_\_\_

u. \_\_\_\_\_

v. \_\_\_\_\_

s. none 1 2 3 4 5 very much  
(Please score them)

t. 1 2 3 4 5

u. 1 2 3 4 5

v. 1 2 3 4 5

2. Here is a list of specific fears which some musicians have described in connection with nervousness about performing. Please circle the numbers corresponding to how much each item applies to you.

- |   |                             |
|---|-----------------------------|
| a. Memory slips   | a. none 1 2 3 4 5 very much |
| b. Hitting wrong notes  | b. 1 2 3 4 5                |
| c. Losing control of tempos or dynamics   | c. 1 2 3 4 5                |
| d. Tripping on the way to your place on stage   | d. 1 2 3 4 5                |
| e. Fainting on stage  | e. 1 2 3 4 5                |
| f. Vomiting on stage  | f. 1 2 3 4 5                |
| g. Having to be the first one to break the silence                                    | g. 1 2 3 4 5                |
| h. Running out of energy and being unable to finish                                   | h. 1 2 3 4 5                |
| i. Being unable to communicate what you wanted to express                             | i. 1 2 3 4 5                |
| j. Getting a cold response from the audience  | j. 1 2 3 4 5                |
| k. Being laughed at by the audience   | k. 1 2 3 4 5                |
| l. Being unfavorably compared to others   | l. 1 2 3 4 5                |
| m. Giving a boring or dull performance  | m. 1 2 3 4 5                |
| n. Disappointing yourself   | n. 1 2 3 4 5                |
| o. Disappointing friends  | o. 1 2 3 4 5                |
| p. Disappointing relatives  | p. 1 2 3 4 5                |
| q. Disappointing coaches or teachers  | q. 1 2 3 4 5                |
| r. Getting a bad review   | r. 1 2 3 4 5                |
| s. Becoming so self-conscious you may have trouble moving                             | s. 1 2 3 4 5                |
| t. The fear that you, yourself, may try to undermine, or "sabotage," your own playing | t. 1 2 3 4 5                |
| u. _____  | u. 1 2 3 4 5                |
| v. _____  | v. 1 2 3 4 5                |
| w. _____  | w. 1 2 3 4 5                |

3. The following is a catalogue of devices or techniques which some musicians use to try to reduce or channel their anxiety. Please circle the extent to which you employ them; (the quotes within parentheses are actual examples of the given category furnished by performers).

- |   |                              |
|---|------------------------------|
| a. Seek support and reassurance from others   | a. never 1 2 3 4 5 very much |
| b. Try to distract yourself; ("Read a book," "Go to a movie")   | b. 1 2 3 4 5                 |
| c. Employ some relaxation technique, such as Yoga meditation, to calm yourself  | c. 1 2 3 4 5                 |
| d. Some form of mild exercise, to 'work off excess energy'  | d. 1 2 3 4 5                 |
| e. Use of alcohol   | e. 1 2 3 4 5                 |
| f. Use of tranquilizers   | f. 1 2 3 4 5                 |
| g. Try to 'put things in perspective;' ("It's not brain surgery," "In 200 years nobody will know the difference anyway")  | g. 1 2 3 4 5                 |
| h. Attempt to 'push the fear out of the way' or just ignore it  | h. 1 2 3 4 5                 |
| i. Convince yourself that it's ridiculous to worry, that there's nothing to worry about   | i. 1 2 3 4 5                 |
| j. Don't try to do anything; just 'flow with' the anxiety and wait for it to diminish on its own  | j. 1 2 3 4 5                 |
| k. Give yourself a positive 'pep talk' to boost your confidence; ("I'm going to go out there and bowl them over")   | k. 1 2 3 4 5                 |
| l. Give yourself a 'self-derogatory' pep talk; ("If you don't know those pieces by now, my dear, maybe you'd better go back to nursery school and take your bottle with you") | l. 1 2 3 4 5                 |
| m. 'Put down' of the audience; ("I picture them as a bunch of dried-out cabbages, sitting on chairs")   | m. 1 2 3 4 5                 |
| n. Use of 'cynical humor'; ("Well here I go again - a lamb to the slaughter")   | n. 1 2 3 4 5                 |
| o. Imagine that you are playing only for yourself, with no audience present   | o. 1 2 3 4 5                 |
| p. Imagine that you are playing for some person (or persons), who are not actually present  |                              |
| q. Imagine that you are playing; in the midst of other physical surroundings ("A summertime meadow")  | q. 1 2 3 4 5                 |
| r. Seek to establish a personal rapport with one or more members of the audience, and play as if just for them  | r. 1 2 3 4 5                 |
| s. Try to immerse yourself so deeply within the music, that you become oblivious to anything else   | s. 1 2 3 4 5                 |

- t. Rely on superstitious 'good luck' charms or actions t. never 1 2 3 4 5 very much
- u. \_\_\_\_\_ u. 1 2 3 4 5
- v. \_\_\_\_\_ v. 1 2 3 4 5
- w. \_\_\_\_\_ w. 1 2 3 4 5

4. To what extent does an increase in these factors effect your performance anxiety; (check your choice for each item):

- |   | No change | Less fear | More fear |
|---|-----------|-----------|-----------|
| a. Size of audience   | a. ___    | ___       | ___       |
| b. Proximity (physical closeness) of audience                     | b. ___    | ___       | ___       |
| c. Size of concert hall   | c. ___    | ___       | ___       |
| d. Importance of concert  | d. ___    | ___       | ___       |
| e. People you know in audience                                    | e. ___    | ___       | ___       |
| f. Strangers in audience  | f. ___    | ___       | ___       |
| g. Number of pieces you have to perform                           | g. ___    | ___       | ___       |
| h. Difficulty of pieces   | h. ___    | ___       | ___       |
| i. Familiarity of pieces  | i. ___    | ___       | ___       |
| j. Familiarity of the surroundings in which you are to perform    | j. ___    | ___       | ___       |
| k. Number of prior performances you have given in the recent past | k. ___    | ___       | ___       |
| l. _____  | l. ___    | ___       | ___       |
| m. _____  | m. ___    | ___       | ___       |
| n. _____  | n. ___    | ___       | ___       |

5. How important do you believe each of the following ingredients to be in the establishment of a successful performing career:

- |   |                                   |
|---|-----------------------------------|
| a. Hard work                              | a. not at all 1 2 3 4 5 extremely |
| b. Talent                                 | b. 1 2 3 4 5                      |
| c. Strong nerves                          | c. 1 2 3 4 5                      |
| d. Persistence                            | d. 1 2 3 4 5                      |
| e. Money                                  | e. 1 2 3 4 5                      |
| f. Luck                                   | f. 1 2 3 4 5                      |
| g. Making friends with influential people | g. 1 2 3 4 5                      |

h. Physical appearance	h. not at all	1	2	3	4	5	extremely
i. Charisma	i.	1	2	3	4	5	
j. _____	j.	1	2	3	4	5	
k. _____	k.	1	2	3	4	5	
l. _____	l.	1	2	3	4	5	

For the following questions, please circle the number that most closely approximates your own experience. As before, the numbers are arranged in rank order, from one extreme to the other of whatever area to which the question refers.

6) In general, how much nervousness do you experience before a performance:

1.	2.	3.	4.	5.
None	Slight	Moderate	Considerable	Extreme

7) To what extent does your anxiety actually hamper or interfere with your performances:

1.	2.	3.	4.	5.
Not at all		Moderately		Extremely

8) How would you compare your own level of nervousness with that of your colleagues in general:

1.	2.	3.	4.	5.
Much less	Bit less	About the same	Bit more	Much more

9) To what extent do you consider some degree of anxiety before performance to be an unhealthy or abnormal phenomenon:

1.	2.	3.	4.	5.
Normal		Moderately abnormal		Very abnormal

10) How far in advance of the performance do you begin to feel nervous:

1.	2.	3.	4.	5.
Same day	Several days	Two weeks	One month	Several months

11) How often, on the average, have the events you feared actually materialized:

1.	2.	3.	4.	5.
Never		Half the time		Almost always

12) At the actual time of performance, at what point does your nervousness begin to subside:

1.	2.	3.	4.	5.
After coming on stage	Part of first piece	Whole of first piece	First half of program	Continues through entire performance

13) In the course of a recital, how frequently are you distracted from attention on the music by irrelevant thoughts from within your own mind:

1.	2.	3.	4.	5.
Never	Rarely	Occasionally	Often	Constantly

14) When you are distracted by such internal events, how quickly can you recover your concentration:

1.	2.	3.	4.	5.
Immediately		In a short while		Very slowly

15) How easily are you distracted from the music by things happening outside you; (e.g., someone coughing in the audience):

1.	2.	3.	4.	5.
Not at all		Moderately		Very easily

16) When you are distracted by such external disturbances, how quickly can you recover your concentration:

1.	2.	3.	4.	5.
Immediately		In a short while		Very slowly

17) Should an external distraction persist, how well can you continue to concentrate despite its presence:

1.	2.	3.	4.	5.
Very easily				Extremely difficult

18) Before a performance, how much time do you generally spend worrying about things that might go wrong:

1.	2.	3.	4.	5.
None				Worry constantly

19) To what extent do any problems you may be experiencing in your life outside of music, interfere with your performing:

1.	2.	3.	4.	5.
None				Very much

20) Should you experience a memory slip or other error while performing - how rapidly can you forget about it and recapture your concentration:

1.	2.	3.	4.	5.
Immediately				Very slowly

21) How consistent - across performances - do you consider your playing to be:

1.	2.	3.	4.	5.
Very consistent				Extremely erratic

22) Do you regard yourself as an objective and accurate judge of your own playing:

1.	2.	3.	4.	5.
Rarely				Always

23) How often do your own assessments of your performances coincide with those of other musicians:

1.	2.	3.	4.	5.
Never		Half the time		Invariably

24) Have you ever had a chance to listen to tapes of any of your performances at a later date? If so, to what extent do your reactions upon hearing them coincide with those you had just after playing:

Usually, the tapes heard later sound (check one) About the same \_\_\_  
Better \_\_\_ Worse \_\_\_ than the concert seemed when it took place.

25) How frequently, on the average, do your performances measure up to the expectations you set for them:

1.	2.	3.	4.	5.
Never		Half the time		Always

26) To what extent do you depend on the help of others in preparing for an important concert or audition, as opposed to relying just upon your own efforts:

1.	2.	3.	4.	5.
Rely on self		About 50-50		Depend on others

27) To what degree do you perform for your own satisfaction, as opposed to trying to fulfill the needs or expectations of others:

1.	2.	3.	4.	5.
Just for self				Primarily for others

28) If an audience should react coldly to a concert in which you felt you had played very well - how much would this bother you:

1.	2.	3.	4.	5.
Not at all				Very upsetting

29) How easily, in general, are you swayed by the opinions of musician colleagues regarding your playing - in the event they go against your own convictions:

1.	2.	3.	4.	5.
Not at all				Very much influenced

30) To what extent do you feel yourself to be competitive with your fellow colleagues:

1.	2.	3.	4.	5.
Not at all				Extremely

31) How rigorous a critic of your own work do you consider yourself to be:

1.	2.	3.	4.	5.
Mild		Medium		Harsh

32) How rigorous a critic are you of the playing of others:

1.	2.	3.	4.	5.
Mild		Medium		Harsh

33) In general, how strongly are you affected by adverse criticism of your playing:

1.	2.	3.	4.	5.
Not at all				Extremely

34) If you receive such criticism, how long does it take for you to recover your confidence:

1. Very quickly                      2.                      3.                      4.                      5. Very slowly

35) In the event you should play badly, how closely do each of the following correspond to your reactions

a. Indifference	a. none	1	2	3	4	5	very much
b. Disappointment	b.	1	2	3	4	5	
c. Guilt	c.	1	2	3	4	5	
d. Embarrassed	d.	1	2	3	4	5	
e. Depression	e.	1	2	3	4	5	
f. Anger at yourself	f.	1	2	3	4	5	
g. Anger at others	g.	1	2	3	4	5	
h. Loss of confidence in yourself	h.	1	2	3	4	5	
i. _____	i.	1	2	3	4	5	
j. _____	j.	1	2	3	4	5	
k. _____	k.	1	2	3	4	5	

36) To what extent are your performances determined by pre-planned interpretations, in contrast to "spur-of-the-moment" feelings and impulses:

1. Adhere to pre-determined plan                      2.                      3.                      4.                      5. Surrender to feelings of the moment

37) To what degree do you feel in control of how well you play - in contrast to the influence of circumstances possibly beyond your control (e.g., luck, how you happen to feel at the moment, etc.):

1. Self in control                      2.                      3.                      4.                      5. External factors

38) How often did you perform as a child:

1. Never                      2.                      3.                      4.                      5. Very often

39) If you did perform as a youngster, did you ever feel pressured or forced to perform against your will?

1. Never                      2.                      3.                      4.                      5. Very often

40) How many performances plus auditions do you average in the course of a year:

1. 1-5                      2. 5-10                      3. 10-15                      4. 15-20                      5. more than 20

41) If you had to leave music as a career, how easily could you make the transition to another line of work:

1. Very easily                      2.                      3.                      4.                      5. Extremely difficult

42) In order of preference (from most to least desired), please list as many alternative professions you can think of that would interest you:

---

---

---

43) Please list all your hobbies and interests outside of music:

---

---

---

44) In a given month, how much time do you actually devote to those outside interests, as compared to musical pursuits:

1.	2.	3.	4.	5.
Very little		About evenly divided		A great deal

45) The space below is provided for you to make any comments you wish regarding the items of the questionnaire; your responses to them; or any area or issue you feel the questionnaire may have missed, but which you consider of importance.

10		10
9		9
8		8
7		7
6		6
5		5
4		4
3		3
2		2
1		1
0		0

Instructions: Above is a numbered ladder. Consider the top of the ladder (rung 10) as the best possible quality of life for you, and the bottom of the ladder (rung 0) as the worst possible life.

Please place a letter "X" on the rung of the ladder corresponding to where you feel your life is now.

Please place a "Y" on the rung corresponding to where you feel your life was five years ago.

Please place a "Z" on the rung corresponding to where you feel your life will be five years from now.

Though the following group of items was not specifically devised in connection with the psychology of performing, it nevertheless has a crucial bearing on the issues being investigated here.

### Instructions

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered "a" or "b". Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you are concerned, and circle the corresponding letter. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers. Please answer these items carefully, but do not spend too much time on any one item. Be sure to give an answer for every choice.

In some instances you may discover that you believe both statements. In such cases, be sure to select the one you more strongly believe to be the case as far as you are concerned. In other instances you might believe that both statements are untrue. In such cases, merely choose the statement which seems to be less untrue as far as you are concerned. Also, please try to respond to each item independently when making your choice; do not be influenced by your previous choices.

1. a. Children get into trouble because their parents punish them too much.  
b. The trouble with most children nowadays is that their parents are too easy on them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.  
b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.  
b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world.  
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are usually unfair to students is nonsense.  
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.  
b. Capable people who fail to become leaders have usually not taken advantage of their opportunities.
7. a. No matter how hard you try some people just don't like you.  
b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.  
b. It is one's experiences in life which determine what they are like.

9. a. I have often found that what is going to happen will happen.  
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.  
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.  
b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.  
b. This world is run by the few people in power, and there is not much that the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.  
b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a. There are certain people who are just no good.  
b. There is some good in everybody.
15. a. In my case getting what I want has little or nothing to do with luck.  
b. Many times we might just as well decide what to do by flipping a coin.
16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.  
b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.  
b. By taking an active part in political and social affairs the people can control world events.
18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.  
b. There really is no such thing as "luck."
19. a. One should always be willing to admit mistakes.  
b. It is usually best to cover up one's mistakes.
20. a. It is hard to know whether or not a person really likes you.  
b. How many friends you have depends upon how nice a person you are.
21. a. In the long run the bad things that happen to us are balanced by the good ones.  
b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a. With enough effort we can wipe out political corruption.  
b. It is difficult for people to have much control over things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.  
b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.  
b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.  
b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.  
b. There's not much use in trying too hard to please people; if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.  
b. Team sports are an excellent way to build character.
28. a. What happens to me is mostly a matter of my own doing.  
b. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a. Most of the time I can't understand why politicians behave the way they do.  
b. In the long run the people are responsible for bad government on a national as well as on a local level.

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