

# Patterns of Art Generating Stress Episodes in Young Musical Performers

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## Introduction

**I**N THE past decades (since the late 1980s, mainly), the relation between art and stress has been studied mostly in the sense that art can be used as an instrument to reduce or alleviate stress. The “healing power” of the arts, the relation between arts in any form (musical, visual, performing) on one hand, and health and wellbeing on the other, have been pointed out repeatedly (Pîrvu 2018), not without its skeptics and critics. The present paper, however, discusses the reverse relation, between arts and stress as a factor inducing the state of mind that triggers and/or fosters the creative moment, also termed the “intensive creative episode” (Leoveanu et al. 2015) or “art-giving stress” (Pîrvu et al. 2016). Such intense episodes have been associated with the use of psychoactive substances (Iszáj and Demetrovics 2011); further studies, however, tend to correlate the quality of the artistic product with drug use, rather than with the episode itself. The correlation that has been pointed out as more stable is that with various types and degrees of mental disorders. The present paper focuses on this link between such bursts of creativity (in music, in this study) and the manifestations of any form of psychological instability. The literature lists schizophrenia, proneness to addiction, to alcohol and/or drug abuse, anorexia, various forms of psychosis, (hypo)mania, and even autism (Kyaga 2015).

All authors listed here made a substantial, direct and intellectual contribution to the work, and approved it for publication.

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## Hypothesis

**W**E HYPOTHESE that:

a. Creativity in any of the arts is frequently associated with psychopathology (or “at least some facets of [it],” Fink et al. 2012), even in a less severe, less debilitating, or in a temporary form. While many studies focus on writers and poets (Andreasen 1987; Jamison 1993; Ludwig 1995; Post 1996, a.o.), others also include performers, visual artists. The present study focuses on musicians.

b. Creativity in any of the arts is frequently related with specific episodes of intense stress, generating the special frame of mind, an “explosion of the mind” (Fink et al. 2012), which engenders the originality and the problem-solving capacity that define the creative mind.

## Material and Method

**T**HE 17 young (adolescent) musicians (performers) were former pupils in the classes devoted to various instruments, as well as in the class of composition; their ages were between 18 and 20. Of the 17 youths, 9 were male, and 8 were female students. Their formal musical training ranged from 12 to 9 years in a vocational high school. At the time the questionnaire was applied they had just graduated classes in music and were on the point of deciding on a career path that would, in the case of some of them, focus on music and capitalize on, obviously, their confirmed talent, and on the training in which they had invested so much time and effort. Due to the special nature of their education, they had all performed in various concerts, sat in various forms of examination that included inter-county and national contests and had, therefore, been subject to intense stress. Also, all of them confessed to having been “visited” by moments of intense creativity that, one way or another, departed from the common everyday stressful experience. Some of the respondents (9, more exactly) had also been in the sample of a previous study on art-generating stress (Leoveanu et al. 2015).

In an attempt to continue a previous investigation in the field and to corroborate the new data with the existing results, we used three assessment tools: 1. an anxiety self-assessment test (General Anxiety Disorder 7 item scale) that the respondents were encouraged to take during/after creative episodes; although it may be considered as less accurate on account of its smaller number of items, this test was preferred as it elicits responses for a short clearly determined period of time (2 weeks), considering the short duration of creative episodes; 2. a structured interview questionnaire (adapted from Amabile 1996) which focused on the assessment of motivation, taking into account that creativity implies the convergence of three elements (domain-relevant skills, creativity-relevant—cognitive and personality—processes, and task motivation, described as a sense of enjoyment in the activity, engagement in the activity, a sense of challenge) (adapted from Amabile 1996); 3. a combination of questionnaires drawn from Jamison (1993) and Csikszentmihalyi (1990) to address various phenomena occurring during

intensive creative episodes, such as mood swings, irregular cognitive processes, or behavioral changes.

## Results

**T**HE GROUP of respondents, located in a major Transylvanian city, came from similar vocational educational backgrounds, with the following differences: 5 respondents (29.41%), 1 male and 4 female, had studied canto and considered, for instance, that vocal expression is the highest form of musical art, as voice is the most unique instrument; or, performance is instantaneous, “the musician carrying her own instrument” or just being endowed with a beautiful voice; 12 respondents (8 male and 4 female) had studied instruments (70.58%) and considered that being able to play an instrument can enhance one’s cognitive abilities, or that it is the best “recipe” to relate to people, to expand one’s social network, simply, to make friends.

The profile of the respondents was established and one element that was investigated was the former pupils’ plans for the future, career-wise; most of them planned to pursue higher education studies as follows: 5 of them (29.41%) decided to abandon a career as a musician for the time being, directing their interests towards other fields, all of them in the humanities (two respondents considered Letters—foreign languages, one psychology and two the social sciences); the remaining 12 (70.58%) were determined to continue their musical studies, 10 (64.7%) in the domain in which they had started (canto or various string or wind instruments), and the remaining 2 (11.76%) in the theory of music.

We first started by establishing various relations between the intensive creative episodes and states of anxiety. Prompted to attempt self-assessment with regard to anxiety, 8 respondents confessed to having experienced either period (whose span varied from a few days to a few weeks), or peaks of very intense feelings similar to sudden attacks of fear and panic. The factors that triggered the episodes ranged from fear of performing in front of an audience—that is, hardly standing the pressure of public performance, fear of disappointing family or other individuals, fear of being rejected by the audience or of receiving no applause, fear of losing concentration while performing—to less discernible reasons like “anguish,” an unknown pressure or some inexplicable fear. When the subjects’ anxiety level was assessed according to the General Anxiety Disorder 7 item scale, the results indicated that most of them, 12 respondents (70.58%), were placed within the moderate anxiety level (11 to 15 points), with 4 respondents (23.52%) showing no signs of anxiety and 1 respondent (11.76%) within the band of severe anxiety (16–21), although they did not admit to it or were not aware of the nature of the episodes they were experiencing.

The responses to the questionnaire investigated issues related to psychological aspects during and around the creative episodes. It must be noted here that the episodes themselves, as described by the respondents, were not restricted to the actual performance/rehearsal of music, but extended beyond it, to other activities such as cre-

ating mental images associated to music, remembering previous sessions, communicating with other musicians; this is in keep with the findings which emphasize that many problem-solving moments were not hands-on-the instrument types of situations, but rather instances of analytical and/or reflective moments, or even singing a piece meant for instrumental performance or self-talk (Wise et al. 2017, 159 and passim). The answers revealed elements related to the cognitive aspects involved, such as confidence/assertiveness, attentional focus, enthusiasm, hyperesthesia. The elements related to the behavioral aspects revealed changes in sleep patterns, level of energy, patterns of social interaction—irritability, peaks of anxiety, restlessness, agreeableness (lack of).

This is the general tableau of the psychological changes the respondents presented during and around the creative episodes, as they were assessed by the musicians, given in average values expressed in percentages, of the intensity of the said changes by comparison to the usual “normal” state, grouped in elements whose intensity a. increased and b. decreased:

a. an increase in the average values for: goal oriented activity (64%), attentional focus (61%), a sense of energy and wellbeing (49%), irritability (46%), confidence/assertiveness (37%), hyperesthesia (25%), communicativity/talkativeness (9%);

b. a decrease in the average values for: anxiety (12%), agreeableness (9%), need for sleep (7%).

The values are partly coherent with a pattern of (mild) hypomanic behavior. In terms of the ability to perform in a goal-oriented manner, the respondents described their ability to continue rehearsal or study of the scores for longer than the usual spans of time, occasional increased short-term memory, the tendency to ignore hunger and/or thirst. Increased efficacy in performance may raise the level of confidence/assertiveness, in correlation with the higher level of enthusiasm and the tendency to express oneself, to share successful episodes, to act expansively.

## Discussion

**A** DETOUR MIGHT well be opportune for now, to probe into the (supposedly) joint cultural creativity and mental disorder in the musical personality, the more so as many musical geniuses are known to have associated during their lifetime elements of titanic creativity, and also of weakness and darkness, that were to haunt their entire career and existence. The disorders ranged from bipolar disorder (Syd Barrett of Pink Floyd—alternatively diagnosed with schizophrenia—and Kurt Cobain of Nirvana) to addictions of various types (as in the case of Jim Morrison, whose death by cerebral hemorrhage was indirectly caused by drug abuse, or Elton John, who added bulimia to his other conditions) and depression (Robbie Williams), to name but a few and to refer to contemporary artists. There are, however, well-known cases among composers of classical music as well: Austrian composer Anton Bruckner, a neurotic personality probably suffering from obsessive-compulsive disorder, the French composer Hector Berlioz, suffering from manic depression, Russian musician Sergei Rachmaninoff suffering from depression, along with other Russian musicians—Piotr Ilyich Tchaikovsky and

Dmitri Shostakovich. Last but not least we have the case of German composer Robert Schumann (1810-1856) coming from a cultural milieu that was barely different, at the time, from the Transylvanian one. He was a tangle of somatic and psychological disorders that manifested from an early age. As early as 1829 (19 years old), in a letter to his sister-in-law Rosalie Schumann, he confessed to being “depressed,” gloomy thoughts visiting him four years later (1833), when, in a letter (33) to Clara Wieck, his then fiancé, he wrote about his work being “doomed to remain a ruin”; he later called his condition “a very depressing form of melancholia,” so serious that it was “beyond human endurance” (letter 41 to Cpt. von Flicken, Vienna 1839). One of the major sources for this dispirited frame of mind was, naturally, his inability to use the fingers on one hand, a condition put down to an injury, to arthritis, some task-specific dystonia, or to manifestations of syphilitic infection (Worthen 2014).

His various complaints and ailments may well have been somewhat exaggerated, as he accused a score of illnesses, rheumatism, “nerve fever,” headaches, spells of dizziness, feebleness, sleeplessness, irritability, an easily upset stomach, restlessness and twitching in various parts of the body (Worthen 2014, *passim*). These problems were, however, elusive and often escaped the doctors’ inspection: in a letter (109) to Mendelssohn, not dated but of 1845, he would remark that “every day I have aches and pains in a hundred different places”; when the doctor tried to tackle (this “mysterious complaint”), it seemed “to vanish.” This must have been a form of hypochondria, associated to a haunting sense of guilt for his irregular relation with a woman whose identity has remained shrouded in mystery.

Anxiety seems to have accompanied him constantly along his life. As early as 1833, in a letter to his mother (36) he stated that, besides being “nervous and timid,” he could not sleep alone. Much later, in March 1855 he was affected by “an attack of anxiety with convulsive movements in his limbs.” He described episodes of panic, “the worst fear man can have . . . the fear of losing one’s reason” (Letter 74 to Clara, 1838) and he continued describing “the terror that drove him from place to place” in a state of “terrible agitation,” picturing his “brain paralyzed,” an image that drove him to such despair that he feared reaching the point where he could take his own life, at least one earlier attempt being known (in 1854, when he tried to drown himself in the Rhine).

His artistic personality and special multivalent gifts extended from music (where his talent as a pianist was unanimously praised, whilst his compositional vigor made him one of the remarkable late Romantic musicians) to literary talents: not only was he a journalist and essayist of remarkable prowess—for years he edited the periodical *Neue Zeitschrift für Musik* (New Journal for Music), but he also was creative as a poet—in May 1829, in a letter to his mother, he described himself on deck of a steam boat, “I sit writing poems”—and prose writer, to his credit coming his autobiographical writings based on two opposing characters and an additional, presumably equidistant one, all of them battling on the ground of ideas: Florestan (the voluble, extraverted side of Schumann’s personality), Eusebius (his shy, introverted side), and finally Meister Raro keeping the balance between the two of them. Not to mention the beauty and impassionate tone of his extensive correspondence with his wife, Clara, which has been considered to be an instance of “poetic prose.” His refined appreciation of both music and

literature is especially well illustrated in his *Lieder*, short musical forms that combined verse and song in a “marriage” of arts, and were inspired by the lyrical poems whose rhythms and euphony lent themselves to music and improvisation.

To such a potent versatile talent, creativity came, according to his own confessions, in explosions that were interspersed with periods of numbness, inactivity and lack of affective response. On the one hand, he worked furiously, in “a state of ferment!” (Letter 13 to Wieck, 1829), his musical ideas being transferred to the paper on “the impulse of the moment” (Letter 26 to Wieck, 1832). The words he most often used to relate such episodes are apt to describe the intensive creative episode: *surging* (“all the music surging within me!,” Letter 80 to Clara, 1838; “melodies [are] surging through my brain,” Letter 120 to Moritz Horn, 1851; he was visited by a “tempest of ideas that surges within me as I sit at work,” Letter 60 to Keferstein, 1840), *burning* (“I burn to begin [composing],” Letter 97, to Clara), *bursting* (“Indeed, I sometimes feel as if I should burst with music,” Letter 75 to Clara, 1838). The creative act is the way to free oneself from the accumulating pressure: “What a relief to give utterance to all the music surging within me!,” he confessed (Letter 80 to Clara, 1838), although occasionally the stress thus generated could be a hindrance to the compositional act itself: “There are times when my soul so overflows with melody that it is impossible to write anything down” (Letter 13 to Wieck, 1829). Such episodes are seen as divine inspiration (Letter 54 to Simonin de Sire, 1839) and the feeling was that of being possessed (“[it] fairly possesses me at times,” Letter 22 to his mother, 1831).

Interestingly, both the letter fragments describing the bouts of anxiety, the fear of losing his mind, and the creative moments when musical ideas seem to “surge” come from the same period, 1838. The significant amount of work around the years 1838–1840 appears to correspond to states similar to the manic highs: “Do you know that I have written four hundred pages of music during the last two years?” he wrote to his colleague Keferstein (Letter 60, 1840). The same period, however, was interspersed with the “low,” the depressive phase: feelings of sadness, of disconnectedness to the world, lack of energy, hopelessness. In Schumann’s own words, he felt “[he] was little better than a statue, feeling neither cold nor heat” (Letter 36 to his mother, 1833), “Depression sets in, and I feel as if I were being swathed in endless black fabrics and garments, and stowed away—an indescribable sensation” (Letter 82 to Clara, 1838), “I was a poor, beaten wretch, who for eighteen months could neither pray nor weep, for eye and heart were cold and hard as iron” (Letter 73 to Clara, 1838) (Schumann 2016; Jensen 2001; Fuller-Maitland 2011).

The perfectly legitimate question, “what’s in store for early-career musicians/artists?” has been actually looming up through the fog for some time now, in various guises, though. Little wonder that it requires some further exemplifications.

For Juda (1949), 9 (34.6%) of her 26 musician sample had psychiatric abnormalities (they were schizoid-eccentrics, emotionally unstable, weak characters, excitable and high-strung, hysterical); their first-degree relatives were more likely to be cyclothymic or commit suicide, and their grandchildren were more likely to have psychosis. For Trethowan (1977), 30 (50%) of his 60 eminent composers had a melancholic temperament, while mood disorders were “easily the commonest and most important psy-

chiatric illnesses.” For Wills (2003), 3 (7.5%) of his 40 eminent American modern jazz musicians had psychotic illness, and 11 (27.5%) had major affective illness; 4 (10%) received in-patient treatment for depression; 1 (2.5%) committed suicide (cf. also Goodwin and Jamison 2007, 385). For Diaconu et al. (2015), the trendy composers (the eminent composer with a twist, worth-talking about for biographical reasons, not only for esthetic reasons), had a significantly higher psychopathology, always a debate *à la mode*—of his 9 composers, 7 (78%) had some psychological illness, and 2 (22) had some neurological illness.

The composers were found by Post (1994) to have the following distribution of various characteristics: 1) lifelong psychopathology: 50% potentially handicapping traits of DSM personality disorders; 11.5% DSM traits adversely affecting relationships and/or careers—also 27% unusual, but not DSM-3-R diagnosable character features; 2) episodic psychiatric ill-health: 36.6% functional, not seriously disabling; 23.1% functional, severely disabling; 1.9% functional psychoses; 11.5% organic psychoses; 3) functional conditions: 17.3% anxiety and related disorders; 33.3% somatophorm-type disorders; 15.4% severe depressions; 15.4% mild depression; 3.8% adjustment disorder (depressive); 4) criteria for 3 clusters of DSM-3-R personality disorders: 5.8% cluster A traits predominating; 15.4% cluster B traits predominating; 40.4%; cluster C traits predominating. In Ludwig’s (1995) lifetime rates of mental illness within professions, depression/melancholia came first (namely with 32% for music performance; and 46% for musical composing); this was followed by alcoholism (with 40% for performance; and 23% for composing); drug abuse (36% for performance; 13% for composing); psychosis (4% for performance; 10% for composing); mania (9% for performance; 6% for composing); pathological anxiety (4% for performance; 4% for composing); suicide (9% for performance; not attested for composing)—and finally any mental disorder (with 68% for music performance; and 60% for musical composing).

If we were to make a connection between this (psychologically-marred) creativity and its own origin, we will readily see that whatever name we call it—inspiration, insight, illumination—the intensive creative episode is another name for the hypomanic episode with the following traits: 1) inflated self-esteem or grandiosity; 2) decreased need for sleep; 3) pressure to keep talking; 4) racing thoughts; 5) distractibility; 6) increase in goal-directed activity (at work or sexually) or psychomotor agitation; 7) excessive involvement in activities that have a high potential for painful consequences (e.g. engaging in unrestrained buying sprees, sexual indiscretions or foolish business investments) (DSM 5: 124).

We expected that much, and perhaps we expected something more, namely, that the hypomanic episode should come alone, with no strings attached—just because we are dealing with early-career artists rather than mature artists! Nevertheless, we have also found the unmistakable evidence of anxiety disorders: 1) whose main symptoms are panic disorder with or without agoraphobia, agoraphobia without history of panic, specific phobia, social phobia, obsessive-compulsive disorder, post-traumatic stress disorder, acute stress disorder/acute situational anxiety, general anxiety disorder, anxiety disorder due to a general medical disorder, substance-induced anxiety disorder; 2) whose psychological features are fear and apprehension, inner tension and restlessness, irritability,

impaired ability to concentrate, increased startle response, increased sensitivity to physical sensations, disturbed sleep; 3) whose physical features are increased muscle tension, tremor, sweating, palpitations, chest tightness and discomfort, shortness of breath, dry mouth, difficulty in swallowing, diarrhea, frequency of micturation, loss of sexual interest, dizziness, numbness and tingling, faintness (DSM 5: 189–234).

## Conclusions

**T**HE INTENSIVE creative episode is certainly a good opportunity to visualize at length the connection between artistic creativity and psychopathology. If, however, the teenage musician sample we have worked on is somehow expected to undermine our efforts, psychopathology needing more space to be fully grown, we will eventually find that the intensive creative episode is the near-synonym for the hypomanic episode. Once they flow into this “syntactic” pattern, things will take a clinical logic and run along paths that are well-trodden by psychiatrists and clinical psychologists alike: hypomania/mild mania will grow into mania, and depression will shortly join in—anxiety being their already, if not for its mild hypostasis of wakefulness.

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### Abstract

#### Patterns of Art Generating Stress Episodes in Young Musical Performers

There is no denying that the artistic personality is to be found in a class of its own, previous research (including ours) showing that what makes an outstanding difference is the significantly higher degree of its psychopathology. The questionnaires and structured interviews which we applied to a number of high-school arts students in a major Transylvanian city show that the intensive creative episode or, in biopsychocultural terms, the art-generating stress, is basically the interface of a creative process that joins together hypomania and anxiety. Given that such episodes are the sine-qua-non of cultural creativity, the domain-specific artistic personality, restricted in our research to the musical personality (performance, composing), gives further proof to the thesis that (sub-clinical) psychopathology and cultural creativity are most intimately connected. This vulnerable status of the early-career artists, in view of the larger-than-life upcoming challenges for their mental health, calls for special measures, foremost amongst them being the greater involvement of the school physician.

### Keywords

cultural creativity, early-career artist, high-school anxiety, hypomania, school physician, wakefulness