Personality Traits and Music Performance Level of Undergraduate Students

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Abstract: The musician's personality has often been investigated, yet little is known about which personality traits are best associated with high achievements in the musical field. The present study aims to explore the link between undergraduates' music performance level and their personality traits. A sample of 130 undergraduate music students completed a Big Five Model personality questionnaire. Correlations were calculated between personality scores and students' grades obtained in their final music exams. Results have shown that the technical abilities of music performers correlated significantly with self-discipline and cautiousness, while the expressive skills were associated with the "openness to experience" factor. In the case of female music students, there was a significant negative correlation between cooperation and general music performance level.

Key-Words: personality traits, music performance level, instrument, Big Five Model, self-discipline, cautiousness, openness to experience, cooperation

1 Introduction

Music specialists have always been preoccupied with the factors that lead to high level of success in instrumental or vocal music performance, especially in the case of classical music where, as it is well known, the technical virtuosity and the power of expression constitute highly desired qualities.

In order to obtain a more comprehensive analysis of the music performance phenomenon, a series of researchers [1, 2, 3, 4] have studied the performers' personality. They have identified certain personality traits that are specific to this professional category, by comparing the musician's personality to the personality of professionals from other fields or from other sub-fields from the artistic area (acting, dancing, visual arts).

However, the revealing of specific personality traits of music performers doesn't necessarily prove a scientific correlation between this profile and high achievements in music performance.

This is why the present study aims to complete this research area by investigating the relationship personality traits described by Big Five model and the level of music performance. Furthermore, according to previous findings, we intend to analyze the impact of the chosen musical instrument (strings, woodwind, brass, piano and vocal performance) on performers' personalities.

2 Review of literature

A recent study [5] has explored the differences regarding personality traits of 158 visual art, 136 music and 309 psychology students and has discovered specific personality profiles for each group. Therefore, visual art students were more neurotic, more open to experience and more inclined to heuristic thinking than psychology students. Also, music students were more extraverted and more agreeable than visual art students were, and more inclined to heuristic thinking than psychology students were.

A research [6] on performing artists (33 actors, 26 dancers, 65 musicians and 38 singers) has revealed a series of interesting personality traits specific to this category, by using The Eysenck Personality Profiler and a stress symptom checklist. Actors showed themselves as extraverted and expressive, dancers as unhappy, anxious. hypocondriacal and low in self-esteem, while musicians were introverted and unadventurous. Singers showed scores in a range between actors and musicians. One third of singers and 47 % of musicians informed researchers their performance anxiety. Also, more than one third of dancers reported depression. The results were interpreted as being a consequence of their instable, risky and demanding lifestyle as performing artists.

A comparative study [7] used the Myers-Briggs Type Indicator (MBTI) to show that music performers and music educators are more alike than different with regard to personality.

In the case of classical music performers, researchers have revealed some specific personality traits that build up a relative distinctive profile. One personality trait that has repeatedly been described is *androgyny* [7, 3, 8 *apud* 2]. Androgyny has been defined as the situation where a "person benefits from both male and female attributes, allows for adoption and adaptation of cognitive and emotional responses from same- and cross-sex typing" [19 *apud* 2, p. 242]. Androgyny has previously been associated to creativity [10, 11] and authors explain the high levels of androgyny of music performers by illustrating the fact that the activity of music performance asks for a large amount of originality, despite the rigors related to technique.

Music performers are also very independent, as Kemp [3] and Alter [9 apud 2] have showed. This trait is associated to high levels of self motivation required for carrying out thousands of hours of individual practice that music performers need to do during their development and along their musical career. The famous term of "bold introvert" [3, p. 51] describes the portrait of a person capable of feeling comfortable in solitude during long hours of practice and also of having enough autonomy in performance. Ericsson and collaborators [10 apud 11] have also stated the idea of music performers' independence. They have studied violinists of different levels of virtuosity and have observed that deliberate practice is very important for developing an international career. The best violin players have accumulated (until the age of 20) more than 10.000 hours of deliberate practice.

The music performers' activity is usually very transparent as he or she is permanently evaluated by the public, due to the nature of this profession. This situation may have as a consequence a high level of *sensitivity* that, in time, may lead to low self-tolerance, emotional disturbance, low self-esteem or depression [2, 3]. The term sensitivity has many meanings: responsiveness to weak stimuli, receptivity in identifying music elements or a degree of vulnerability in which a person is easily upset or offended [3, p. 68]. All these circumstances are applicable in the case of music performers, considering the socio-emotional complexity of their professional activity.

Music is a multifaceted communication channel built between the performer and the audience based on empathy and mutual understanding. During their many interpersonal interactions with the public, music performers develop high abilities of *interpersonal communication*, as Lawrence [12 apud 2, p. 245] stated when analyzing successful music teachers "great teachers demonstrate qualities of personalities that are more than the sum of their musicianship and their teaching ability".

One controversial personality trait of music performers refer to *introversion-extraversion*. In this case, a series of studies [3, 4, 5] that state that performers are extrovert have been challenged by other studies [6] that proved the opposite. This situation may be due to the incomplete exploration of the performing context, of the music genre, of the cultural factors that contribute to the musical phenomenon or of the moment in the performer's career development.

Alter [9 apud 2] has compared a group of music students to a control group and has discovered that the first registered high levels of **need for attention** from others. The result may be explained by the fact that music performers are used to be on stage and perform in front of other people. Also, when playing in an ensemble, the frustration is amplified by the paradoxal role of getting the public's attention and in the same blending with the other performers and following conductor's intentions.

Trait anxiety is another element that completes the music performer's personality profile. Performance anxiety, in its state or trait forms, represents one of the most studied phenomenons in music psychology and its presence is explained by the frequency of evaluations, sometimes based on personal or unauthorized criteria, that music performers are exposed to from an early age.

There are some stereotypes that built up among professional musicians related to the personality profile of performers that play different musical instruments. Kemp [3 apud 13, p. 11] stated that, when choosing a musical instrument, general aspects of children's personality might be useful to keep in mind: "for example, string playing may frequently attract the quieter, more introverted and studious child, whereas brass playing may appeal to the more socially outgoing and extroverted. Singers also tend to be more extroverted, sensitive and imaginative types. Keyboard players tend to be more extroverted but not as extroverted as the brass players and singers".

In order to investigate the validity of these stereotypes related to the specific personality traits of instrumentalists, two studies [14, 4] have applied personality inventories and measured precisely certain personality traits specified before.

Accordingly, researchers have revealed that brass players emerged more suspicious, imaginative, apprehensive and radical compared with singers. Also, brass players were more extraverted and less anxious and creative than string players. Keyboard players were more warmhearted, emotionally stable and shrewd than other instrumental categories (strings, woodwind, brass, singers).

Cribb and Gregory [4] have used Eysenck Personality Inventory to illustrate the greater neuroticism among string players, but not the greater extraversion of brass players. The two authors explained that the personality stereotypes among musicians may be determined more by history and traditions of the group rather by the instruments they play.

Woody [2] has noticed that most psychological studies made on music performance focused on classical music performers leaving out a lot of the aspects related to popular music (jazz, folk, country, rock). The need for scientific certainty is required here also, considering the fact that this music performance area was often associated to particular stereotypes. One stereotype suggests that rock soloists tend to have their personalities linked to clinical symptomatology.

In order to address this aspect, Gillespie [15] has analyzed the personality characteristics of 100 rock and popular musicians who completed the Revised NEO Personality Inventory (NEO-PI-R). The results showed that rock musicians share a common profile of high neuroticism and openness to experience, average extraversion and low agreeableness and conscientiousness.

These findings were challenged by Rankin [16] who explored the personality traits and their relationship to creativity, self-esteem and clinical symptomatology of 74 popular/rock performers. Rankin's results suggested that this category is understudied and unfairly associated to psychological pathology, as their personality profile showed positive aspects of personality traits.

Finally, a Denmark study [17] brought to light sensation seeking as a relevant personality trait in choosing a specific path in music performance. The authors suggested that personality traits may differ between classical musicians and performers in improvisational styles of music such as jazz, rock, pop, reggae and other contemporary popular genres. The results have showed that the latter category of performers display significantly higher levels of sensation seeking scores and than classical music performers who, in turn, showed higher scores of state anxiety.

These findings were explained by the authors through the particular nature of the two types of music performing and their rehearsal characteristics. hand, popular music improvisational freedom and this will eventually reflect on performer's lifestyle and way of thinking. In improvisational music performance there is less possibility for mistake and this fact lowers anxiety. More than that, playing classical music requires more advanced psychological and motrical skills and self control that the performer obtains through long periods of difficult individual practice. On the other hand, the rehearsals of popular music is often seen more as a social activity, where performers focus more on expressing feeling and ideas than on proving vocal or instrumental virtuosity.

The review of literature on personality and its link to music performance creates the premises of continuing the analysis on this research area toward a specific experimental design focus on the relationship between personality traits and the level of music performance. The present study aims to investigate this correlation, also focusing on classical music performance.

3 Method

The purpose of the present research is to explore statistically the relationship between the level of classical music performance and the personality traits of performers, by calculating the bivariate correlation between the two main variables.

We also intend to verify previous findings related to performers specific personality profile, especially when it is linked to particular chosen musical instruments. In order to do this, we did the ONE WAY ANOVA test, to obtain the significant differences regarding personality traits between instrumental categories (strings, brass, woodwind, pianists and singers).

3.1 Variables

The first main variable is the level of music performance. In this case we measured: the general level of performance, the technical abilities and the expressive skills of the performers. We defined the technical and the expressive dimensions of music performance according to the international musicological literature and these definitions were included in the measurement scales that evaluators have used in order to assess the level of music performance in the experimental group of undergraduate music students.

The second main variable refers to the personality traits described in the Big Five model. It illustrates the personality through five main factors that include, in turn, other six sub-factors each: EXTROVERSION (friendliness, gregariousness, assertiveness, activity level, excitement seeking, and cheerfulness), AGREEABLENESS (trust, morality, cooperation, modesty, sympathy), altruism. NEUROTICISM (anxiety, anger, depression, selfconsciousness. immoderation, vulnerability), CONSCIENTIOUSNESS (self-efficacy, orderliness, dutifulness, achievement-striving, self-discipline, cautiousness) and OPENNESS TO EXPERIENCE artistic (imagination, interest, emotionality. adventurousness, intellect and liberalism). The analyzed personality profile of music performers was in the end described by 30 personality traits.

3.2 Participants

The experimental group included 130 students from a faculty of music performance (74 females and 56 males). Their number was relatively equally distributed according the four years of study.

The performing categories included in the research followed the criteria of classical music instruments. We also focused on the music instruments that have a more solo function on the stage (like violins, piano etc) and excluded the instruments that serve more as accompaniment (like percussion, tuba etc).

There were: 35 string players (most of them violin players), 36 brass and woodwind players (most of them clarinetists), 10 piano players and 49 singers (26 females and 23 males).

3.3 Instruments

The assessment of music performance was made through global evaluations of the performers made by university professors that participated in the final exams of their students. The final scores of music performance levels reflected the opinion of a board of evaluators rather than of one evaluator alone. The study used 3 scores to described music performance level: the general level of music performance, the technical level of music performance and the expressive level of music performance.

In order to measure the personality traits of music performers we used The Big Five ©plus 209 Questionnaire [18]. This instrument measures the five factors described before through 240 items that were distributed equally among factors and subfactors (48 items for each factor and 8 items for each of the 30 sub-factors). The items are created

like forced chose responses (one out of two responses), allowing the researcher to reduce respondents tendency to project a certain image of themselves. The reliability of the instrument was over 0.70 for each factor.

4 Results

Only few of the 30 personality traits described in the Big Five model correlated significantly with music performance level. We talk about the following significant factors and sub-factors: CONSCIENTIOUSNESS (with self-discipline and cautiousness), AGREEABLENESS (cooperation) and OPENNESS TO EXPERIENCE (imagination, artistic interest, and emotionality). Only these traits interfered with the musical level of performers and proved to be relevant for the artistic development.

The first relevant personality trait refers to *cooperation*. This sub-factor correlates indirect with the general, technical and expressive level of music performance, especially in the case of female performers. The individuals with high cooperation scores dislike confrontations and tend to make compromises and to give up to their own needs in order to keep good relationships with the others. The people with low cooperation scores tend to act through intimidation in order to get what they want.

The fact that female performers with high levels of music performance are less cooperative may be explained by the fact that they consider their own interests regarding their professional career as a priority. They may prefer to react less diplomatically when dealing with other people because they consider themselves as having greater responsibilities towards music than towards the others.

The technical level of music performance correlated with self-discipline and cautiousness. The connection may be considered obvious. If one person is well organized when performing difficult or unpleasant tasks, he or she will have more chances of success. This is especially the case of the technical dimension of music performance that requires instrumental or vocal virtuosity and this means performing pieces of extraordinary difficulty. Only perseverant performers get to this stage. One the other hand, cautiousness allows people to analyze their actions before doing them. Regarding to music performance, this increases self-control of complex movement involved in instrumental performing and leads to higher levels of technical music performance.

The expressive dimension of music performance was significantly associated to the *OPENNESS TO*

EXPERIENCE factor. This factor describes a dimension of people's cognitive style between differentiates imaginative, creative individuals and realistic, conventional individuals. People who report high scores related to openness to experience have greater curiosity, appreciate the artistic filed and are sensitive to beauty. They tend to be more aware of their emotions, to think in unconventional, original ways, to operate easily with abstract concepts and to avoid concrete experiences.

There is a natural analogy between being musically expressive and being open to experience. Being expressive in music performance means to go away from the conventional sonority suggested by the musical score and to consider music performance as a series of emotional nuances, of attitudes or even of visual images, rather than as a series of individual sounds with certain particularities related to intensity, frequency or duration. This happens because music results from the complex relationships between sounds, rather than the sounds themselves.

Expressive performers don't use the technical virtuosity to impress the public. They are the ones who influence the audience into having psychosomatic reactions such as the "chills effect" just by being original in the way they slightly recreate the musical piece. Being expressive in performance means to use music not for the music itself, but for communicating ideas, emotions, attitudes. This is why the correlation between *imagination* and the expressive dimension of music performance supports the conclusion that expressive performers use their fantasy in order to create a richer and more meaningful world through musical sounds and to enjoy this new world together with the public to whom they dedicate this activity.

The association between *emotionality* and the expressive dimension of music performance is also interesting. People who report high emotionality scores are more aware of their emotional life which they know and use very efficiently. In order to be an expressive performer, the musician needs to work with his / her own emotions because he or she will have to communicative them to the public in a sincere and convincing manner.

The second part of this research deled with differences related to personality traits between instrumental categories (strings, brass and woodwind, piano players, singers). We identified that brass and woodwind players are less modest than singers and less angry than string players. Also, only in the case of female performers, the brass and woodwind performers are more adventurous than

the string performers. In order to explain these results, we need to analyze the nature and the context of each category's musical activity.

First of all *singers are more modest than brass* and woodwind players maybe because of their vulnerable self-image. This may be due to the fragility of their vocal apparatus (voice is a sensitive "instrument" that can easily be affected by a multitude of physical, chemical or psychological factors) or their higher role that they have on stage. Unlike brass or woodwind players, singers appear on stage as soloists more often and this pressure may lead to higher modesty scores. Ironically these findings tend to confirm the stereotype that Woody revealed when he talked about brass players as being considered "brash, impetuous, cocky, cool, in command" [2, p. 244].

Second, *string performers are angrier than brass and woodwind players*. This result confirms Cribb and Gregory's findings [4] related to the higher levels of neuroticism among string players. The situation may be due to the fact that string players usually have a higher volume of practice than brass and woodwind do. The study of violin starts earlier (around 6 years old) than the study of any brass or woodwind instrument (around 11-12 years old), due to the physical development of performers. Moreover, brass and woodwind players will not practice more than 4 or 5 hours a day, also due to physical factors. So, more hours of practice determines higher levels of tiredness and frustration and lastly anger.

Third, female string performers are less adventurous than female brass and woodwind performers. We explained the result by analyzing the two categories' repertoire. Strings repertoire is mainly classical, whereas brass and woodwind repertoire include also popular music styles such as jazz of folk music. Performing these two types of repertoire means developing certain abilities associated to the music performance context. It is well known that classical music is usually played in concert halls, where there are strict and conservative rules related to public and performers' behavior. On the opposite, jazz or folk music is usually played in unconventional spaces such as reunions, parties etc. In this case, the performer must develop a certain sense of adventure in order to keep up with the public's requests and the social interaction demands.

The study regarding personality differences between instrumental categories has revealed that music performers' profile is rather more unitary and constant rather than divers or specific to a certain musical instrument. This confirms the findings revealed by Cribb and Gregory [4] who stated that the differences in the personality of certain types of instrumentalists may be due to tradition rather than the instrument.

5 Conclusions

The present research draws attention on the fact that there are some personality traits that correlate significantly with the level of music performance (the general level, the technical level or the expressive level).

The most important correlation built up between expression and OPENNESS TO EXPERIENCE factor, with its sub-factors (imagination, artistic, interest and emotionality). Another relevant association was between the technical level of music performance and some sub-factors related to the CONSCIENTIOUSNESS factor (self-discipline and cautiousness). Also, only in the case of women, the sub-factor cooperation correlated indirect with the general level of music performance.

When we explain these findings we have to keep in mind the bivariate correlation. On one hand, this means that the personality traits may have developed the higher levels of music performance. On another hand, the same personality traits may have been determined by the nature of the instrumental / vocal music training.

These results may have important implications in the educational field, specifically when referring to career orientation or the artistic development. The early identification of certain personality traits may have relevant effects for the developing classical music performer.

References:

- [1] Weller, J., An Introduction to Talent, Temperament and Personality for Musicians, 2003, http://www.elisioninstitute.org/aeticle-talent.html (4/27/2011, 8:49:34 PM).
- [2] Woody, R.H., The Musician's Personality, *Creativity Research Journal*, Vol. 12, No. 4, 1999, pp. 241-250.
- [3] Kemp, A., The Musical Temperament: Psychology and Personality of Musicians, Oxford University Press, 1996.
- [4] Cribb, C. & Gregory, A.H., Stereotypes and Personality of Musicians, *Journal of Psychology*, Vol. 133, No. 1, 1999, pp. 104-114.
- [5] Haller, C.S. & Courvoisier, D.S., Personality and Thinking Style in Different Creative Domains, *Psychology of Aesthetics, Creativity and Arts*, Vol. 4, No. 3, 2010, pp. 149-160.

- [6] Marchant-Haycox, S.E. & Wilson, G.D., Personality and Stress in Performing Artists, *Personality and Individual Differences*, Vol. 13, No. 10, 1992, pp. 1061-1068.
- [7] Wubbenhorst, T.M., Personality Characteristics of Music Educators and Performers, *Psychology of Music*, Vol. 22, No. 1, 1994, pp. 63-74.
- [8] Hassler, M., Birbaumer, N. & Feil, A., Musical Talent and Visual-Spatial Abilities. A Longitudinal Study, *Psychology of Music*, Vol. 13, No. 2, 1985, pp. 99-113.
- [9] Alter, J.B., Creativity Profile of University and Conservatory Music Students, *Creativity Research Journal*, Vol. 2, 2001, pp. 184-195.
- [10] Ericsson, K.A., Krampe, R.T. & Clemens, T.R., The Role of Deliberate Practice in Expert Performance, *Psychological Review*, Vol. 103, 1993, pp. 363-406.
- [11] Sternberg, R.J., *Manual de creativitate*, Polirom, 2005.
- [12] Lawrence, I., The Composer's View of the Teacher, *Psychology of Music*, Vol. 5, No. 2, 1977, pp. 30-38.
- [13] Parncutt, R. & McPherson, G., The Science and Psychology of Music Performance. Creative Strategies for Teaching and Learning, Oxford University Press, 2002.
- [14] Buttsworth, L.M. & Smith, G.A., Personality of Australian Performing Musicians by Gender and by Instrument, *Personality and Individual Differences*, Vol. 18, No. 5, 1999, pp. 595-603.
- [15] Gillespie, W. & Myors, B., Personality of Rock Musicians, Psychology of Music, Vol. 28, No. 2, 2000, pp. 154-165.
- [16] Rankin, C., The Popular Musician: Personality Traits and Their Relationship to Creativity, Self-Esteem and Clinical Symptomatology, The Wright Institute, 2005.
- [17] Vuust, P., Gebauer, L., Hansen, N.C., Jorgensen, S.R., Moller, A. & Linnet, J., Personality Influences Career Choice: Sensation Seeking in Professional Musicians, *Music Education Research*, Vol. 12, No. 2, 2010, pp. 219-230.
- [18] Constatin T., Macarie, A., Gheorghiu A., Iliescu, M., Fodorea A. & Caldare, L., Chestionarul Big Five Plus Rezultate preliminare, în *Cercetarea psihologică modernă: Direcții și perspective*, vol. 2 (coord. M. Milcu), Editura Universitară, 2008.
- [19] Csiksentmihaly, H.J. & Getzels, J.W., The Personality of Young Artists: An Empirical and Theoretical Exploration, *British Journal of Psychology*, Vol. 64, 1973, pp. 91-104.