

More Similarities than Differences among Elite Music Students in Jazz, Folk Music and Classical Genre – Personality, Practice Habits and Self-rated Music-related Strengths and Weaknesses

Maria Sandgren

Department of Psychology, Stockholm University, Sweden
maria.sandgren@psychology.su.se

ABSTRACT

The aim of the study was to investigate a) if music students have a unique personality profile, and b) if music students in different genres differ in practice habits and musical self-image. Participants were music students in different music genres (n=96; jazz n=31, folk music n=33, classical genre n=32) from two conservatories in Sweden. Results indicated that music students differed significantly from students in psychology on agreeableness and openness. Students in classical genre practiced significantly more hours per week than students in jazz and folk music. Students in folk music practiced the most days per week in ensemble outside the school curriculum. A thematic analysis followed of the students' descriptions of their strengths and weaknesses related to their musical development. Five main themes were identified; Learning, Interpretation, Playing Technique, Group Playing and Psychosocial Aspects. The metaphor of Musical Self-image was chosen as an appropriate overall description of the themes. Of the five themes, Learning was the most frequently mentioned theme by the students. In summary, the personality profile of music students differed only moderately to the control group. In addition, music students were more similar than different regarding practice habits and musical self-image.

I. INTRODUCTION

Very little is known about possible differences in music-making across musical genres. The overall aim of the study is to explore three essential aspects of musical development - practice, personality and self-image among highly qualified student in three musical genres.

Practicing. Researchers agree that the quantity of practice is of essential importance for the determination of music performance expertise (Feltovich et al., 2006; Jorgensen & Hallam, 2009; Sloboda et al., 1996). In order to reach a high level of musical performance, the individual needs to start very early with practice on the future main instrument. The starting age for formal lessons may differ due to instrument and choice of career path in music. Instrumentalist students started as early as age 11.3 years, and students in music education started later at 14.2 years (Jorgensen, 2001). A comparison between instruments showed that pianists and violinists started at ages 7.8 and 9.9 years, respectively. Brass and woodwind musicians started at age 11-12 years. Vocal students had their first lesson at 14.4 years of age. In a study by Sandgren (2009), opera students started taking formal singing lessons at 19.5 years on average. In another study of music students (Sloboda et al., 1996), there was no difference in starting age based on instrument types.

Concerning practice habits in the present, the literature is mixed. Various instrumental groups might differ in how much they practice. Keyboard students at a conservatory devoted the

most time to practice followed by students on strings, woodwind, brass and voice (Jorgensen, 1997). It should be added that differences in present practice time usually are small across groups of instruments, as most students practice with high regularity - around 6-7 days a week (Jorgensen, 2002).

Personality. The role of personality and self-esteem for engagement in the intense amount of practice is less known. The literature offers some evidence regarding links between personality and artistic activity. The heterogeneous group of artists are primarily characterized by emotionality and non-conformity (Feist, 1998), but evidence for particular personality aspects of musicians are mixed. Kemp (1996) suggests that introversion in particular characterizes the skilled musicians, but also sensitivity, openmindedness and tenderness are part of their personality profile. Buttsworth and Smith (1995) indicate that performing musicians are more emotionally stable and sensitive compared to controls. Singers appear to differ from instrumentalists and share personality traits with dancers, such as emotionality and hypochondriasis (Marchant-Haycox & Wilson, 1992).

The assumption that musicians playing different instruments would differ in personality is based on the stereotyped view of musicians according to Langendörfer (2008). In her study on orchestral musicians, there was one single finding on personality traits: strings scored higher in conscientiousness compared to brass and woodwind players. She argues that instrumental groups mainly differ in their work conditions. Certain work conditions demand more rigorous preparations and other conditions foster social bonding. Therefore, strings, brass and woodwind players are not so different in personality as the literature and musicians suggest.

As most studies involve samples of orchestral musicians, i.e. in the classical genre, the question arises if musical genre could be linked to certain personality aspects. In a study by Gillespie and Myers (2000), rock musicians were emotionally unstable, low on agreeableness and conscientiousness. Dyce and O'Connor (1994) found that popular musicians were extraverted, emotionally unstable and imaginative.

Other aspects of the music-making process might be linked to personality. Musicians have a long history of practice and training before they succeed in high performance (Ericsson et al., 1993). How the individual carries out practice are of importance for learning and development. Openness to experience and extraversion predict engagement in further training among professionals (non-musicians) (Barrick & Mount, 1991). It is also known that creative individuals are open to experience, self-confident, less conscientious, ambitious, driven and dominant (Feist, 1998).

The role of self-esteem for musical performance is rarely studied. Music students related their self-esteem to how well

they succeeded during a performance (Dews & Williams, 1989). Opera singers linked also their self-worth to their artistic accomplishments (Sandgren, 2002).

The literature on personality and possible links to musical performance suggests that musicians would be introverted, emotionally stable, self-confident, driven and open to experience. Therefore, another purpose of the present study was to investigate if music students would have a personality profile unique to controls regarding self-esteem and traits from Big Five Model. Possible differences between musical genres and also between music and students in psychology were of interest.

Elements of musical development. As previously stated, the amount of instrumental practice from an early age is of vital importance for later musical performance (Feltovich et al., 2006). It is clear that the individual learns a broad range of skills during instrumental training and music playing, but the literature is less specific on which skills the individual is acquiring. Gaunt and Hallam (2009) list skills related to musical expertise such as rhythmic accuracy, intonation, understanding harmony, articulation, expressive tone quality, performance skills and communicating with other performers. While, some skills are required for a musical career, others are general and may contribute to other areas of expertise as well.

Sandgren (2005) proposes a model of major features in the artistic development for students in opera training. The model takes a developmental perspective in account where singing technique, expressive skills, interpersonal skills, motivational processes, establishment of voice type and suitable repertoire are the main features in the skill acquisition process. The outcome variables are artistic autonomy, artistic competence and change in self-concept. Artistic autonomy is the ability to make artistic decisions autonomously. Artistic competence means to have attained a high level of artistic skills in a broad sense. These changes in autonomy and competences interact with the self-concept of the opera student. Aspects of self-concept are personal growth and increased self-confidence.

Although the literature is rich on studies concerning various aspects of musical development, there is a lack of studies presenting the students' own perspective on their musical development. In the present study, the students aspired to be performing musicians and studied at conservatoires, and were in their final years of formal music education. The study also aimed to explore how students in different musical genres would describe their strengths and weaknesses with respect to the musical development of their main instrument.

II. METHOD

A convenience sample of music students ($n=96$; jazz $n=31$, folk music $n=33$, classical genre $n=32$) at two prestigious music colleges in Sweden was gathered. Participants were 44 women (M age 25.5, SD=5.0), and 51 men (M age 24.9, SD=3.4). Their main instruments were string (25%), voice (24%), wind and brass (18%), plucked instruments (10%), keyboard (8%), percussion (7%), and free reed instruments (4%) (Table 1). A comparison group of undergraduate students in psychology ($n=134$; women $n=73$, M age 23.0, men $n=61$, M age 24.8) was included.

The music students filled in a questionnaire on demographic data, musical genre, instrument, career plans (soloist, part in ensemble or otherwise). They indicated also the extent of their present practice habits during the last week, measured in hours practicing at a regular occasion and how many days per week. They were asked to describe their strengths (3 open-ended items) and weaknesses (3 open-ended items) essential for the musical development on their main instrument.

Both music students and psychology students filled a well validated measurement of Big Five Inventory (BFI, 44 items, John & Srivastava, 1999). This framework suggests that most individual differences in human personality can be classified into five broad, empirically derived domains; Neuroticism, Conscientiousness, Agreeableness, Extraversion and Openness. The BFI scales have shown substantial internal consistency, retest reliability and clear factors. Items were rated on a five-point rating scale ranging from 1 (not at all) to 5 (agree completely).

Self-esteem was assessed using the scale of self-esteem (5 point Likert scale from 1=do not agree at all to 5=agree completely) with items tapping achievement and insufficiency (12 items, Johnson & Blom, 2007). The scale has shown high reliability and good validity.

Table 1. Frequency (%) of main instruments in groups of students in different music genres.

Main instrument	Music genres		
	Jazz (%) n	Folk Music n (%)	Classical n (%)
String	6 (6)	9 (9)	10 (10)
Voice	9 (9)	7 (7)	8 (8)
Wind & Brass	6 (6)	3 (3)	9 (9)
Plucked instr.	2 (2)	8 (8)	-
Keyboard	2 (2)	1 (1)	5 (5)
Percussion	5 (5)	2 (2)	-
Free reed instr.	1 (1)	3 (3)	-

III. RESULTS

A. Personality Traits & Self-esteem

A series of one-way analyses of variance (ANOVA) for personality aspects for groups of students were conducted. There was no difference on personality and self-esteem between students in jazz, folk music and classical genre. However, music students reported significantly higher levels of agreeableness ($F(1, 225)=4.650$, $p<.05$) and openness ($F(1, 227)=5.016$, $p<.05$) compared to psychology students. No group difference were found for self-esteem (Table 2).

B. Practice Habits

One-way analyses of variance (ANOVA) for practice habits among students in various music genres were conducted. Results showed that the students differed in when they started taking formal lessons on their main instrument. Jazz students started to take formal lessons at 14.1 years whereas students in folk music and classical genre at around 11 years ($F(2, 95)=3.993$, $p<.05$). It is worth noting that female students started to take formal lessons earlier (M age 10.5) than male students (M age 13.0) ($F(1, 94)=4.574$, $p<.05$). There was no

difference regarding when the students actually started to make serious plans for a professional career (M age 16.2).

Table 2. Means (SD) for personality traits according to Big Five and self-esteem among music students (n=96) and psychology students (n=134).

Personality aspects	Music students M (SD)	Psychology students M (SD)
Neuroticism	2.8 (.7)	2.9 (.8)
Extraversion	3.5 (.6)	3.5 (.7)
Conscientiousness	3.5 (.6)	3.5 (.6)
Agreeableness	3.9 (.5)	3.8 (.6)
Openness	4.0 (.5)	3.8 (.7)
Self-esteem	3.0 (.7)	3.0 (.7)

Significant results were found for present practice habits (Table 3). Students in classical genre practiced more in solitary measured in hours per week ($F(2, 91)=16.021, p<.001$) compared to students in jazz and folk music. Significant differences for ensemble practice were found. Students in classical genre practiced the least and folk music students the most in ensemble within the college curriculum ($F(2, 91)=4.239, p<.05$). No difference was found between genres regarding practice in ensemble outside the college curriculum. The total amount of practice during a week differed between genres ($F(2, 90)=3.235, p<.05$). Students in the classical genre practiced more (measured in hours per week) than students in jazz and folk music.

Table 3. Means (sd) for amount (hours per week) of practicing in solitary and in ensemble among music students in three genres.

Students in different genres	Practice in solitary	Practice in ensemble in college	Practice in ensemble outside college	Total hours of practice
	M (SD)	M (SD)	M (SD)	M (SD)
Students in jazz	10.4 (5.6)	6.1 (3.7)	5.0 (3.6)	21.6 (9.0)
Students in folk music	10.3 (6.8)	6.7 (4.4)	5.4 (4.0)	22.2 (10.2)
Students in classical genre	20.1 (10.5)	4.1 (2.8)	3.6 (4.1)	27.9 (12.8)

C. The Musical Self-image

Regarding career aspirations, one χ^2 was carried out showing that students in different genres did not differ in their aspirations to work as soloist, in ensemble, a combination of soloist and ensemble or other (for example teacher) ($\chi^2(6, 96) = 8.439, n.s.$). Almost half of the students (47%) envisioned to

play in an ensemble and around one third (27%) envisioned a career as a soloist only.

The students were asked to indicate in their own words three strengths and three weaknesses, about the musical development on their main instrument. A thematic analysis followed (Braun & Clarke, 2006) where the aim was to identify main and sub-themes of the open-ended items (Table 4).

Table 4. Overview of main themes and sub-themes of self-rated strengths and weaknesses for musical development on the main instrument among music students.

STRENGTHS (100%)	WEAKNESSES (100%)
Learning (38%) Focus & discipline Learning skills Practice skills Talent & potential Openness Self-esteem Independence	Learning (54%) Focus & discipline Learning efficiency Practice skills Talent & potential Openness Self-esteem -
Interpretation (37%) Dynamics Personal sound Emotions Music tradition Musical ideas Timbre Ear training Phrasing Improvisation	Interpretation (7%) - Personal sound Emotions Music tradition - - Ear training Phrasing Improvisation
Playing Technique (33%) Technical skills Intonation Rhythmic skills Ergonomics Music theory -	Playing Technique (26%) Technical skills Intonation Rhythmic skills Ergonomics - Previous learning experiences
Group Playing (12%) Collaborative skills Tuning in	Group Playing (8%) Collaborative skills Tuning in
Psychosocial Aspects (4%) -	Psychosocial Aspects (5%) Time constraints

The items were analyzed separately under the overall categories of Strengths and Weaknesses, as stated in the question to the students. The sub-themes were identified and coded within the explicit and semantic meanings of the data, and later sorted into four main themes named Learning, Interpretation, Playing Technique, Group Playing and Psychosocial Aspects. Even if the sub-themes were categorized under Strengths and Weaknesses, they contained basically the same meaning, but differed in positive or negative valence for example the theme of Learning could be related to learning

efficiency or deficiency. Some sub-themes could only be found for Strengths for example independence in Learning, dynamics, musical ideas and timbre in Interpretation. Some sub-themes were only identified as aspects of Weaknesses, for example previous learning experiences in Playing Technique and time constraints in Psychosocial Aspects. The metaphor of Musical Self-image was selected as an appropriate overall description of the students' open-ended answers.

In the next step of the item analysis, frequencies of the main themes were calculated. Results indicated that the theme of Learning was the most frequently indicated sub-theme for both Strengths (38%) and Weaknesses (54%). For Strengths, the most frequent items regarded Learning (i.e. to be focused, disciplined and have an attitude of openness). For Weaknesses, the most frequently indicated items were to be focused, disciplined and lack of self-esteem.

The least frequently indicated sub-themes were Playing Technique (13%) and Group Playing (12%) for Strengths and Interpretation (7%) and Psychosocial Aspects (5%) for Weaknesses.

IV. CONCLUSION

The aim of the study was to explore if music students would display a unique personality profile and if music students in different genres would differ in practice habits and musical self-image.

Personality. Results showed that music students in various genres did not differ in personality aspects. However, music students differed significantly from the control group on agreeableness and openness, yet the differences were small. Previous findings (Kemp, 1996) on introversion among musicians were not supported, but openness among creative individuals (Feist, 1996) and musicians (Dyce & O'Connor, 1994) was confirmed. With respect to self-esteem, both music and psychology students reported somewhat elevated scores which is common in young adulthood (Hallsten et al., 2005). This sample of very accomplished music students in different genres appear to dispose a personality profile of being emotionally stable, sympathetic, curious, open-minded, aesthetically disposed and to have robust self-esteem relative to their peers.

Practice habits. Along with an assessment of instrumental practice in solitary, the present study also took practice in ensemble within or outside the school curriculum into consideration. Students in jazz and folk music practiced more in ensemble within the school curriculum than students in classical genre. Students in classical genre practiced the most in solitary and also as measured in hours per week. The reasons for this variation in practice hours and contexts are unknown, but might be related to the time needed for genre-specific skills to develop.

Previous results (Jorgensen, 2001) regarding starting age for formal lessons were confirmed for students in folk music and classical genre (around 11 years), but not for students in jazz who started at around 14 years. Moreover, the results indicated that music students engaged in practice around 22-28 hours per week, ranging 9-13 hours.

Musical self-image. In the thematic analysis of the musical self-image, four main themes were identified; Learning,

Interpretation, Playing Technique, Group Playing and Psychosocial Aspects. The overall result is that the students felt most confident in their skills to learn and develop (Learning) and in how well they succeeded in interpreting the music (Interpretation). At the same time, they were less confident and felt inadequate in their learning skills (Learning), but also in how well they played on their main instrument (Playing Technique).

Learning, in particular, appears to be an integrative part of the students' self-rated strengths and weaknesses, as the items in Learning accounted for 46 percent of all items. Learning concerned efficiency and discipline and self-esteem. It is possible that the marked focus on achievement-related issues in Learning is associated with the intense and demanding learning process at the music college. Another frequently mentioned strength was Interpretation (33%). The content of Interpretation fits well with what students are supposed to learn within the school curriculum, as it is expected that they have already acquired a very good playing technique and are therefore able to focus on their interpretative and expressive skills. Concerning Group Playing, i.e. skill to function well in an ensemble, it was identified as a separate and very distinct theme compared to other themes.

Previous findings on musical development have rarely indicated (Gaunt & Hallam, 2009; Sandgren, 2005) that learning efficiency is an essential aspect of musical expertise. The present study did yet confirm other aspects of musical expertise such as intonation, personal expression and communicating with other performers. It is possible that how efficient the individual is in learning and improving his or her musical expertise is specifically important for individuals in education. Later in the career, it might be more important to be able to perform on a high and consistent level in accordance with expert performance (Feltovich et al., 2006).

The students were invited to freely indicate 3 strengths and 3 weaknesses, and a broad range of items were generated due to the open-ended question. The decision was taken to analyze the data as complete data sets for Strengths and Weaknesses, respectively, in order to create heterogeneous themes. The thematic analysis succeeded satisfactorily in creating main themes and sub-themes, but some items representing aspects of Interpretation such as Phrasing proved to be difficult to categorize.

The sampling method had the advantage to closely tap the students' perception of their musical self-image, but lacked in precision. The next step is to analyze frequencies more closely in order to explore if the students would describe their musical self-image differently depending on their respective expertise in jazz, folk music or classical music.

Further studies are warranted to better understand the students' strong emphasis on learning-related issues. They described a wide range of aspects related to efforts behind successful or failed learning outcomes. As the results on personality aspects indicated, they are emotionally stable and have a robust self-esteem, so their concerns of learning-related aspects have to be understood from another point of view. Possibly, the focus on learning can be interpreted from two angles, partly as a kind of work or educational strain, partly as a lack of knowledge of learning strategies on this high level of music development.

As the sample of music students was fairly large (n=96), generalizations can be drawn to similar groups of instrumental students at specialized conservatoires. All students had passed highly qualified assessments of their musical skills and can be expected to represent a group of highly accomplished and promising performing musicians. Generalizations should only be done to the studied music genres and students on this level of musical development.

Moreover, future studies are needed to answer for differences in practice time. It appears as if these students, in particular jazz students, start to take formal lessons somewhat later than students in other countries. Results showed also that there were differences in practice time for various music genres.

In summary, the main result of the study is that students in jazz, folk music and classical genre are more similar than different in the personality profile. As suggested by Langendörfer (2008), it seems as if assumptions regarding personality differences would be due to stereotypes. Another intriguing finding is that the students in jazz, folk music and classical music differ in practice habits, but the individual variation was large. Another important result is that music students are very concerned about how they can learn and develop efficiently. Their ability to learn was shown to be an important aspect of their musical self-image (i.e. to become a professional performing musician). Future analyses of the data will show if and how students in different musical genres are more similar or different regarding musical self-image.

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