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# CHARACTERISTICS OF AN OUTSTANDING MUSICAL TALENT - A CASE STUDY

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# **Keywords:** giftedness, musical talent, outstanding talent, case study, organ

virtuoso.

Abstract/Izvleček The purpose of this study is to investigate the expression of thirty-two characteristics of a musically talented person in various life periods (from three to thirty-five years of age), in a case study of an internationally renowned musician and organist, Aleksey Vylegzhanin. The results show that the expression of the characteristics of his musical talent increased with age. With enough rehearsal and support from the environmental factor, his characteristics increased to a level above average, compared to his peers. These were also predispositions for the musical development of the organ virtuoso.

#### Značilnosti izjemnega glasbenega talenta – študija primera

# Ključne besede:

nadarjenost, glasbeni talent, izjemen talent, študija primera, orgelski virtuoz.

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Namen študije je raziskati izraženost dvaintridesetih značilnosti glasbenega talenta v različnih življenjskih obdobjih (od 3. do 35. leta) s študijo primera mednarodno priznanega glasbenika, orglavca, Alekseya Vylegzhanina. Rezultati kažejo, da se je njegova izraženost značilnosti glasbenega talenta s starostjo ob zadostni količini vaje ter podpori okoljskih dejavnikov stopnjevala v vse bolj nadpovprečno v primerjavi z vrstniki. Prav to pa so bile predispozicije za glasbeni razvoj orgelskega virtuoza.

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#### Introduction

The long, rich organ tradition with excellent organ virtuosos and instructors continues and is increasingly distinguished by a younger generation of extremely talented organ virtuosos. Among these, we can currently recognize on the organ scene Thomas Ospital, Nathan J. Laube, Raul Priet Ramirez, Paolo Oreni, Martin Schmeding, Ulrich Walther, Gunther Rost, Balázs Szabo, László Fassang, Konstantin Volostnov, Cameron Carpenter, and Aleksey Vylegzhanin - the participant in our research. Many organ virtuosos or concert performers also establish themselves as organ instructors and members of juries at internationally recognized competitions. For organists who decide to pursue a professional career, the international space offers study fields and education at a high professional level, at internationally recognized institutions or music universities such as the Paris Conservatory, the State University of Music and Performing Arts Stuttgart, the University of Music and Theatre Leipzig, the University of Music and Performing Arts Graz, the University of Music and Performing Arts Vienna, Liszt Ferenc Academy of Music in Budapest, the Royal Academy of Music London, the Royal Conservatory The Hague (University of the Arts The Hague), Eastman School of Music Rochester, and many others. Studying at a university is considered the crown of music education, during which the earlier periods of musical development play an important role. The developmental paths of virtuosos differ, as each talent represents an individual with differently expressed characteristics. A holistic study of an outstanding musical talent, an organ virtuoso, and the expression of characteristics in various life periods, however, is the main purpose of the present study.

In dealing with an outstanding talent, we can rely on several theories, including the Pentagonal Implicit Theory of Giftedness (Sternberg and Zhang, 2004). The Pentagonal Implicit Theory of Giftedness summarizes five criteria that define an individual as gifted. The *excellence criterion* requires that an individual stand out as above average in one or more areas. This is complemented by a *rarity criterion*, which states that an individual who is gifted, be exceptionally outstanding in a particular area, which is a rarity in comparison with the majority - average. The *productivity criterion* states that the criterion by which an individual is assessed as above average or "superior" leads or potentially leads to productivity, whereby the "superiority"

of the individual must be proven by one or more tests that are valid assessments, and this is a *demonstrability criterion*. The last is called the *value criterion*, according to which a person marked as gifted must be assessed as above average by the society in which he lives and works, and high results of a gifted person must be assessed as favourable to or for the good of society (Sternberg and Zhang, 2004).

The review of the literature shows that the terms giftedness and talent are often used interchangeably. Gagné's Differentiated Model of Giftedness and Talent (DMGT) (2005) has established definitions for both concepts, since Gagné's first presentation in 1985, explaining that giftedness refers to innate abilities, while talent refer to skills that can be developed and which help us achieve good results (Gagné, 2004). In both concepts, an individual must rank in the top ten percent of the best among their peers in at least one area. The model shows the transformation of specific innate abilities into outstanding abilities specific to a particular professional field, with the author arguing that you can almost certainly not become talented without having been previously gifted (Gagné, 2005). In addition to Gagné's Differentiated Model of Giftedness and Talent (2005), a clearer picture in terms of distinguishing giftedness and talent is provided by the Munich Model of Giftedness (Heller et al., 1992, 2001, in Heller et al., 2005; Heller and Schofield, 2008; Ziegler and Heller, 2000), the Munich Dynamic Ability Achievement Model (Perleth, 1997, 2000, 2001, in Heller et al., 2005), and the Pyramid of Talent Development (Piirto, 2008), which all begin to show the developmental process of transition from innate abilities, potential or giftedness, on the one hand, to achievements, developed abilities or talent, on the other.

When studying the characteristics of the development of a musician's talent (in our case an organist), it is considered that, in this specific field, we are talking about musical talent and not about giftedness. Based on the acceptance of the theoretical distinction between giftedness and talent, McPherson and Williamon (2006) adapted Gagné's Differentiated Model of Giftedness and Talent (2005) and named it the Differentiated Model of Musical Giftedness and Talent. In addition to Gagné's model, they propose at least eight different types or areas of musical talent: performing, improvising, composing, arranging, analysing, appraising, conducting and teaching. They are all related to professional occupations and fields of disciplines from which musicians can make a living.

The findings of many authors are related to the development of musical talent and the stages of its development (Matuszewska, 1990, in Garces-Bascal, 2014; Hargreaves and Galton, 1992, in Garces-Bascal, 2014; Reis, 2009). The development itself is conditioned by the characteristics of the musical talent and the influences of its factors. The primary factor in musical success and the condition for learning music and acquiring vocal-instrumental performance competences involves musical abilities, the level and quality of which are among the basic predispositions, the selection criteria at the beginning of special music education and the basis for effectiveness in musical activity, performance skills and the development of expertise and professional careers (Bogunović, 2008). The development of musical ability in the literature often refers to the topic of musical development, which brings a general framework of characteristics for a certain age period (Kovačič, 2016). According to B. Sicherl Kafol (2001), musical development includes the development of elementary musical abilities, such as a rhythmic and melodic ear, and higher-order musical abilities, such as aesthetic and evaluation skills, a harmonic ear, and analytical listening.

An important aspect of the giftedness phenomenon is creativity (Runco, 1993, in Sternberg, 2004). Many characteristics of creative people can be found in the literature, such as flexibility, fluency, originality, divergent thinking (musical fantasy) and creative problem solving (Kovačič, 2016). When dealing with musical talent, the context of creativity is reduced to *musical creativity*, which belongs to a wide range of areas of human creativity. J. Haroutounian (2009a) defines musical creativity as a process of musical creation that involves inner realization and interpretive manipulation of sound and communication with others in a unique direction, while A. Padula (2009) defines it as the ability through which persons can express their own personal relationship with the realm of sound; they use the abilities of thought, body, and soul. It is found in musical activities related to creating/producing music: listening, performing, conducting, arranging, composing, etc. Musically gifted and talented people have a high level of this ability; Gardner defines it as musical intelligence, one aspect of which is musical creativity (Kovačič, 2016).

One of the eight types of musical talent in the Differentiated Model of Musical Giftedness and Talent (McPherson and Williamon, 2006) is performing talent. *Musical performance* is inextricably linked to dedicated work and achievements and early recognition of talent, which depends on the rapid development of performance skills and abilities (Kovačič, 2016).

According to Sloboda and Ericsson, over time, instead of an innate musical capacity, deliberate practice becomes a decisive factor in musical talent (Haroutounian, 2009a). In the Slovenian school area, the term musical performance refers to musical expression, which means the performance of music and is reflected in performance achievements (Kovačič, 2016). According to the Curriculum for Music Education (Holcar et al., 2011), the areas of music performance are as follows: singing, playing an instrument, and movement-dance. We assume that the aesthetics of musical expression in musically talented students is expressed above average, compared to peers. We talk about the aesthetics of musical expression when the pupil's musical performance or achievements reflect a high level of knowledge, ability, skill, technique, interpretation and a sense of art (Kovačič, 2016).

Musical knowledge and musical activity are also important and well-represented areas of a musical talent. When we talk about the musical knowledge of musically talented pupils, we mean primarily knowledge relating to the acquisition of the professional vocabulary and rules of musical language or music theory; J. Mills and McPherson (2006) use the term musical literacy. According to B. Sicherl Kafol (2001), musical knowledge in terms of the integrity of the music learning processes is always the result of the development of musical ability and skill and includes concepts and musical vocabulary. Musical knowledge and the level of ability are related to the length of formal learning of music (Ericsson et al., 1990, in Dai and Schader, 2002). Providing early musical activities is the domain of preschool education and the family, until the child enters school. The author Sloboda found that children who were highly exposed to and engaged in music through informal musical activity before entering school showed noticeable, above-average musical ability, compared to their peers upon entering school (Haroutounian, 2009b). Early involvement in appropriate musical activities may influence the development of absolute pitch (Haroutounian, 2009b; Chin, 2003), but it is not necessary for absolute pitch to develop. Referring to musical activities, it is interesting to note that engaging in music and later success are not necessarily related. S. A. O'Neill (1997) states that more girls are involved in musical activity at school and are also more successful than boys, while men later dominate the music professions and achieve higher success rates in music careers.

It draws on several studies showing that musical achievement depends, not only on an individual's musical ability, but also on the interaction of cognitive, social, environmental, and motivational factors, the individual's experience, education, aspirations, attitude towards music and the process of musical learning.

Among the *non-musical characteristics*, the following determinants of musical talent are important: motivation, concentration, perseverance, readiness to work, learning, interest, and listening and following instructions (Kovačič, 2016). D. Sisk (2009) sees motivation as a driving force behind all individual actions. It is a process that involves initiating, persevering, and guiding one's own, self-oriented behaviour. According to M. Juriševič (2012), motivational initiators include interest, goals, values and complexity, and motivational enhancers include self-esteem and the reasons that pupils attribute to their success or failure in learning. Factors such as hard work, perseverance, passion, and social competence are important for outstanding achievement (Rinn, 2012, in Worrell, Olszewski-Kubilius and Subotnik, 2012). Orlick and Partington (1988, in MacNamara and Collins, 2009) state that the development of excellence includes goal setting, realistic evaluation of achievements, imagination, dedication, quality of exercise, coping with pressure and motivation. In the context of a holistic, integrated, multidimensional view of a musical talent, six major areas of characteristics of a musical talent were identified: musical abilities, musical creativity, musical performance, musical knowledge, musical activities and non-musical characteristics. Theoretical Model of Characteristics of Musical Talent (Figure 1) was chosen, in which a wide range of these characteristics are included (Kovačič, 2020, 2016; Kovačič, Blažič and Črčinovič Rozman, 2015; Kovačič and Črčinovič Rozman, 2014; Črčinovič Rozman and Kovačič, 2010; Blažič, Črčinovič Rozman and Kovačič, 2009).

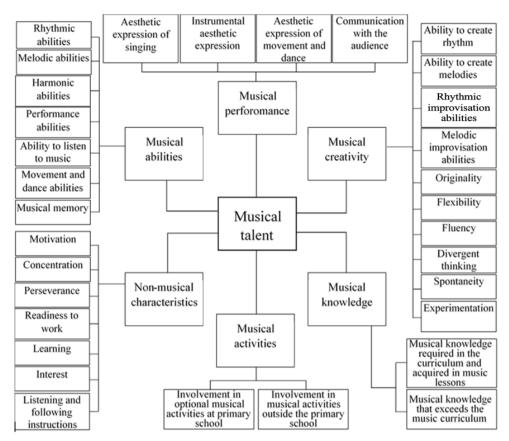


Figure 11. The Theoretical Model of Characteristics of a Musical Talent (Kovačič, 2016, p. 194)

# Method

# Goals

The purpose of the research is to investigate the expression of the characteristics of an outstanding musician, with an outstanding musical talent in different life periods. The participant in the case study is a professional organist, Aleksey Vylegzhanin (Russia/Austria), hereinafter A. V.

# Research questions

In the study, we explored whether the characteristics of Aleksey Vylegzhanin's musical talent were above average in all six areas (musical ability, musical creativity, musical performance, musical knowledge, musical activity and non-musical characteristics), what is the deviation of the considered characteristics from the average population or peers at different life stages, and whether and how the expression of these characteristics were enhanced or escalated through different life stages of the participant A. V.

# Measurement instruments

For the research, we developed and used a modified measurement instrument (a questionnaire), which had been applied in a previous study (Kovačič, 2016). The questionnaire includes a set of 32 characteristics of a musical talent, for which it is necessary to note deviation from the average population or peers in different life stages: early childhood (3–6 years), middle childhood (6–8 years), late childhood (9–11 years), early adolescence (12–14 years), middle adolescence (15–17 years), late adolescence (18–20 years), and early adulthood (20–35 years). Deviations of characteristics are assessed by periods using a 7-point rating scale containing the following levels: 1. very below average, 2. moderately below average, 3. slightly below average, 4. average, 5. slightly above average, 6. moderately above average, 7. very above average. Thirty-two criteria (characteristics) are divided into six areas for assessing the characteristics of a musical talent: musical ability (7 criteria), musical creativity (10 criteria), musical performance (4 criteria), musical knowledge (2 criteria), musical activity (2 criteria) and non-musical characteristics (7 criteria).

#### Process

The study was conducted remotely because of the COVID-19 epidemic. Data collection took place in April 2020. A questionnaire was administered to the study participant A. V.; it was sent in electronic form (in English). The participant returned it in electronic form after one week. The review of the answers was followed by a consultation conversation with the participant via videoconference (MS Teams application). A. V. read the case study before publication and approved the publication of the findings.

# Participant

Aleksey Vylegzhanin (Russia/Austria, 1987) is an outstanding artist and a prizewinner in many renowned national and international competitions, who has been successfully building his organ career. Apart from the organ, he regularly performs on other keyboard instruments (piano, harpsichord) and actively composes.

He received his first music experiences from his parents – professional musicians (father – opera singer and mother – conductor). At the age of six, he began his formal music education with piano lessons at the Music lyceum in Novosibirsk (Russia), which specializes in children with extraordinary musical talent. His interest in the organ developed a few years later. Subsequently, A. V. continued his music education at the Novosibirsk M. I. Glinka State Conservatory (Russia), where he studied organ in the class of Professor Natalya Baginskaya. After his first organ degree in 2010, he continued his organ studies at the University of Music and Performing Arts in Graz (Austria) with prof. Gunther Rost, where in 2018, he received his master's degree with honour. He is currently studying church music at the University of Music Graz.

A. V. began performing his first concerts at the age of six, and at the age of nine began to receive numerous awards at national and international competitions. During his musical education, he attended several master classes with renowned musicians: D. Roth, Z. Szathmary, L. Lohmann, J. van Oortmerssen, E. Bellotti, W. Porter, and N. Hakim. He regularly gives concerts in Russia, Slovenia, Croatia, Germany, Austria, and England, as a solo organist or in collaboration with renowned musicians, choirs, orchestras, and chamber ensembles. Among the most important concerts are the gala concert in Moscow Cathedral (2009), regular solo concerts in the Cathedral and Church of the Sacred Heart of Jesus in Graz (Austria), several projects in Mumuth Concert Hall in Graz: organ@mumuth (2013), Petr Eben: Faust (2014), Organ on Stage (2015), Schlafes Bruder (2016), projects with the composer Reiko Yamada as part of the Orgelfrühling Steiermark festival (2018 and 2019), collaboration with an internationally renowned ensemble Klangforum Wien (2019), and many others.

He is especially challenged to perform organ works by modern and contemporary composers, as is evident from the CDs that he has recorded: *Klaus Lang – Organ Works Vol. 1* (GOD Records) and *Aleksey Vylegzhanin plays Naji Hakim* (Klangdebüts, Vol. 53). Apart from classical music, he is also active in jazz, collaborating with renowned musicians and ensembles.

He recorded a CD of his own compositions with the Slovenian jazz singer Lina Rahne. Currently, he is working on a new album with his own arrangements of Mozart's opera arias. In addition to giving concerts, he also works as an organist in many churches in Graz and the surrounding area, where he collaborates with numerous choirs and orchestras, and has a special interest in interdisciplinary performances.

# Qualitative case study results and discussion

# Musical ability

In early childhood, in rhythmic ability (1), melodic ability (2) and harmonic ability (3), it was shown that A. V. did not deviate from the average. Between 6 and 8 years of age, he began to deviate slightly above the average and in early adolescence moderately above the average, compared to his peers. The leap occurred at the age of fifteen, when he began to deviate very much above average from his peers. In early childhood, performance abilities (4) were slightly below average, between 6 and 8 years of age they were average, and in late childhood (9-11 years) he began to deviate slightly above average, compared to his peers. The latter progressed to moderately above average between the ages of 15 and 17, and the leap occurred at the age of eighteen when he began to deviate very much above average, compared to his peers. The ability to listen to music (5) escalated from average to moderately above average throughout childhood. The leap occurred in adolescence when he began to deviate very much above average from his peers, and this deviation persisted well into the last studied period of his life (early adulthood, 20–35 years). Movement and dance abilities (6) were moderately below average at all of the relevant life stages. Musical memory (7) grew from slightly below average to slightly above average in childhood (3-6 years, 6-8 years, 9-11 years). Between the ages of 15 and 17, he began to deviate moderately above average, and at the age of eighteen, very much above average, compared to his peers.

We can deduce that the fastest deviation began in rhythmic ability, melodic ability, and harmonic ability and in the ability to listen to music, in which A. V. started deviating slightly above average from his peers at the age of six. In the ability to listen to music, this deviation rose to very much above average in early adolescence from the age of twelve, and in rhythmic ability, melodic ability, and harmonic ability from the age of 15.

The latter confirms the claim of E. Winner and Martin (2000) that the essential characteristic of a musically gifted child is sensitivity to the structure of music tonality, harmony, rhythm, and the ability to hear the expressive qualities of music. Sensitivity to the structure allows the child to remember the music and easily sing or play it again, transpose, improvise, invent, or rework. Performance ability and musical memory were slightly below average in early childhood (3-6 years). However, by the age of eighteen, these had developed to a level very much above average, compared to his peers. It should be noted that the research participant began attending the Music lyceum in Novosibirsk (Russia) at the age of six, an institution specializing in children with extraordinary musical talent, which explains that A. V., until the age of fifteen, was being measured against and compared with peers who were also extremely talented. In contrast to musical ability, movement and dance ability remain moderately below average in all studied periods of his life. The latter can be explained as a characteristic of talent that was expressed in childhood as below average, compared to (extremely talented) peers, and A. V. also stated that this characteristic did not develop because he showed no interest in it, as a result of which there was not enough motivation and practice present.

# Musical creativity

A. V.'s ability to create rhythm (8), ability to create melodies (9) and rhythmic improvisation ability (10) were, in his early childhood, developed slightly above average, compared to his peers and, in later childhood (6–11 years), developed to an average level. He began to deviate from his peers in these characteristics slightly above average in adolescence, so that he was already above average in the period between 18 and 20 years of age (late adolescence), and considerably above average after the 20th year of age. Melodic improvisation ability (11) was in childhood (up to the eighth year of age) average, in late childhood and early adolescence they rose to slightly above average and in middle adolescence (15–17 years) to moderately above average, compared to his peers. The leap where these abilities developed to a level very above average occurred after the age of eighteen. Observation of originality (12) and flexibility (13) shows that A. V. did not deviate from the average until the age of eight. In late childhood and early adolescence (9–14 years), he was slightly above average and in middle adolescence moderately above average.

In late adolescence and early adulthood (18–35 years), he began to deviate from his peers, becoming considerably above average in these characteristics. A. V.'s fluency (14) was average in early and middle childhood; subsequently, over a period between the ages 9 and 14, it moved to slightly above average. In later adolescence, A. V. was already moderately above average in this characteristic, compared to his peers, and in early adulthood (20-35 years) a leap occurred when he began to deviate to a level very much above average. A. V.'s divergent thinking (musical fantasy) (15) was average throughout his childhood, after which it developed to slightly above average in adolescence (12-17 years). A major leap occurred in late adolescence (from the age of eighteen onwards), when he began to deviate considerably above average from his peers. The same applies for spontaneity (16). A. V.'s experimentation (17) did not deviate from the average throughout his childhood and almost his entire adolescence; however, there was subsequently a leap in late adolescence (18-20 years), when he began to deviate from his peers to moderately above average. Even in early adulthood (20-35 years), his experimentation was still moderately above average.

In melodic improvisation ability, originality, flexibility, fluency, divergent thinking (musical fantasy), spontaneity and experimentation in childhood, at least until the age of eight, there was no deviation from the average. In early childhood (3–6 years), the deviation in the ability to create rhythm, the ability to create melodies and rhythmic improvisation ability was even slightly below average. All these characteristics developed to a level very much above average by the age of twenty, except for experimentation, where there was no deviation from the average until the age of seventeen. Between the ages of 18 and 35, there was a moderately above average deviation from peers. These results can be related to pedagogical experience that musically talented students are not necessarily extremely successful in musical improvisation in early and middle childhood, owing, among other things, to a lack of experience (Kovačič, 2016). We see musical improvisation ability (as a set or a favourable combination of all necessary abilities and properties) and its development as a process that is manifested in pupil's improvisation. Appropriate support or providing opportunities for improvisation can have a favourable effect on the development of musical improvisation ability or on the performance of pupils in tasks that require improvisation. In the case of A. V., this escalation was shown. The development spread to many content and experience paths and led to the realization and fulfilment of talent in these considered aspects of characteristics.

As stated by J. Haroutounian (2009a), creativity is realized during musical development, through musical improvisation or composing or compositional activities, interpretively through musical performance, and further includes creative listening and critique. At an early stage of musical learning, it is noticeable through musical improvisation or playing. Nowadays, the notion that musical creativity can be expressed mainly through composition and improvisation has been re-evaluated. Music educators argue that creativity lies at the heart of all musical activity and is found in a variety of tasks: listening, analysing, evaluating music, performing, improvising, and composing. Creative listening, analysing, and evaluating include active involvement in discovering, comparing, and evaluating rhythmic, melodic and harmonic elements, musical structures, styles, etc. In execution, individuals can express creativity through personal decisions - e.g., at dynamic, tempo, agogics, sound colour, and ornament. In improvising and composing, however, individuals show creativity in choosing elements consistent with their theoretical knowledge and practical experience, combining these in new ways: rhythmic and melodic patterns, repetition and variation, tonal stability, musical form and style, and so on. All this was realized to a certain extent with the participant A. V. during the quality education and experience he gained.

# Musical performance

A. V.'s aesthetic expression in singing (18), from childhood to early adulthood (3–35 years), was moderately below average, compared to his peers. Instrumental aesthetic expression (19) throughout childhood was average, after which it developed to a level slightly above average in adolescence (12–17 years). A major leap occurred in late adolescence (from the age of eighteen onwards), when A. V. began to deviate from his peers to considerably above average. Aesthetic expression through movement and dance (20), throughout all his life stages – from early childhood to early adulthood (3–35 years), remained slightly below average, compared to his peers. A. V.'s communication with the audience (21) in childhood (3–11 years) was slightly below average, compared to his peers, while in adolescence (12–17 years) it was average. He rose slightly above average in late adolescence and early adulthood (18–35 years).

In instrumental aesthetic expression in childhood there was no deviation from peers (average), while communication with audience in childhood was slightly below average.

Instrumental aesthetic expression developed to a level considerably above average in late adolescence, while communication with the audience reached a level above average in late adolescence (up to the age of 35). The extremes occur in aesthetic expression through singing, which in all life periods remained moderately below average, compared to his peers, and aesthetic expression through movement and dance, which in all life periods remained slightly below average, compared to his peers. The results suggest consistency with Sloboda and Erickson's finding that, over time, deliberate practice becomes a decisive factor in musical talent, instead of innate musical capacity (Haroutounian, 2009a). A. V. advanced in aesthetic expression and communication with the audience because of the appropriate amount of practice. Both could be substantiated by the findings of S. Baum et al. (2004), who include a sense of communication to expressiveness. Kopiez (2002, in Bogunović, 2008) sees musical communication as a process that encompasses three aspects of the participants: the performer aspect, the listener aspect, and the musical aspect. These intertwine during A. V.'s development. Moreover, there was influence and interweaving of various factors that entered during musical development, which according to Juslin (2003) can influence musical performance. These factors, which could lead to more precise answers and in-depth insight, could be related to each of the following areas: musical work (the composition itself, notation variants in the work, consultation with the composer or the composer's written comments, musical style/genre), instrument (acoustic parameters, specific aspects: colour, height, etc., technical complexity), performers (structural interpretation, expressive intention in relation to the mood at work, emotional-expressive style, technical skill, motor precision, mood while playing an instrument, interaction with co-performers, perception of the audience or interaction with the audience), listeners (musical preferences, musical knowledge, personality, current mood, state of attention), and context (acoustics, sound technology, listening context (e.g. recording, concert), other individuals present, visual performance conditions, cultural and historical requirements, and formal evaluation of performance.

# Musical knowledge

Musical knowledge required in the curriculum and acquired during instrument lessons (22) remained average throughout A. V.'s childhood (3–11 years).

A major advance occurred in adolescence (12–17 years), when A. V. began to deviate to moderately above average in relation to his peers, and after the 18<sup>th</sup> year of age, when it became considerably above average. Regarding musical knowledge that exceeds the musical curriculum (23), A. V. was comparable to his peers throughout childhood (3–11 years); they were all average. In early adolescence (12–14 years), he started to deviate to a level slightly above average, in middle and late adolescence (15–20 years), he attained a level moderately above average and after his 20<sup>th</sup> year of age, scored very much above average.

Considering the musical knowledge required in the curriculum and acquired during instrument lessons, as well as musical knowledge that exceeds the musical curriculum, in A. V.'s childhood, there was no deviation from his peers (average). The deviation occurs in early adolescence, when the first characteristic changes in late adolescence to a level very much above average, while the second of these characteristics is very much above average in early adulthood. The latter can be linked to Gagné's Differentiated Model of Giftedness and Talent (2005), in which knowledge is implicitly included as a result of learning and exercise or developmental processes that take place through maturation, formal or non-formal learning and exercise. Knowledge is also included in Gagné's definition of talent (proficiency in systematically developed skills and knowledge). For the participant, the statement of B. Sicherl Kafol (2001) that musical knowledge is always the result of the development of musical ability and skill is broadly confirmed.

# Musical activities

A. V's involvement in musical activities in music school (24) in all life periods was very much above average. In childhood and early adolescence (up to the age of 14), he was involved in musical activities outside the music school (25) to a moderate degree above average, compared to his peers, and from the age of 15 onwards considerably above average.

In musical activities within and outside the music school, deviations from the peer average are very high at all stages of his life, as his musical activity in music school in all life periods was very much above the peer average. Activities outside the music school were moderately above average until the age of fifteen, and subsequently very much above average.

Referring to musical activities, we can confirm the introductory findings that the provision of early musical activities, before the child's entry into school, lies in the domain of preschool education and the family, and that, as Sloboda states, children who were highly exposed to and engaged in music before entering school through informal musical activity, upon entering school show marked above-average musical ability compared to their peers (Haroutounian, 2009b). Important factors in the development of a musically talented person include, of course, the environment (school, family) and people in the environment (parents, teachers, peers), which can provide musically talented pupils with many opportunities and involvement in various musical activities. Thus, J. Freeman (2000) in his comparative study finds that the environment, especially the home, has a great influence on extremely high achievements, which can also be observed in A. V., where both parents are professional musicians. For children without home support, school conditions play a major role. The influence of both factors decreases with age. Deviation from peers was probably greatly influenced by the effective individual instruction in the instrument and, as discussed by A. Kavčič Pucihar and B. Rotar Pance (2017) in the context of dealing with an otherwise specific sample of teachers, the relationship between teacher and student.

# Non-musical characteristics

Regarding motivation (26), A. V. in childhood and early adolescence (up to the age of 14) was slightly above average in motivation, compared to his peers. After the age of fifteen, his motivation was moderately above average. In childhood, concentration (27) was slightly below average, and then, in adolescence, it rose to become average (over a period of 12 to 14 years) and slightly above average (between 15 and 17 years). The jump from slightly above average to considerably above average concentration occurred in late adolescence (from the 18th year of age onwards). Perseverance (28) was, in all life periods (3–35 years) slightly above average, compared to his peers. Regarding readiness to work (29), it was shown that in childhood and early adolescence (until the age of 14), he did not deviate from the average. From the age of fifteen, a change occurred when he began to deviate from his peers' moderately above average level. Nor did he deviate from the average in learning (30) in childhood. In adolescence (12–17 years), he began to score slightly above average compared to his peers, and from the age of eighteen onwards, moderately above average.

Interest (31) remained at an average level throughout his childhood. In adolescence, it rose to slightly above average, compared to his peers, and from the age of twenty onwards, interest was above average. A. V. did not deviate from the average in listening and following instructions (32) in childhood. In adolescence (from 12 to 14, and then from 18 to 20 onwards), he began to deviate to a level slightly above the peer average. The greatest deviation, to moderately above average, occurred in adolescence (15–17 years). A drastic drop occurred in early adulthood when A. V. fell very below average regarding this characteristic. In motivation and perseverance, a slightly above average deviation from peers could be observed even in childhood, while in readiness to work and interest, in learning and listening and following instructions in childhood, there was no deviation from the peer average. Concentration was even slightly below average in childhood, compared to his peers. Above-average deviations in adolescence occurred in all these characteristics. A major turnaround occurred in listening and following instructions, where from slightly above average and moderately above average deviation in adolescence, there occurred a very much below average deviation in early adulthood. From this, we can find parallels with the results of a longitudinal study of psychological characteristics conducted by A. MacNamara and Collins (2009). The results showed that different combinations of psychological characteristics promote the effectiveness of the development of classical musicians, also depending on the musician's focus, level of development and maturity.

# Conclusion

This study can confirm the transferability of the Theoretical Model of Characteristics of a Musical Talent (Kovačič, 2016) to various research contexts, as well as to the study of an example of an outstanding talent from a specific field of organ art. At the age of twelve, the participant in the study expressed as many as twenty-five out of thirty-two characteristics of above-average musical talent, compared to peers who were also gifted, as A. V. attended the Music lyceum, which specializes in children with (extraordinary) musical talent. The findings confirm the belief of many researchers and music educators that a child who does not possess innate musical talent (giftedness) will never achieve excellence in music.

We can also agree with the findings of more recent research that trained musicians do not differ from less trained ones in early indicators of exceptionality, but in opportunities and hours of practice (Visser, 2009). Exercise is an important factor in the development of musical talent (Haroutounian, 2009b). With the pupils' age, the amount of practice, music and instrumental lessons and engagement in various musical activities increase. This is also evident in the results of our case study, where for most characteristics, the scale escalates with age to an increasingly above-average deviation. In addition to ability and practice, we affirmed that environmental factors (family and school) are of essentially importance in the development of musical talent, which opens challenges for further research on the impact of factors on the development of musical talent at different stages of life. A special role in our future research should be given to what M. Kukanja Gabrijelčič (2014) discusses, namely "the role, mission, competencies, social intelligence and responsibility of the gifted and talented teacher in terms of working with and developing gifted students." In the context of studying outstanding musical talent, non-musical characteristics should also include perfectionism, which, according to Frost, Marten, Lahart and Rosenblate (1990, in Kranjec, 2017), as a personality trait, includes an individual's high standards. In addition, the impact of musical preferences at different life stages should be studied in depth, starting with the preschool level (Habe and Bratina, 2018), then performance anxiety, which represents a significant problem in general education, as well as in music education (Bačilja Susić, 2018), and the influence of a number of important factors included in the developmental models of giftedness that are well represented in the literature.

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