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# Leadership Potential of Talented Students

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## Abstract

*The paper aims to contribute to the knowledge about the leadership potential of talented students. The intention is to establish distinctive traits of talented students in the areas of music, art, sports, and mathematics in the following aspects of leadership: affinity for authenticity and creativity, basic personality traits, achievement motive, and emotional intelligence. The research was conducted on a convenience sample of 473 participants attending high schools for talented, using the following instruments: preconscious activity scale (PAS), Big Five Inventory (BFI), scale of achievement motive (MOP 2002) and a scale of emotional competences. The research results suggest various constellations of leadership dispositions in relation to the domain. Within the domain of sports and music, there are specific characteristics relating to public performance. Introspection and the intrapsychic plan are important characteristics of the mathematics and art domains. The domain of music and art are characterized by greater interest for innovation and diversity, while the domain of sports and mathematics revolve around "playing by set rules". It is concluded that the leadership potential of talented students can be precisely observed and adequately supported only if it is located within the framework of individual domains.*

**Key words**: *achievement motive; basic dimensions of personality; creativity; emotional intelligence.*

## Introduction

Contemporary conceptions of giftedness insist on the observation of this phenomenon as a developmental process that records the gradual upgrading of potentials into an outstanding effect (Gagné, 2005; Renzulli, 2005). This transformation is substantially determined by co-cognitive characteristics, such as: motivation, resilience, risk taking, independence, emotional intensity, assertiveness,

persistence, self-efficacy, creativity (Lee & Olszewski-Kubilius, 2006). The fact is that co-cognitive characteristics enhance cognitive functioning of an individual, directing him/her to transform his/her giftedness potential into socially constructive action. The introduction of co-cognitive traits extends the space of giftedness beyond the boundaries of general intelligence to focus on the talent development, but at the same time an idea has been introduced that some co-cognitive characteristics are separate modalities of giftedness. Thus, in the *Marland Report*, giftedness is determined as a high-performance and / or a potential in one or more of the following areas: 1) general intellectual ability, 2) specific academic aptitude, 3) creative or productive thinking, 4) leadership ability, 5) visual and performing arts, 6) psychomotor ability (Marland, 1972). Despite the growing interest in co-cognitive traits, whether as a driving force in developing giftedness, or as its separate forms, there are very few studies dealing with its examination in the population of the gifted, especially if different domains are taken into account. It is significant that giftedness manifested in a particular domain has no general intellectual ability for the substrate that is by chance directed towards the domain. However, it already has an origin in the highly developed specific skills that correspond to the given domain or the specific knowledge base (Pekić, 2010). Taking into consideration the fact that the domains mutually differ in the content and structure of knowledge which they include, it is reasonable to assume that the relationship between the skills and domains is a two-way relationship. While specific skills direct an individual to a specific domain, the domain directs further development of these skills with its specific requirements placed before the individual. In addition, the domain-specific quality of giftedness is reflected not only in the development of certain types of skills, and the prevailing conception is the one which emphasizes that talents manifested in various domains imply different combinations of non-intellectual factors (Benbow & Minor, 1990, as cited in Pekić, 2010).

One of the fundamental human rights in a civilized society refers to the right of individuals to entirely realize their potential. Personal awards for achieving full potential are numerous, but the social benefits are equally important. The prosperity of a country unambiguously depends on individuals who are leading experts in their fields, who create knowledge and who can contribute to solving problems in the future (Watters & Diezmann, 2003). In that respect, the call for framing and supporting talented leaders cannot be disregarded. Because of that, the research focus of this paper is aimed at shedding light on the leadership potential of talented students in the domain of talent manifestations.

When referring to the leadership phenomenon, it is evident that there are very diverse criteria based on which current approaches to its research are classified. One of the possibilities implies defining the author's position in relation to the explanatory power of the "disposition" constructs in explaining this phenomenon. On the one hand, there are approaches based on the assumption that there exist stable and permanent inner dispositions which determine leadership (Drath & Palus, 1994; Kirkpatrick & Locke, 1991; Schein, 1992). On the other hand, there are approaches

that negate the acceptance of postulating such leadership dispositions and that find it, more or less, situationally specific (House, 1971; Kerr & Jermier, 1978; Vroom & Yetton, 1973). Taking into consideration research results that indicate the existence of individual differences in the quality and quantity of responsiveness of persons for performing particular roles in a group or the collective, including leadership (Barling, Slater, & Kelloway, 2000; Chen, Jacobs, & Spencer, 1998; Franceško & Mirković, 2008; Goleman, Bojacis, & Maki, 2006; Judge, Bono, Ilies, & Gerhardt, 2002; McClelland, 1998; Mouly & Sankaran, 1999; Mumford, Scott, Gaddis, & Strange, 2002; Stevens & Ash, 2001; Tierney, Farmer, & Graen, 1999; Zaccaro, White, Kilcullen, Parker, Williams, & O'Connor-Boes, 1997), the paper poses that there are particular intrapsychic factors that predispose a person for the leadership role.

Literature on leadership dedicates particular attention to the issue that *skills* characterize effective leaders. Although there are various classifications of the skills, the most frequently used classification implies the following: technical – knowledge of methods, processes and means necessary for accomplishing specific tasks, knowledge of the leadership process; interpersonal – knowledge of human nature and interpersonal processes, knowledge of group structure and dynamics, and conceptual – creativity in generating ideas and problem solving, ability to analyze events, identification of potential issues (Franceško, 2003). A significant number of studies dealing with this particular segment is directed towards examining the relationship between conceptual skills – primarily creativity in generating ideas and problem solving – and leadership indicators (Mouly & Sankaran, 1999; Mumford et al., 2002; Tierney et al., 1999). The research results indicate that creativity, to a significant extent, determines leadership in various domains of work, and that it contributes to a leader's success.

Numerous research studies on leadership are directed towards revealing *personality traits* of effective leaders. Considering that the most significant classification of personality traits resulted in the *Big Five* model, that was the most frequent theoretical framework applied in such research. The results of research dealing with this issue (Judge et al., 2002; Stevens & Ash, 2001; Zaccaro et al., 1997) indicate a strong relationship between traits from the *Big Five* group and leadership. The conclusions indicated that the possession of particular personality traits is related to effective leadership: extraversion was found to be the most significant determinant of leadership, followed by conscientiousness, neuroticism (which is negatively correlated with leadership), openness and agreeableness.

When referring to relationships between *motivation* and leadership, research shows that the motive for achievement emerged as a significant leadership factor (McClelland, 1998; Zaccaro et al., 1997). That is why this motive is considered a precondition for leader effectiveness, whose task is to show initiative and motivate him/herself and others (Franceško & Mirković, 2008). Within the segment of *intrapersonal skills*, literature focuses attention on emotional intelligence, establishing that emotions are a very important dimension of leadership (Barling et al., 2000; Chen et al., 1998; Goleman et al., 2006).

Overall, it can be concluded that in the domain of personality, as a key determinant of leadership, the following is abstracted: *creativity, basic personality traits – the Big Five, the achievement motive,* and *emotional intelligence*. Individuals can be born with these traits; they can acquire them through learning, or both. However, it should be noted that the possession of the mentioned dispositions is not a sufficient requirement for someone to become an effective leader (Letić, 2015). Those dispositions represent the potential for leadership but do not necessarily guarantee it.

Literature (Csikszentmihalyi, Rathunde, & Whalen, 1997; Winner, 1996) suggests that the distinctive traits of talented individuals are most frequently established in correlation to the average population. Significantly less frequently personality descriptions are found in relation to the specific domain of talent manifestations. It is also observed that such studies are focused on comparing two broadly defined domains of talent – academic and artistic, and that the distinctive characteristics of such aspects of talent are for the majority part examined in the areas of individual, personal traits of the talented. An example shows that students talented in one of the academic domains show a significantly higher degree of self-confidence, i.e. assurance in oneself and one's skills, in comparison to students talented in the domain of music or visual arts (Csikszentmihalyi et al., 1997). Also, the trait of non-conventionality is to a greater extent characteristic of students talented in the artistic, rather than of students talented in the academic domain. There are findings (Csikszentmihalyi & Getzels, 1973; Kemp, 1981, as cited in Feist, 1999; Pekić, 2010) which describe artistically talented individuals, in comparison with academically talented individuals, in terms of more prominent non-conformism, understood as an affinity towards questioning social norms and values. Some studies of personal traits between academically and artistically talented students indicate that the latter have greater interferences in the aspect of social conformation, most likely because society, and consequently the school system, place less value on talent in the artistic domains (Olenchak, 1999; Pekić, 2010). Research has also shown that artistically and academically talented individuals differ in the emotional sphere, where the former are characterized by "the disposition towards more intensive emotional experiences" (Andreasen & Glick, 1988, as cited in Feist, 1999, p. 283).

Despite the multiple treatments of this issue, there is still an open question about constellations of leadership dispositions which distinguish students who are talented in different domains. The question presented the starting point for this paper, which will aim to contribute to knowledge on the leadership potential of students in four domains: music, art, sports and mathematics.

## Research Methodology

### *Research Aim*

This paper aimed to establish the distinctive traits of students talented in the domains of music, art, sports and mathematics with respect to the following leadership dispositions: aptitude for originality and creativity, basic personality traits, achievement

motive and emotional intelligence. Taking into consideration the presented initial theoretical bases of the research, there is an expectation that the research will point out different constellations of leadership dispositions depending on the type of the domain with which an individual interacts.

### *Variables*

The variable of individual differences implies talent, defined as the above average development of specific abilities of mastery in a specific domain.

Features of dependent variables in the research are the following:

– aptitude for originality and creativity, which implies preference for non-productive and divergent tasks which allow for a high degree of originality and expressiveness in the answer (Altaras, 2006);
– basic personality traits, i.e. the *Big Five* dimensions of personality: neuroticism, extraversion, openness, agreeableness, and conscientiousness. The basic dimensions of personality are defined as non-cognitive, temporally stable, and in comparison to sample traits, invariant dispositional constructs which explain the greater part of variances of individual differences (Knežević, Džamonja-Ignjatović, & Đurić-Jočić, 2004);
– achievement motive is defined as the aspiration towards success, whether that success is defined as achievement of personal goals and/or prominence before other people. This is a complex motivational disposition composed of the following components: competition with other people, perseverance in attaining the goal, reaching the goal as a source of satisfaction, focus on planning (Franceško, Mihić, & Bala, 2002);
– emotional intelligence, postulated within the framework of Goleman's integrated model, which assumes that the area of emotional intelligence can be described along four broad domains: self-awareness, self-regulation, social skill, and managing relationships (Goleman et al., 2006). The selection of this theoretical model stems from observations that it includes emotional intelligence in the context of leadership.

## Instruments

Several instruments were applied in order to collect data. The Preconscious Activity Scale (PAS), authored by Holland and Baird (1968), is designed to offer a general measurement of originality/ creativity, where a high score on the scale implies the efficiency of an individual to use personal, preconscious processes, which, among other things, imply the acceptance of daydreaming and irrationality as a source of ideas, preference of novelties, greater tendency toward expressiveness and creativity, independence of thinking and tolerance for independent and ambiguous contents. The instrument consists of 38 claims, such as: "I often daydream about possible solutions to the problems that I face", "It is considered that I am a person of ideas", "I have to learn

things in my own way, and not only to accept the ideas and structure of the learning material from textbooks or books". The PAS reliability is around .75.

For the evaluation of basic personality dimensions, the Serbian translation of the Big Five Inventory, BFI (John & Srivastava, 1999) was used. This 44-item scale, which has been created as an attempt to operationalize the constructs of *Big Five* models, proved to be a satisfactory measure of dimensions comprised in the mentioned model (John, Naumann, & Soto, 2008). In research to date, the reliability coefficient (α) has been between .72 for the cooperation scale to .80 for the openness scale.

The achievement motive was measured using the MOP 2002 instrument authored by Franceško et al. (2002). The instrument was composed as a Likert-type scale consisting of 55 items divided into four subscales, each of which measures one component, e.g. a factor of general achievement motive.

For the purpose of this research an instrument for measuring emotional intelligence was developed. The need for its construction stems from the fact that there is no widely accepted instrument for measuring this particular construct. In the development and definition of items, the starting point was Goleman's definition of emotional intelligence in leadership which abstracts four domains (self-awareness, self-regulation, social skill and managing relationships).

## Sample

The sample is a convenience one with elements of a stratified sample considering that the stratification was done according to the domain (music, art, sports, mathematics). Within the four-stratum framework, a questionnaire was used to examine 473 students from specialized high schools for talented students in Novi Sad, Belgrade and Kraljevo. The sample structure, and its homogeneity in terms of the domains of talent, sex, and age, can be seen in Table 1.

Table 1
*Sample structure*

| Variables | | Frequencies | Percentage |
|---|---|---|---|
| Domain of talent | Music | 102 | 21.6 |
| | Art | 96 | 20.3 |
| | Sports | 152 | 32.1 |
| | Mathematics | 123 | 26.0 |
| Gender | Male | 206 | 43.6 |
| | Female | 267 | 56.4 |
| Age | 15 | 98 | 20.7 |
| | 16 | 131 | 27.7 |
| | 17 | 115 | 24.3 |
| | 18 | 92 | 19.5 |
| | 19 | 37 | 7.8 |
| | Total | 473 | 100.0 |

Since the research included students of specialized secondary schools for the gifted, it could be said that the sample, although convenient, had a satisfactory degree of representativeness. The fact is that entrance exams for these schools include the application of tests of specific skills, where the prescribed minimum points required for enrollment actually mean that candidates must have developed specific skills in comparison to the average population.

## Research Results

Testing the factor structure of the MOP 2002 scale through the application of factor analysis in our research did not confirm the factor structure which was obtained in previous papers written by authors of the scale. Slight deviations in the number of isolated factors emerged, which can be expected in the application of the scale on various samples that have certain characteristics in respect to the general population. More precisely, three factors were isolated explaining 38.94% of variance of the group manifested variables (Table 2). The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy amounted to .925, and the value of Bartlett's test of Sphericity was statistically significant (p=.000), which indicates a justification for the application of factor analysis.

Table 2

*Values of characteristic roots and the percentage of explained variances of isolated factors of MOP 2002*

| Factor | Initial values | | | Values post rotation |
|---|---|---|---|---|
| | λ | % variance | Cumulative % | λ |
| 1 | 13.51 | 24.56 | 24.56 | 10.29 |
| 2 | 5.22 | 9.49 | 34.06 | 10.62 |
| 3 | 2.68 | 4.88 | 38.94 | 7.80 |

The first factor is defined by items indicating a tendency of an individual to distinguish oneself and be more successful than others. Because of that, the factor is entitled *competition with others* (α=.87). Items that define the second isolated factor indicate persistence, which is why the second factor is called *perseverance in achieving goal* (α=.83). The content analysis of items which define the third isolated factor indicate a tendency of the person to plan activities in order to achieve a set goal. This factor is termed *focus on planning* (α=.73). The factor *achievement of goals as a source of pleasure* has not been clearly distinguished even when the four-factor solution is applied. Items related to this factor have mostly joined another factor (*perseverance in achieving a goal*).

With the aim of researching the area of measurement on the scale of emotional competences, a factor analysis was applied (principal axis method). Testing the justification for the application of the factor analysis was carried out through the

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of Sphericity. The obtained value of KMO was .905, while the value of Bartlett's test of Sphericity was statistically significant (p=.000), which indicates the suitability of the correlation matrix for the factor analysis. After eliminating minor psychometric items (with load below .30, and low communalities), 51 items were kept in the final version of the questionnaire. Based on the *Scree*-tests, four factors explaining 32.87% of the common variance of the total number of variances were extracted (Table 3).

Table 3

*Values of characteristic roots and percentage of explained variance of isolated factors of the scale of emotional competences*

| Factor | Initial values | | | Values post rotation |
|---|---|---|---|---|
| | λ | % variance | Cumulative % | λ |
| 1 | 17.93 | 19.92 | 19.92 | 14.38 |
| 2 | 4.59 | 5.10 | 25.09 | 11.68 |
| 3 | 3.62 | 4.02 | 29.04 | 9.52 |
| 4 | 3.45 | 3.83 | 32.87 | 9.77 |

The first factor gathers items relating to the ability to articulate common visions, ability to effectively solve conflicts and the ability to work in a team and cooperate. The factor is termed *relationship management* (α=.89). The second factor gathers items relating to empathy, awareness of a group and affability. The factor is termed *social awareness* (α=.86). The third factor gathers items relating to self-control, ability to adapt to new and unexpected situations, and successfully overcoming difficulties. The factor is called *self-regulation* (α=.80). The fourth factor is saturated with items indicating a person's inclination towards deep understanding of own feelings, needs, intentions, values and weaknesses. The factor is termed *self-awareness* (α=.71). On the basis of the structure matrix of isolated factors, i.e. content of items that achieved the highest correlations with the isolated factors, the operationalization of the construct of *emotional intelligence,* which was the starting point in the construction of the questionnaire, was confirmed.

In carrying out the specific research goal, the procedure of multivariate analysis of variance was applied. The results of testing the significance of differences in the self-assessment of leadership dispositions between the four groups of participants are shown in Table 4.

Table 4

*Multivariate test of significance of variance*

| Multivariate test | Value | *F* | *p* |
|---|---|---|---|
| Wilks' Lambda | .535 | 8.166 | **.000** |

Observing the values, it can be stated that, with respect to the type of talent, there are statistically significant differences in the self-assessment of leadership

dispositions. Post comparisons between groups were conducted in order to obtain data on individual aspects of personality in which the examined groups differ (Table 5).

Table 5

*Significance of differences between groups on single variables*

| Dependent variables | Grouping variable | M | SD | df | F | p |
|---|---|---|---|---|---|---|
| Relationship management | Music | .063 | .996 | 3 | .687 | .561 |
| | Art | -.125 | 1.057 | | | |
| | Sports | .025 | .907 | | | |
| | Mathematics | .009 | 1.034 | | | |
| Social awareness | Music | .010 | 1.089 | 3 | 1.894 | .130 |
| | Art | -.064 | .996 | | | |
| | Sports | .161 | .840 | | | |
| | Mathematics | -.098 | 1.013 | | | |
| Self-regulation | Music | -.057 | .992 | 3 | 4.591 | **.004** |
| | Art | -.151 | 1.000 | | | |
| | Sports | .243 | .912 | | | |
| | Mathematics | -.120 | 1.037 | | | |
| Self-awareness | Music | .151 | .885 | 3 | 6.165 | **.000** |
| | Art | -.359 | 1.072 | | | |
| | Sports | .129 | .989 | | | |
| | Mathematics | .055 | .936 | | | |
| Competitiveness with others | Music | -.013 | 1.070 | 3 | 7.859 | **.000** |
| | Art | -.223 | .895 | | | |
| | Sports | .311 | .919 | | | |
| | Mathematics | -.141 | .966 | | | |
| Perseverance in achieving goals | Music | .045 | .861 | 3 | 9.855 | **.000** |
| | Art | -.301 | 1.031 | | | |
| | Sports | .327 | .946 | | | |
| | Mathematics | -.104 | .918 | | | |
| Focus on planning | Music | .193 | 1.033 | 3 | 3.378 | **.018** |
| | Art | -.106 | .986 | | | |
| | Sports | .115 | .892 | | | |
| | Mathematics | -.156 | 1.041 | | | |
| Neuroticism | Music | 22.343 | 6.173 | 3 | 2.957 | **.032** |
| | Art | 22.219 | 6.007 | | | |
| | Sports | 20.388 | 5.442 | | | |
| | Mathematics | 21.366 | 6.175 | | | |
| Extraversion | Music | 29.853 | 5.702 | 3 | 5.851 | **.001** |
| | Art | 27.823 | 5.717 | | | |
| | Sports | 30.704 | 4.778 | | | |
| | Mathematics | 29.285 | 5.506 | | | |
| Openness | Music | 42.304 | 4.555 | 3 | 31.685 | **.000** |
| | Art | 41.260 | 5.076 | | | |
| | Sports | 36.125 | 5.520 | | | |
| | Mathematics | 38.390 | 6.511 | | | |

| Dependent variables | Grouping variable | M | SD | df | F | p |
|---|---|---|---|---|---|---|
| Cooperation | Music | 35.412 | 5.333 | 3 | 4.194 | **.006** |
| | Art | 33.990 | 5.066 | | | |
| | Sports | 35.520 | 4.698 | | | |
| | Mathematics | 33.748 | 4.991 | | | |
| Conscientiousness | Music | 30.333 | 5.041 | 3 | 5.306 | **.001** |
| | Art | 29.635 | 6.332 | | | |
| | Sports | 32.408 | 5.271 | | | |
| | Mathematics | 31.724 | 5.561 | | | |
| Affinity for originality and creativity | Music | 24.069 | 4.732 | 3 | 5.468 | **.000** |
| | Art | 23.313 | 4.804 | | | |
| | Sports | 18.507 | 4.529 | | | |
| | Mathematics | 20.276 | 5.240 | | | |

In examining differences for each dependent variable individually, it is observed that the self-assessment of students who are talented in four specific domains, statistically significantly differs in almost all aspects of leadership dispositions, except for those related to *managing relationships* and *social awareness*. The groups of sports and musically talented students achieve higher scores in all variables tested. However, in order to establish between which groups the differences exist on dependent variables, a series of post hoc univariate analysis of variance tests was applied.

The first univariate analysis of variance, which aimed at establishing differences between the self-assessment of the four groups of participants in terms of *self-regulation* (Table 6), clearly indicates that this characteristic is dominant among sports rather than the artistically or mathematically talented, and in that respect the mentioned groups of participants statistically significantly differ.

Table 6

*Scheffe's test of multiple comparisons between groups (self-regulation)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .093 | .930 |
| | Sports | -.300 | .128 |
| | Mathematics | .063 | .973 |
| Art | Music | -.093 | .930 |
| | Sports | -.393(*) | **.025** |
| | Mathematics | -.030 | .997 |
| Sports | Music | .300 | .128 |
| | Art | .393(*) | **.025** |
| | Mathematics | .363(*) | **.026** |
| Mathematics | Music | -.063 | .973 |
| | Art | .030 | .997 |
| | Sports | -.363(*) | **.026** |

In terms of self-assessment of *self-awareness,* Table 7 shows that artistically talented students, statistically significantly differ from the other three groups of participants,

and that this aspect is least observable among them. The group of musically talented students is in the lead in terms of dominance of this trait (followed by athletes, and mathematicians).

Table 7

*Scheffe's test of multiple comparisons between groups (self-awareness)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .509(*) | **.004** |
| | Sports | .021 | .999 |
| | Mathematics | .096 | .909 |
| Art | Music | -.509(*) | **.004** |
| | Sports | -.488(*) | **.002** |
| | Mathematics | -.413(*) | **.022** |
| Sports | Music | -.021 | .999 |
| | Art | .488(*) | **.002** |
| | Mathematics | .074 | .941 |
| Mathematics | Music | -.096 | .909 |
| | Art | .413(*) | **.022** |
| | Sports | -.074 | .941 |

While establishing differences between the self-assessment of the four groups of participants with respect to affinity for *competitiveness with others* (Table 8) and *perseverance in attaining goal* (Table 9), statistically significant differences were observed between talented athletes on the one hand and artistically and mathematically talented on the other hand.

Table 8

*Scheffe's test of multiple comparisons between groups (competition with others)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .209 | .502 |
| | Sports | -.323 | .076 |
| | Mathematics | .128 | .803 |
| Art | Music | -.209 | .502 |
| | Sports | -.533(*) | **.000** |
| | Mathematics | -.081 | .942 |
| Sports | Music | .323 | .076 |
| | Art | .533(*) | **.000** |
| | Mathematics | .451(*) | **.002** |
| Mathematics | Music | -.128 | .803 |
| | Art | .081 | .942 |
| | Sports | -.451(*) | **.002** |

Table 9

*Scheffe's test of multiple comparisons between groups (perseverance in attaining goal)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .346 | .083 |
| | Sports | -.281 | .142 |
| | Mathematics | .149 | .704 |
| Art | Music | -.346 | .083 |
| | Sports | -.627(*) | **.000** |
| | Mathematics | -.196 | .501 |
| Sports | Music | .281 | .142 |
| | Art | .627(*) | **.000** |
| | Mathematics | .430(*) | **.003** |
| Mathematics | Music | -.149 | .704 |
| | Art | .196 | .501 |
| | Sports | -.430(*) | **.003** |

The fifth univariate analysis of variance clearly indicates that the self-assessment of musically and mathematically talented students statistically significantly differs in the aspect *affinity for planning* (p=.041), and that the former dominate in this aspect.

Although borderline significant, a statistically significant difference between the self-assessment of musically and sports talented students in the aspect of *neuroticism* goes in favor of musicians (p=.049).

Table 10 shows that artistically talented students differ significantly from musically and athletically talented students in the self-assessment of *extraversion*, as for them this aspect is less dominant (it is most dominant among athletes, followed by musicians).

Table 10

*Tukey's test of multiple comparisons between groups (extraversion)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | 2.030(*) | **.041** |
| | Sports | -.851 | .603 |
| | Mathematics | .568 | .859 |
| Art | Music | -2.030(*) | **.041** |
| | Sports | -2.881(*) | **.000** |
| | Mathematics | -1.461 | .190 |
| Sports | Music | .851 | .603 |
| | Art | 2.881(*) | **.000** |
| | Mathematics | 1.419 | .131 |
| Mathematics | Music | -.568 | .859 |
| | Art | 1.461 | .190 |
| | Sports | -1.419 | .131 |

*Tukey's* test (Table 11) indicates that, in the self-assessment of *openness*, there are statistically significant differences between all groups tested, except between musicians

and artists, who have the highest and very similar mean values in this dimension (followed by mathematicians and athletes).

Table 11

*Tukey's test of multiple comparisons between groups (openness)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | 1.043 | .545 |
| | Sports | 6.178(*) | **.000** |
| | Mathematics | 3.913(*) | **.000** |
| Art | Music | -1.043 | .545 |
| | Sports | 5.135(*) | **.000** |
| | Mathematics | 2.870(*) | **.001** |
| Sports | Music | -6.178(*) | **.000** |
| | Art | -5.135(*) | **.000** |
| | Mathematics | -2.265(*) | **.004** |
| Mathematics | Music | -3.913(*) | **.000** |
| | Art | -2.870(*) | **.001** |
| | Sports | 2.265(*) | **.004** |

When referring to the self-assessment of *cooperation*, *Tukey's* test suggests that statistically significant differences exist only between athletes and mathematicians (p=.019), in favor of athletes.

The penultimate univariate analysis of variance (Table 12) shows that students talented in the domain of sports statistically significantly differ from students talented in music or art in the self-assessment of *conscientiousness*, and that this trait is more dominant for them.

Table 12

*Tukey's test of multiple comparisons between groups (conscientiousness)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .697 | .844 |
| | Sports | -2.074(*) | **.034** |
| | Mathematics | -1.390 | .304 |
| Art | Music | -.697 | .844 |
| | Sports | -2.772(*) | **.002** |
| | Mathematics | -2.088 | .051 |
| Sports | Music | 2.074(*) | **.034** |
| | Art | 2.772(*) | **.002** |
| | Mathematics | .684 | .780 |
| Mathematics | Music | 1.390 | .304 |
| | Art | 2.088 | .051 |
| | Sports | -.684 | .844 |

The final univariate analysis of variance, which would determine differences between the self-assessment of respondents in the aspect *affinity for originality and*

*creativity* (Table 13), indicates that statistically significant differences exist between the examined groups, except between students talented in the domain of music and art. The order is the following: musically and artistically talented have the most and very similar mean values on the SPA scale, followed by mathematicians and finally athletes.

Table 13

*Tukey's test of multiple comparisons between groups (affinity for originality and creativity)*

| Domain of talent (I) | Domain of talent (J) | Arithmetic mean difference | *p* |
|---|---|---|---|
| Music | Art | .756 | .688 |
| | Sports | 5.562(*) | **.000** |
| | Mathematics | 3.792(*) | **.000** |
| Art | Music | -.756 | .688 |
| | Sports | 4.805(*) | **.000** |
| | Mathematics | 3.036(*) | **.000** |
| Sports | Music | -5.562(*) | **.000** |
| | Art | -4.805(*) | **.000** |
| | Mathematics | -1.769(*) | **.014** |
| Mathematics | Music | -3.792(*) | **.000** |
| | Art | -3.036(*) | **.000** |
| | Sports | 1.769(*) | **.014** |

## Discussion

This research investigated distinctive characteristics of students talented in the domains of music, art, sports and mathematics, in the following leadership dispositions: affinity towards originality and creativity, basic personality dimensions – the Big Five, achievement motive and emotional intelligence. The research results confirm previous findings, which point to differences in the personality profile of talented students in various domains (Csikszentmihalyi et al., 1997; Feist, 1999; Olenchak, 1999; Subotnik & Jarvin, 2005). It was established that talent implies various constellations of leadership dispositions, depending on the type of domain with which the individual is realizing interaction.

The self-assessment of respondents shows that students who are talented in sports achieve higher scores on the dimension of self-regulation skills and manage their negative emotions better in comparison to those artistically and mathematically talented students. Self-regulation is best described by the following items: "I do not allow harmful, disturbing emotions such as sadness, anxiety or rage, to lead me off track"; "I manage to keep spirituality, good mood and enthusiasm even in most difficult situations"; "I remain calm and clear minded when under great pressure or pressured by problems". In that respect, students talented in the domain of sports, in comparison to those talented in the domains of art and mathematics, assess that they possess a greater degree of self-control, transparency, adaptability, initiative and optimism. Such findings could be interpreted as characteristic of the given domains,

i.e. the fact that the domain of sports is characterized by greater focus on outward reality, while the domains of art and mathematics encourage introspection and focus on the intrapsychic plan, which causes differences in their emotional sphere.

Results of the second univariate analysis of variance, based on the self-assessment of respondents, show that self-awareness is least dominant among the artistically talented students, and that the group of musically talented is the lead group when it comes to the dominance of this trait. Self-awareness is best explained by the following items: "I am capable of influencing others"; "I can manage unpredictable, challenging situations"; "I live in accordance with my principles and values". Artistically talented students show weaker understanding of personal feelings, needs, intentions, values and weaknesses in comparison to other participants. Those talented in the domain of art are characterized by weaker awareness of their own emotions, weaker knowledge of personal strengths and weaknesses, and a lower level of self-confidence. On the other hand, the dominance of this trait among musically talented students implies that a high evaluation of personal skills is very important for mastery of the music domain. This is supported by studies emphasizing the importance of self-confidence at the level of musical talent development which surpasses the level of technical skill (Subotnik & Jarvin, 2005), and the predictive power of experiencing self-efficacy for being successful in a musical performance (McCormick & McPherson, 2003).

With respect to affinity towards competition with others and perseverance in attaining goal, the research established statistically significant differences between the self-assessment of students talented in sports on the one hand, and those talented in arts and mathematics on the other. The findings indicate that, besides achieving higher scores on the dimension self-regulation and control of feelings – athletes, in comparison to artists and mathematicians – lead in the aspect of competitiveness. Although literature states that competitiveness with others is useful for "ego glorification" (Ames, 1992), it is indisputable that such affinity can have a motivational effect, and can have a positive effect on student achievement. What is more, students talented in the domain of sports, are more perseverant in doing relevant activities, most likely because a certain type of resistance to potential distractors is characteristic of them, regardless of whether the source is external reality or related to an intrapsychic plan.

The fifth univariate analysis of variance established that musically and mathematically talented students statistically significantly differ in the self-assessments of the aspect affinity for planning, and that the former are in the lead in terms of this affinity being developed. The assumption is that music, as a highly structured domain of art (Winner, 1996), requires elaborate practice on a daily basis, which makes it different from other domains of art. Mastery in the domain of music requires disciplined ambition towards attaining set goals, which makes the affinity for planning extremely important.

The results show that there are statistically significant differences between the self-assessment of students talented in music and sports in terms of *neuroticism*.

Musically talented students show more concern, more frequently react irrationally, have weaker capacity to overcome stress and delay immediate impulses. Athletes are emotionally more stable, relaxed, are less worried that things will "take a wrong turn", and are capable of dealing with everyday life situations. These results could possibly be interpreted with the fact that musically talented students often have independent public performances. Being frequently subjected to public criticism could imply a more dominant tendency towards experiencing negative emotions, primarily anxiety, fear and uneasiness.

The self-assessments show that athletes and musicians are more loquacious, active, sociable, cheerful, optimistic and self-confident in comparison to artistically talented students. Elaboration of the possibility of describing sports and musically talented in terms of more dominant *extraversion* could be founded in their greater dependence on the social context. Literature points out that building a reputation in the domain of sports or music performance, above all, implies the adeptness of the talented individual for the segment of his/her social environment marked with the notion of "promoter", which is why such aspects of talent require high levels of social skills (Subotnik & Jarvin, 2005). On the other hand, attaining a high level of development of artistic talent can be perceived even in the absence of high social competence.

In terms of *openness*, statistically significant differences were found between the self-assessments of all groups in the research, except musicians and artists, who have the highest and relatively similar arithmetic means for this trait. Musically and artistically talented students show a greater level of curiosity and imagination in comparison with other participants, they are more open in spirit towards inward experiences, they are prone to experimenting, to new ideas and unconventional values. Such results indicate a similarity with previous research which pointed to the relevance of the trait of nonconformity for reaching a high level of efficiency in the area of art (Csikszentmihalyi & Getzels, 1973; Kemp, 1981, as cited in Feist, 1999; Pekić, 2010).

Looking at *cooperation*, statistically significant differences are present between the self-assessments of athletes and mathematicians, in favor of athletes. More dominance of this trait among talented athletes could be ascribed to their team spirit, which is usually not present with mathematicians.

The self-assessments suggest greater *conscientiousness* of talented athletes in comparison to musically and artistically talented students. Such findings indicate that talented athletes in their behavior adhere to ethical principles, and are led by feelings of obligation and personal high aspirations. Therefore, it could be said that this group of participants have a highly developed trait of motivation that some authors term task orientation or commitment to task, which implies "inner" motivation, i.e. motivation of intrinsic character (Ames, 1992; Winner, 1996).

Keeping in mind the self-assessment of higher propensity of musically and artistically talented participants to use pre-conscious processes – which implies acceptance of daydreaming and irrationality as sources of ideas, tendency for expressiveness and

creativity, independence of thought and tolerance of vague and ambiguous content – it can be said that creativity has been confirmed as an important determinant of artistic traits of talent.

## Conclusion

This research of the leadership potential of talented students, contributed in providing a more detailed description of the specific qualities behind various types of talent. It is evident that the domain is determined by the quality of talent manifested in it, and that the specificity of that quality is portrayed as an aspect of ability and an aspect of personality traits. A more detailed consideration of the self-assessment of personality traits in the sphere of leadership enabled the observation of particular distinctions dependent on the type of domain. When referring to the domains of sports and music, in comparison to mathematics and art, specific constellations of leadership dispositions are observed in the aspect of dominant characteristics which are related to public performance. Introspection and adeptness to the intrapsychic plan are important determiners in the mathematics and art domains. The domains of music and art, compared to the domains of sports and mathematics, require greater development of personality characteristics with a sign of interest for the new and different, while "playing by set rules" seems very important for the domains of sports and mathematics.

The research results indicate the significance of domains in the creation of specific leadership potential which is manifested in them. That does not necessarily mean that the domain forms the talented person and his/her leadership potential. Rather, the relationship between leadership dispositions and the domain in which talent is manifested can be two-way: as there is the possibility that particular behaviors emerge as an answer to more demanding domains, it is also possible that the talented person, along with the particular ability, possesses some other characteristics which lead him/her towards a particular domain (Altaras, 2006). Finally, findings implying that talent presupposes various constellations of dispositions for leadership dependent on the type of domain with which the individual is forming interaction, lead to the conclusion that the leadership potential of the talented can be precisely examined and adequately supported only if located within the framework of individual domains.

When it comes to the limitations of this research, it is important to say that this study includes the gifted students who have been qualified in the group of the gifted on the basis of their attendance of specialized schools, and therefore the results of the research cannot be generalized for all students gifted in certain domains. In addition, every scientific paper based on the quantitative methodology includes limitations arising from the imperfect assessment methods of the relevant phenomena. In this sense, the question is whether the selection of some other instruments would provide a different illustration of the leadership potential of the gifted students in different domains. The domain of self-assessment of the respondents has been identified as a

possible limitation of the conducted study; introduction of the assessment by others would complete the information on the researched phenomena. Since leadership is a phenomenon that has a social background, a qualitative study that would analyze the correlates of leadership would certainly represent an appropriate step forward in some other areas as well.

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## References

Altaras, A. (2006). *Darovitost i podbacivanje*. Pančevo: Mali Nemo.

Andreasen N. C., & Glick I. D. (1988). Bipolar affective disorder and creativity: implications and clinical management. *Comprehensive Psychiatry, 29*(3), 207-17. https://doi.org/10.1016/0010-440X(88)90044-2

Ames, C. (1992). Classroom: Goals, structures and student motivation. *Journal of Educational Psychology, 84*(3), 261-271. https://doi.org/10.1037/0022-0663.84.3.261

Barling J., Slater F., & Kelloway E. K. (2000.). Transformational leadership and emotional intelligence: an exploratory study. *Leadership and Organization Development Journal*, *21*(3), 157-161. https://doi.org/10.1108/01437730010325040

Benbow, C. P., & Minor, L. L. (1990). Cognitive profiles of verbally and mathematically precocious students: Implications for identification of the gifted. *Gifted Child Quarterly, 34*(1), 21-26. https://doi.org/10.1177/001698629003400105

Chen, W., Jacobs, R., & Spencer, L. M. (1998). Calculating the competencies of stars. *Working with Emotional Intelligence*, *70*(3), 377-380.

Csikszentmihalyi, M., & Getzels, J. W. (1973). The personality of young artists: an empirical and theoretical exploration. *British Journal of Psychology, 64*(1), 91-104. https://doi.org/10.1111/j.2044-8295.1973.tb01331.x

Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1997). *Talented teenagers: The roots of success and failure.* New York: Cambridge University Press.

Drath, W. H., & Palus, C. J. (1994). *Making common sense: Leadership as meaning-making in a community of practice*. Greensboro, NC: Center for Creative Leadership.

Feist, G. J. (1999). Personality in Scientific and Artistic Creativity. In R. J. Sternberg (Ed.), *Handbook of Creativity* (pp. 273-296). Cambridge: Cambridge University Press.

Franceško, M. (2003). *Kako unaprediti menadžment u preduzeću*. Novi Sad: Prometej.

Franceško, M., Mihić, V., & Bala, G. (2002). Struktura motiva postignuća merena skalom MOP 2002. In M. Franceško, & B. Čukić (Eds.), *Ličnost u višekulturnom društvu* (pp. 134-143). Novi Sad: Filozofski fakultet.

Franceško, M., & Mirković, B. (2008). *Organizaciono ponašanje: moć poznavanja organizacionog ponašanja*. Novi Sad: Prometej.

Gagné, F. (2005). From gifts to talents: The DMGT as a developmental model. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 98-120). New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511610455.008

Goleman, D., Bojacis, R., & Maki, E. (2006). *Emocionalna inteligencija u liderstvu*. Novi Sad: Adižes.

Holland, J. L., & Baird, L. L. (1968). The preconscious activity scale: The development and validation of an originality measure. *Journal of Creative Behavior*, *2*(3), 217-225. https://doi.org/10.1002/j.2162-6057.1968.tb00106.x

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, *16*(3), 321-339. https://doi.org/10.2307/2391905

John, O. P., & Srivastava, S. (1999). The Big Five Trait Taxonomy: History, Measurement and Theoretical Perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of Personality: Theory & Research* (pp. 102-138). New York: The Guilford Press.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: history, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: theory and research* (pp. 114-158). New York: The Guilford Press.

Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765-780. https://doi.org/10.1037/0021-9010.87.4.765

Kemp, A. E. (1981). The personality structure of a musician. 1. Identifying a profile of traits for the performer. *Psychology of Music, 9*(1), 3-14. https://doi.org/10.1177/03057356810090010201

Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership. *Organizational Behavior and Human Performance*, *22*(3), 375-403. https://doi.org/10.1016/0030-5073(78)90023-5

Kirkpatrick, S. A., & Locke, E. A. (1991). Leadership: Do traits matter? *The Executive, 5*(2), 48-60. https://doi.org/10.5465/AME.1991.4274679

Knežević, G., Džamonja-Ignjatović, T., & Đurić-Jočić, D. (2004). *Petofaktorski model osobnosti.* Beograd: Društvo psihologa Srbije.

Lee, S-Y., & Olszewski-Kubilius, P. (2006). The Emotional Intelligence, Moral Judgment, and Leadership of Academically Gifted Adolescents. *Journal for the Education of the Gifted, 30*(1), 29-67. https://doi.org/10.1177/016235320603000103

Letić, M. (2015). *Značaj moralnih i liderskih svojstava za ostvarenje darovitosti. (Doctoral disertation)*. Filozofski fakultet, Univerzitet u Novom Sadu, Novi Sad.

Marland, S. (1972). *Education of the gifted and talented. Report to Congress*. Washington DC: U.S. Government Printing Office.

McClelland, D. C. (1998). Identifying competencies with behavioural-event interviews. *Psychological Science*, *9*(5), 331-340. https://doi.org/10.1111/1467-9280.00065

McCormick, J., & McPherson, G. E. (2003). The role of self-concept in a musical performance examination: An exploratory structural equation analysis. *Psychology of Music*, *31*(1), 37-51. https://doi.org/10.1177/0305735603031001322

Mouly, V. S., & Sankaran, J. K. (1999). The "permanent" acting leader: insights from a dying Indian R&D organization. *Leadership Quarterly*, *10*(4), 637-652. https://doi.org/10.1016/S1048-9843(99)00034-X

Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *Leadership Quarterly, 13*(6), 705-750. https://doi.org/10.1016/S1048-9843(02)00158-3

Olenchak, F. R. (1999). Affective Development of Gifted Students with Nontraditional Talents. *Roeper Review*, *21*(4), 293-297. https://doi.org/10.1080/02783199909553978

Pekić, J. (2010). Uloga domena u nastanku specifičnog kvaliteta darovitosti. *Godišnjak Filozofskog fakulteta u Novom Sadu*, *35*(1), 193-205.

Renzulli, J. S. (2005). The three-ring conception of giftedness: A developmental model for creative productivity. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 246-280). New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511610455.015

Schein, E. H. (1992). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

Spencer, L., & Spencer S. (1993). *Competence at work: Models for Superior Performance.* New York: John Wiley & Sons.

Stevens, C. D., & Ash, R. A. (2001). Selecting employees for fit: personality and preferred managerial style. *Journal of Managerial Issues*, *13*(4), 500-517.

Subotnik, R., & Jarvin, L. (2005). Beyond expertise: Conceptions of giftedness as great performance. In R. J. Sternberg, & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 343-358). New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511610455.020

Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, *52*(3), 591-620. https://doi.org/10.1111/j.1744-6570.1999.tb00173.x

Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh, PA: University of Pittsburgh Press. https://doi.org/10.2307/j.ctt6wrc8r

Watters, J. J., & Diezmann, C. M. (2003). The Gifted Student in Science: Fulfilling Potential. *Australian Science Teachers Journal, 49*(3), 46-53.

Winner, E. (1996). *Gifted Children: Myths and Realities*. New York: Basic Books.

Zaccaro, S. J., White, L., Kilcullen, R., Parker, C., Williams, D., & O'Connor-Boes, J. (1997). *Cognitive and temperament predictors of Army civilian leadership*. Bethesda, MD: Management Research Institute, Inc.

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# Liderski potencijal darovitih učenika


## Sažetak

*Ovim se radom nastoje upotpuniti spoznaje o liderskom potencijalu darovitih učenika. Cilj je utvrditi distinktivne karakteristike učenika darovitih u području glazbe, likovne umjetnosti, sporta i matematike, s obzirom na sljedeće aspekte liderstva: sklonost originalnosti i kreativnosti, temeljne dimenzije osobnosti, motiv postignuća i emocionalna inteligencija. Istraživanje je provedeno na prigodnom uzorku od 473 ispitanika koji pohađaju specijalizirane srednje škole za darovite, a primijenjeni su sljedeći instrumenti: skala predsvjesne aktivnosti (SPA), upitnik Velikih pet (BFI), skala motiva postignuća (MOP 2002) i skala emocionalnih kompetencija. Rezultati istraživanja sugeriraju različite konstelacije dispozicija liderstva ovisno o vrsti domene. Domene sporta i glazbe specifične su po naglašenosti osobina koje su povezane s javnim nastupanjem. Introspektivnost i upućenost na intrapsihički plan važne su odrednice domena matematike i likovne umjetnosti. Domene glazbe i likovne umjetnosti karakterizira izraženije zanimanje za inovativnost i raznolikost, a za domene sporta i matematike važno je „ponašanje prema utvrđenim pravilima". Zaključuje se da se liderski potencijal darovitih učenika može precizno uočiti i adekvatno podržavati samo ako se definira unutar okvira pojedinačnih domena.*


**Ključne riječi:** *motiv postignuća; temeljne dimenzije osobnosti; kreativnost; emocionalna inteligencija.*

## Uvod

U suvremenim se shvaćanjima darovitosti inzistira na promatranju te pojave kao razvojnog procesa koji bilježi postupno usavršavanje potencijala do izvanrednog učinka (Gagné, 2005; Renzulli, 2005). Navedena je transformacija značajno određena ko-kognitivnim karakteristikama, kao što su: motivacija, otpornost, riskiranje, neovisnost, emocionalni intenzitet, asertivnost, upornost, samoučinkovitost, kreativnost (Lee i Olszewski-Kubilius, 2006). Činjenica je da ko-kognitivna svojstva poboljšavaju kognitivno funkcioniranje pojedinca, usmjeravajući ga prema tome da transformira svoj potencijal darovitosti putem društveno konstruktivnog djelovanja. Uvođenje ko-kognitivnih svojstava proširuje područje darovitosti izvan granica opće inteligencije kako bi se usmjerilo na razvoj talenta, ali istodobno je predstavljena i ideja da su neke

ko-kognitivne karakteristike odvojeni modaliteti darovitosti. Stoga je u *Marlandovu izvještaju* darovitost definirana kao značajna učinkovitost i / ili potencijal u jednom ili više sljedećih područja: 1) opća intelektualna sposobnost, 2) specifična akademska sposobnost, 3) kreativno ili produktivno razmišljanje, 4) liderska sposobnost, 5) vizualne i izvedbene umjetnosti, 6) psihomotoričke sposobnosti (Marland, 1972). Unatoč rastućem zanimanju za ko-kognitivne osobine, bilo kao pokretačku snagu u razvoju darovitosti, ili kao zaseban oblik, vrlo je malo istraživanja koja su provedena među populacijom darovitih učenika, pogotovo s obzirom na različite domene. Značajno je da darovitost koja se očituje u određenoj domeni ne podrazumijeva opću intelektualnu sposobnost kao podlogu koja je slučajno usmjerena prema domeni, već ima podrijetlo u visoko razvijenim specifičnim vještinama koje odgovaraju dotičnoj domeni ili specifičnoj bazi znanja (Pekić, 2010). Uzimajući u obzir činjenicu da se domene međusobno razlikuju u sadržaju i strukturi znanja koje uključuju, razumno je pretpostaviti da je odnos između vještina i domena dvosmjeran. Dok specifične vještine usmjeravaju pojedinca prema određenoj domeni, domena usmjerava daljnji razvoj tih vještina postavljajući posebne zahtjeve pred pojedinca. Osim toga, kvaliteta darovitosti specifična za određenu domenu ne odražava se samo u razvoju određenih vrsta vještina, pri čemu je prevladavajuća koncepcija ona koja naglašava da talenti koji se manifestiraju u različitim područjima podrazumijevaju različite kombinacije neintelektualnih čimbenika (Benbow i Minor, 1990, navedeno u Pekić, 2010).

Jedno od temeljnih ljudskih prava u civiliziranom društvu jest pravo pojedinca da u potpunosti ostvari svoje potencijale. Osobne su nagrade za ostvarivanje punog potencijala mnogobrojne, ali su društvene beneficije jednako važne. Prosperitet zemlje nedvojbeno ovisi o pojedincima koji su vodeći stručnjaci u svom području, koji kreiraju znanje i koji mogu doprinijeti rješavanju problema u budućnosti (Watters i Diezmann, 2003). Stoga se poziv za oblikovanjem i podržavanjem darovitih lidera ne smije zanemariti. Upravo je zbog toga istraživački fokus ovoga rada usmjeren na rasvjetljavanje liderskog potencijala darovitih učenika u specifičnoj domeni u kojoj se manifestira darovitost.

Kada je riječ o fenomenu liderstva, može se uočiti da postoje vrlo raznovrsni kriteriji na temelju kojih se klasificiraju suvremeni pristupi njegovu proučavanju. Jedna od mogućnosti podrazumijeva određivanje autorove pozicije u odnosu na objasnidbenu snagu „dispozicijskih" konstrukata u objašnjavanju te pojave. S jedne su strane pristupi u čijoj je osnovi pretpostavka da postoje stabilne i trajne unutarnje dispozicije koje određuju liderstvo (Drath i Palus, 1994; Kirkpatrick i Locke, 1991; Schein, 1992), a da su s druge strane pristupi koji negiraju prihvatljivost definiranja takvih dispozicija liderstva i koji ga smatraju, u manjoj ili većoj mjeri, situacijski specifičnim (House, 1971; Kerr i Jermier, 1978; Vroom i Yetton, 1973). Polazeći od rezultata istraživanja koji pokazuju da postoje individualne razlike u kvaliteti i kvantiteti sposobnosti reagiranja pojedinaca prilikom preuzimanja određenih uloga u grupi ili kolektivu, uključujući i liderske (Barling, Slater, i Kelloway, 2000; Chen, Jacobs, i Spencer, 1998; Franceško i

Mirković, 2008; Goleman, Bojacis, i Maki, 2006; Judge, Bono, Ilies, i Gerhardt, 2002; McClelland, 1998; Mouly i Sankaran, 1999; Mumford, Scott, Gaddis, i Strange, 2002; Stevens i Ash, 2001; Tierney, Farmer, i Graen, 1999; Zaccaro, White, Kilcullen, Parker, Williams, i O'Connor-Boes, 1997), u ovom se radu zastupa stav da postoje određeni intrapsihički čimbenici koji predisponiraju osobu za ulogu lidera.

U literaturi o liderstvu posebna se pažnja posvećuje činjenici da određene *sposobnosti* odlikuju učinkovite lidere. Iako postoje različite klasifikacije tih sposobnosti, ističe se da klasifikacija koja se najčešće koristi uključuje sljedeće sposobnosti: tehničke – znanje o metodama, procesima i sredstvima potrebnim za izvršavanje određenih zadataka, poznavanje procesa liderstva; interpersonalne – poznavanje ljudske prirode i interpersonalnih procesa, poznavanje strukture i dinamike grupe; i konceptualne – kreativnost u stvaranju ideja i rješavanju problema, sposobnost analize događaja, prepoznavanje potencijalnih problema (Franceško, 2003). Značajan broj istraživanja koja se bave navedenom tematikom usmjeren je prema proučavanju odnosa između konceptualnih sposobnosti – na prvom mjestu kreativnosti u stvaranju ideja i rješavanju problema – i pokazatelja liderskih sposobnosti (Mouly i Sankaran, 1999; Mumford i sur., 2002; Tierney i sur., 1999). Rezultati tih istraživanja pokazuju da kreativnost u značajnoj mjeri određuje liderstvo u različitim domenama djelovanja, te da doprinosi uspješnosti lidera.

Brojna istraživanja o liderstvu usmjerena su i na otkrivanje *osobina osobnosti* učinkovitih lidera. Budući da je najznačajnija klasifikacija osobina osobnosti rezultirala modelom *Velikih pet*, on je postao i najčešći teorijski okvir od kojeg se u istraživanjima te vrste polazilo. Rezultati istraživanja koja se bave tom problematikom (Judge i sur., 2002; Stevens i Ash, 2001; Zaccaro i sur., 1997) naglašavaju snažnu vezu između osobina navedenih u skupini *Velikih pet* i liderstva. Naime, pokazalo se da je posjedovanje određenih osobina osobnosti povezano s učinkovitim liderstvom: ekstrovertiranost se pokazala kao najznačajnija odrednica liderstva, potom slijede savjesnost, neuroticizam (koji je u negativnoj korelaciji s liderstvom), otvorenost i suradljivost.

Kada se govori o odnosu između *motivacije* i liderstva, važno je istaknuti da se u istraživanjima motiv postignuća pokazao značajnim čimbenikom liderstva (McClelland, 1998; Zaccaro i sur., 1997). Stoga se taj motiv smatra preduvjetom učinkovitosti lidera čiji je zadatak pokazati inicijativu i motivirati sebe i druge (Franceško i Mirković, 2008). Unutar segmenta *intrapersonalnih vještina*, u literaturi se pažnja sve više usmjerava na emocionalnu inteligenciju, pri čemu je utvrđeno da su emocije izuzetno važna dimenzija liderstva (Barling i sur., 2000; Chen i sur., 1998; Goleman i sur., 2006).

Općenito gledano, može se zaključiti da se iz domene osobnosti, kao ključne odrednice liderstva izdvajaju: *kreativnost*, *temeljne dimenzije osobnosti - Velikih pet*, *motiv postignuća* i *emocionalna inteligencija*. Pojedinci se mogu roditi s tim osobinama, mogu ih steći učenjem ili oboje. Međutim, treba uzeti u obzir i činjenicu da samo

posjedovanje navedenih dispozicija nije dovoljan uvjet da bi netko postao učinkovit lider (Letić, 2015). Te dispozicije predstavljaju potencijal za liderstvo, ali nisu i jamstvo za njega.

Na temelju uvida u literaturu (Csikszentmihalyi, Rathunde, i Whalen, 1997; Winner, 1996) zaključuje se da se distinktivna obilježja darovitih pojedinaca najčešće utvrđuju u odnosu na prosječnu populaciju. Znatno rjeđe se, međutim, nailazi na opis osobnosti u odnosu na specifičnu domenu unutar koje se darovitost manifestira. Pri tome je također uočeno da su navedena istraživanja usmjerena prema usporedbi dviju šire definiranih domena darovitosti – akademske i umjetničke, kao i da se distinktivna obilježja tih aspekata darovitosti uglavnom istražuju u području pojedinačnih osobnih karakteristika darovitih osoba. Tako je, na primjer, utvrđeno da učenici daroviti u nekoj od akademskih domena pokazuju značajno viši stupanj samopouzdanja, odnosno sigurnosti u sebe i svoje sposobnosti, u odnosu na učenike darovite u domeni glazbe ili likovne umjetnosti (Csikszentmihalyi i sur., 1997), kao i da je osobina nekonvencionalnosti u većoj mjeri karakteristična za učenike darovite u umjetničkoj, nego u akademskoj domeni. Neki rezultati istraživanja (Csikszentmihalyi i Getzels; 1973, Kemp, 1981, prema Feist, 1999; Pekić, 2010) umjetnički darovite pojedince, u odnosu na one akademski darovite, opisuju kao osobe koje karakterizira naglašeniji nonkonformizam, odnosno sklonost prema preispitivanju društvenih normi i vrijednosti. Neka istraživanja osobnih karakteristika akademski i umjetnički darovitih učenika ukazuju na to da potonji imaju znatno veće smetnje u aspektu društvene prilagođenosti, najvjerojatnije zbog toga što društvo, a prema tome i školski sustav, manje vrednuju darovitost u umjetničkim domenama (Olenchak, 1999; Pekić, 2010). Istraživanja su također pokazala da se umjetnički i akademski daroviti pojedinci razlikuju u emocionalnoj sferi, pri čemu umjetnički darovite karakterizira „dispozicija prema intenzivnijim emocionalnim doživljajima" (Andreasen i Glick, 1988, prema Feist, 1999, str. 283).

Može se utvrditi da, unatoč različitim pristupima opisanom problemu, još uvijek ostaje otvoreno pitanje koje konstelacije liderskih dispozicija odlikuju učenike darovite u različitim domenama. Navedeno je pitanje predstavljalo polazište za ovaj rad kojim se nastoje upotpuniti spoznaje o liderskom potencijalu učenika darovitih u četiri različite domene: glazba, likovna umjetnost, sport i matematika.

## Metodologija istraživanja

### *Cilj istraživanja*

Ovaj rad imao je za cilj utvrditi distinktivna obilježja učenika darovitih u domenama glazbe, likovne umjetnosti, sporta i matematike, u području sljedećih dispozicija liderstva: sklonost originalnosti i kreativnosti, temeljne dimenzije osobnosti, motiv postignuća i emocionalna inteligencija. Uzimajući u obzir predstavljene teorijske osnove istraživanja, očekuje se da će rezultati ukazati na različite konstelacije liderskih dispozicija, ovisno o vrsti domene s kojom je pojedinac u interakciji.

### Varijable

Varijable individualnih razlika podrazumijevaju darovitost, koja je definirana kao iznadprosječna razvijenost specifičnih sposobnosti ovladavanja određenom domenom.

U nastavku su navedene karakteristike zavisnih varijabli koje su se koristile u istraživanju:

- sklonost originalnosti i kreativnosti, koja podrazumijeva preferencije neproduktivnih i divergentnih zadataka koji omogućuju visok stupanj originalnosti i ekspresivnosti u odgovoru (Altaras, 2006);
- temeljne dimenzije osobnosti, to jest *Velikih pet* dimenzija osobnosti: neuroticizam, ekstrovertiranost, otvorenost, suradljivost i savjesnost. Temeljne dimenzije osobnosti definirane su kao nekognitivni, vremenski stabilni i, u odnosu na karakteristike uzorka, invarijantni dispozicijski konstrukti koji objašnjavaju najveći dio varijance individualnih razlika (Knežević, Džamonja-Ignjatović, i Đurić-Jočić, 2004);
- motiv postignuća, određen kao težnja prema postizanju uspjeha, bilo da je taj uspjeh definiran kao ostvarenje osobnih ciljeva i/ ili isticanjem pred drugim ljudima. To je složena motivacijska dispozicija čije su komponente: natjecanje s drugim ljudima, ustrajnost u postizanju cilja, ostvarivanje ciljeva kao izvor zadovoljstva i orijentacija prema planiranju (Franceško, Mihić, i Bala, 2002);
- emocionalna inteligencija, postulirana u okviru Golemanova integriranog modela koji pretpostavlja da se područje emocionalne inteligencije može opisati s pomoću četiri široke domene: samosvijest, samoregulacija, socijalne vještine i upravljanje odnosima (Goleman i sur., 2006). Odabir toga teorijskog modela proizlazi iz zapažanja da se u njemu emocionalna inteligencija stavlja u kontekst liderstva.

### Instrumenti

U prikupljanju podataka primijenjeno je nekoliko instrumenata. Skala predsvjesne aktivnosti (SPA), čiji su autori Holland i Baird (1968), koncipirana je kao opća mjera originalnosti/ kreativnosti, pri čemu visok rezultat na toj skali podrazumijeva učinkovitost pojedinca pri korištenju vlastitih predsvjesnih procesa koji, između ostalog, podrazumijevaju prihvaćanje sanjarenja i iracionalnosti kao izvora ideja, sklonost prema novitetima, veće sklonosti prema ekspresivnosti i kreativnosti, neovisnost razmišljanja i toleranciju neovisnih i dvosmislenih sadržaja. Instrument se sastoji od 38 tvrdnji, kao što su: "Često sanjarim o mogućim rješenjima problema s kojima se suočavam", "Smatraju me osobom koja ima dobre ideje", "Moram naučiti stvari na svoj način, a ne samo prihvatiti ideje i strukturu materijala za učenja iz udžbenika ili knjiga ". Pouzdanost SPA iznosi oko ,75.

Za procjenu temeljnih dimenzija osobnosti koristio se srpski prijevod instrumenta *Inventar Velikih pet* (eng. Big Five Inventory, BFI) (John i Srivastava, 1999). Ta skala, koja sadrži 44 čestice, zamišljena je kao pokušaj operacionalizacije

konstrukta modela *Velikih pet* koji se pokazao kao zadovoljavajuća mjera dimenzija obuhvaćenih spomenutim modelom (John, Naumann, i Soto, 2008). U dosadašnjim su se istraživanjima koeficijenti pouzdanosti (α) kretali u rasponu od ,72 za skalu suradljivosti do ,80 za skalu otvorenosti.

Motiv postignuća mjeren je instrumentom MOP 2002, čiji su autori Franceško i sur. (2002). Instrument je koncipiran kao skala Likertova tipa s 55 čestica podijeljenih u četiri podskale, od kojih svaka mjeri jednu komponentu, npr. čimbenik općeg motiva postignuća.

Za potrebe ovog istraživanja konstruiran je instrument za mjerenje emocionalne inteligencije. Potreba za njegovom konstrukcijom proizašla je iz činjenice da ne postoji općeprihvaćen instrument za mjerenje tog konstrukta. Pri konstrukciji i definiranju čestica pošlo se od Golemanovaog određenja emocionalne inteligencije u liderstvu, prema kojemu se izdvajaju četiri domene (samosvijest, samoregulacija, socijalne vještine, upravljanje odnosima).

### *Ispitanici*

Uzorak ispitanika je prigodan, ali je način uzorkovanja sadržavao i elemente stratificiranog uzorka prema domeni darovitosti (glazba, likovna umjetnost, sport, matematika). Unutar četverorazinskog okvira primijenjen je upitnik kojim su ispitana ukupno 473 učenika specijaliziranih srednjih škola za darovite učenike iz Novog Sada, Beograda i Kraljeva. Struktura uzorka i njegova homogenost s obzirom na domene talenta, spola i dobi prikazane su u Tablici 1.

Tablica 1

Budući da je istraživanje uključivalo učenike specijaliziranih srednjih škola za darovite, moglo bi se reći da je uzorak, iako prikladan, imao zadovoljavajući stupanj reprezentativnosti. Činjenica je da prijemni ispiti za te škole uključuju primjenu testova specifičnih vještina, pri čemu propisani minimalni bodovi potrebni za upis zapravo znače da kandidati moraju imati razvijene specifične vještine u odnosu na prosječnu populaciju.

## Rezultati istraživanja

Provjera faktorske strukture skale MOP 2002 primjenom faktorske analize u našem istraživanju nije potvrdila faktorsku strukturu koja je dobivena u prijšnjim radovima autora skale. Pojavila su se manja odstupanja u broju izoliranih faktora, što se može dogoditi prilikom primjene skale na različitim uzorcima koji imaju određene specifičnosti u odnosu na opću populaciju. Naime, izolirana su tri faktora koja zajedno objašnjavaju 38,94 % varijance skupine manifestiranih varijabli (Tablica 2). Vrijednost Kaiser-Meyer-Olkinove mjere prikladnosti uzorkovanja bila je ,925, a vrijednost Bartlettova testa sferičnosti bila je statistički značajna (p=,000), čime je potvrđena opravdanost primjene faktorske analize.

Tablica 2

Prvi faktor definiraju čestice koje ukazuju na tendenciju pojedinca da se istakne i bude uspješniji od drugih. Zbog toga je taj faktor nazvan *natjecanje s drugima* (α=,87). Čestice koje definiraju drugi izdvojeni faktor ukazuju na upornost, zbog čega je drugi faktor nazvan *ustrajnost pri ostvarivanju cilja* (α=,83). Analiza sadržaja čestica koje definiraju treći izdvojeni faktor ukazuje na tendenciju osobe da planira aktivnosti kako bi ostvarila unaprijed postavljen cilj. Taj faktor nazvan je *usmjerenost na planiranje* (α=,73). Faktor *postignuće ciljeva kao izvor užitka* nije se jasno razlikovao čak ni kada je primijenjeno četverofaktorsko rješenje. Čestice povezane s tim faktorom uglavnom su pridružene drugom faktoru (*ustrajnost pri postizanju cilja*).

U cilju ispitivanja područja mjerenja na skali emocionalnih kompetencija, primijenjena je faktorska analiza (metoda glavne osi). Testiranje opravdanosti primjene faktorske analize provedeno je s pomoću Kaiser-Meyer-Olkinove mjere prikladnosti uzorkovanja (KMO) i Bartlettova testa sferičnosti. Dobivena vrijednost KMO mjere je ,905, a vrijednost Bartlettova testa sferičnosti bila je statistički značajna, što ukazuje na primjerenost primjene korelacijske matrice u faktorskoj analizi. Nakon eliminacije psihometrijskih čestica niže vrijednosti (s opterećenjem ispod ,30 i niskim komunalitetom), 51 čestica je zadržana u završnoj verziji upitnika. Na temelju *Scree*-testa izolirana su četiri faktora koja objašnjavaju 32,87 % zajedničke varijance ulaznog skupa varijabli (Tablica 3).

Tablica 3

Prvi faktor okuplja čestice koje se odnose na sposobnost artikuliranja zajedničke vizije, na sposobnost učinkovitog rješavanja konflikata, kao i na sposobnost timskog rada i suradnje. Taj je faktor stoga nazvan *upravljanje odnosima* (α=,89). Drugi faktor okuplja čestice koje se odnose na empatiju, svijest o grupi i pristupačnost. Ovaj je faktor nazvan *društvena osviještenost* (α=,86). Treći faktor okuplja čestice koje se odnose na sposobnost samokontrole, na sposobnost prilagodbe u novim i nepredviđenim situacijama, kao i na uspješno svladavanje teškoća. Taj je faktor nazvan *samoregulacija* (α=,80). Četvrti faktor zasićen je česticama koje ukazuju na tendenciju osobe prema dubokom razumijevanju osobnih osjećaja, potreba, namjera, vrijednosti i slabosti. Taj je faktor nazvan *samosvijest* (α=,71). Na temelju strukture matrice izoliranih faktora, tj. sadržaja čestica koje su postigle najviše korelacije s izoliranim faktorima, potvrđena je operacionalizacija konstrukta *emocionalne inteligencije*, koji je bio polazna točka u izradi upitnika.

U realizaciji konkretnog cilja istraživanja primijenjen je postupak multivarijantne analize varijance. Rezultati testiranja značajnosti razlika u samoprocjeni liderskih dispozicija između četiriju grupa ispitanika prikazani su u Tablici 4.

Tablica 4

Analiza vrijednosti ukazuje na to da, s obzirom na tip darovitosti, postoje statistički značajne razlike u samoprocjeni liderskih dispozicija. Naknadne usporedbe među

grupama provedene su kako bi se dobili podatci o pojedinačnim aspektima osobnosti u kojima se ispitivane grupe razlikuju (Tablica 5).

Tablica 5

Usporedbom razlika svake zavisne varijable pojedinačno, može se uočiti da se samoprocjena učenika koji su daroviti u četiri specifične domene statistički značajno razlikuje u gotovo svim aspektima liderskih dispozicija, izuzev onih koje se odnose na *upravljanje odnosima* i *društvenu osviještenost*. Grupe učenika darovitih u području sporta i glazbe postigle su više rezultate na svim ispitanim varijablama. No, da bi se utvrdilo između kojih grupa postoje razlike na zavisnim varijablama, napravljena je serija univarijantnih analiza varijance s testovima za naknadnu usporedbu među grupama.

Prva univarijantna analiza varijance, koja je imala za cilj utvrđivanje razlika između samoprocjena četiriju grupa ispitanika s obzirom na razvijenost *samoregulacije* (Tablica 6), jasno ukazuje na to da ta karakteristika dominira više kod sportski nego kod likovno i matematički darovitih, te da se prema njoj spomenute grupe ispitanika statistički značajno razlikuju.

Tablica 6

Kada je u pitanju samoprocjena *samosvijesti*, iz Tablice 7 je vidljivo da se likovno daroviti učenici statistički značajno razlikuju od preostalih triju grupa ispitanika, te da je ta karakteristika kod njih najmanje izražena. Također se može uočiti da grupa glazbeno darovitih učenika prednjači s obzirom na nadmoć te karakteristike (zatim slijede sportaši i matematičari).

Tablica 7

Prilikom utvrđivanja razlika između samoprocjene četiriju grupa ispitanika s obzirom na sklonost prema *natjecanju s drugima* (Tablica 8) i *ustrajnosti u ostvarivanju cilja* (Tablica 9), utvrđene su statistički značajne razlike između sportski darovitih, s jedne, i likovno i matematički darovitih, s druge strane.

Tablica 8 i 9

Peta univarijantna analiza varijance jasno ukazuje na to da se samoprocjena glazbeno i matematički darovitih učenika statistički značajno razlikuje u *sklonosti prema planiranju* (p=,041), te da prvi prednjače u razvijenosti te karakteristike.

Premda na granici značajnosti, utvrđena je statistički značajna razlika između samoprocjene glazbeno i sportski darovitih učenika s obzirom na dimenziju *neuroticizma* u korist glazbeno darovitih (p=,049).

Iz Tablice 10 vidljivo je da se likovno daroviti učenici statistički značajno razlikuju od glazbeno i sportski darovitih s obzirom na samoprocijenjenu *ekstrovertiranost*, budući da je kod njih navedena karakteristika slabije izražena (najizraženija je kod sportaša, a potom kod glazbeno darovitih učenika).

Tablica 10

Tukeyev test (Tablica 11) pokazuje da, s obzirom na samoprocjenu *otvorenosti*, postoje statistički značajne razlike između svih ispitivanih grupa, osim između glazbeno i likovno darovitih učenika koji imaju najviše i približno jednake srednje vrijednosti na toj dimenziji (potom slijede matematičari, pa sportaši).

Tablica 11

Kada je u pitanju samoprocjena *suradljivosti*, Tukeyev test sugerira da statistički značajne razlike postoje samo između sportaša i matematičara (p=,019), i to u korist sportaša.

Pretposljednja univarijantna analiza varijance (Tablica 12) pokazuje da se učenici daroviti u domeni sporta statistički značajno razlikuju od glazbeno i likovno darovitih s obzirom na samoprocjenu *savjesnosti* te da je kod njih navedena karakteristika izraženija.

Tablica 12

Posljednja univarijantna analiza varijance, čiji je cilj bio utvrditi razlike između samoprocjene ispitivanih grupa s obzirom na *sklonost originalnosti i kreativnosti* (Tablica 13), ukazuje da statistički značajne razlike postoje između svih ispitivanih grupa, izuzev između učenika darovitih u domeni glazbe i likovne umjetnosti. Poredak je sljedeći: glazbeno i likovno daroviti imaju najviše i vrlo slične srednje rezultate na SPA skali, a zatim slijede matematičari i na kraju sportaši.

Tablica 13

## Rasprava

Ovo je istraživanje usmjereno na distinktivna obilježja učenika darovitih u domenama glazbe, likovne umjetnosti, sporta i matematike, u području sljedećih dispozicija liderstva: sklonost originalnosti i kreativnosti, temeljne dimenzije osobnosti – *Velikih pet*, motiv postignuća i emocionalna inteligencija. Rezultati istraživanja potvrđuju prethodne spoznaje koje ukazuju na razlike u profilu osobnosti učenika darovitih u različitim domenama (Csikszentmihalyi i sur., 1997; Feist, 1999; Olenchak, 1999; Subotnik i Jarvin, 2005). Naime, utvrđeno je da darovitost podrazumijeva različite konstelacije liderskih dispozicija, ovisno o vrsti domene s kojom pojedinac ostvaruje interakciju.

Samoprocjena ispitanika pokazuje da sportski daroviti učenici postižu bolje rezultate na dimenziji samoregulacije i bolje upravljaju svojim negativnim emocijama u odnosu na likovno i matematički darovite. Samoregulaciju najbolje opisuju sljedeće čestice: „Ne dopuštam da me štetne, uznemirujuće emocije, kao što su tuga, strepnja ili bijes, izbace iz takta"; „Uspijevam i u najtežim situacijama sačuvati prisustvo duha, dobro raspoloženje i entuzijazam"; „Ostajem miran i bistre glave čak i kada sam pod velikim pritiskom ili opterećen problemima". Učenici daroviti u domeni sporta, u usporedbi

s učenicima darovitima u domenama likovne umjetnosti i matematike, procjenjuju da imaju višu razinu samokontrole, transparentnosti, prilagodljivosti, inicijative i optimizma. Takvi rezultati mogli bi se tumačiti kao osobitosti navedenih domena, to jest činjenicom da domenu sporta karakterizira veća usmjerenost na vanjsku realnost, a da domene likovne umjetnosti i matematike potiču introspektivnost i usmjerenost na intrapsihički plan, što uzrokuje razlike u njihovoj emocionalnoj sferi.

Rezultati druge univarijantne analize varijance pokazuju da je, na temelju samoprocjene učenika, samosvijest najmanje izražena kod likovno darovitih, a da grupa glazbeno darovitih prednjači po izraženosti tog svojstva. Samosvijest najbolje objašnjavaju sljedeće čestice: „Imam sposobnost utjecati na druge"; „Snalazim se u nepredviđenim, zahtjevnim situacijama"; „Živim u skladu sa svojim principima i vrijednostima". Likovno daroviti učenici pokazuju slabije razumijevanje osobnih osjećaja, potreba, namjera, vrijednosti i slabosti, u odnosu na ostale ispitanike. Darovite u domeni likovne umjetnosti karakterizira i slabije poznavanje vlastitih emocija, slabije poznavanje svojih jakih i slabih strana, kao i niža razina samopouzdanja. S druge strane, izraženost tog svojstva kod glazbeno darovitih učenika ukazuje na to da je visoko vrednovanje vlastitih sposobnosti veoma važno za ovladavanje domenom glazbe. Navedeno potvrđuju i istraživanja kojima se naglašava važnost samopouzdanja na razini razvoja glazbenog talenta koji nadmašuje razinu tehničke vještine (Subotnik i Jarvin, 2005), te prediktivna moć doživljaja samoučinkovitosti nakon uspješne glazbene izvedbe (McCormick i McPherson, 2003).

S obzirom na sklonost prema natjecanju s drugima i ustrajnost u ostvarivanju cilja, istraživanjem su utvrđene statistički značajne razlike između samoprocjene sportski darovitih učenika, s jedne, i likovno i matematički darovitih učenika, s druge strane. Rezultati pokazuju da, osim što su postigli bolje rezultate s obzirom na dimenziju samoregulacije i kontrole vlastitih osjećaja, sportaši – u usporedbi s darovitima u području likovne umjetnosti i matematike – prednjače i u pogledu kompetitivnosti. Iako se u literaturi navodi da je natjecanje s drugima korisno za „veličanje ega" (Ames, 1992), neosporno je da takve sklonosti mogu imati motivacijski učinak, ali i da mogu imati pozitivan učinak na uspješnost učenika. Također, učenici daroviti u domeni sporta ustrajniji su u obavljanju relevantnih aktivnosti, vjerojatno zbog toga što im je svojstvena neka vrsta otpornosti na moguće ometajuće čimbenike, bilo da oni imaju izvor u vanjskoj realnosti ili su povezani s intrapsihičkim planom.

Petom univarijantnom analizom varijance utvrđeno je da se glazbeno i matematički daroviti učenici statistički značajno razlikuju s obzirom na samoprocijenjenu sklonost prema planiranju te da glazbeno daroviti prednjače u razvijenosti toga svojstva. Pretpostavka je da glazba, kao visoko strukturirana domena umjetnosti (Winner, 1996), zahtijeva razrađene vježbe koje se svakodnevno provode, čime se glazba razlikuje od drugih domena umjetnosti. Ovladavanje domenom glazbe zahtijeva disciplinirani težnju prema ostvarivanju postavljenih ciljeva, zbog čega je sklonost planiranju neobično važna.

Rezultati pokazuju da postoje statistički značajne razlike između samoprocjene glazbeno i sportski darovitih učenika s obzirom na dimenziju *neuroticizma*. Glazbeno daroviti učenici u nešto većoj mjeri izražavaju zabrinutost, češće reagiraju iracionalno, imaju slabije kapacitete za prevladavanje stresa i odgađanje neposrednih nagona. Sportaši su emocionalno stabilniji, opušteniji, manje se zabrinjavaju time da će „stvari krenuti loše" i mogu se bolje nositi sa svakodnevnim životnim situacijama. Takvi rezultati mogli bi se eventualno protumačiti činjenicom da glazbeno daroviti učenici često samostalno nastupaju u javnosti. Česta podvrgnutost sudu kritike i publike mogla bi podrazumijevati naglašeniju sklonost prema doživljavanju negativnih emocija, ponajprije tjeskobe, straha i nelagode.

Rezultati samoprocjene pokazuju da su sportaši i glazbenici govorljiviji, aktivniji, druželjubiviji, vedriji, optimističniji i sigurniji u sebe u odnosu na likovno darovite učenike. Tumačenje mogućnosti opisivanja sportski i glazbeno darovitih s obzirom na naglašeniju *ekstrovertiranost*, moglo bi biti utemeljeno na njihovoj većoj ovisnosti o društvenom kontekstu. U literaturi se ističe da izgrađivanje reputacije u domeni sportske ili glazbene izvedbe, prije svega, podrazumijeva upućenost talentiranog pojedinca na segment vlastitog društvenog okruženja koji je označen izrazom „promotori", zbog čega je za te aspekte darovitosti važna visoka razvijenost socijalnih vještina (Subotnik i Jarvin, 2005). S druge strane, dostizanje visokog stupnja razvijenosti likovnog talenta može se zamisliti i bez visoke socijalne kompetencije.

S obzirom na *otvorenost* utvrđene su statistički značajne razlike u samoprocjenama između svih ispitivanih grupa, osim između glazbeno i likovno darovitih učenika, koji imaju najviše i približno jednake srednje vrijednosti za tu dimenziju. Glazbeno i likovno daroviti učenici pokazuju viši stupanj radoznalosti i maštovitosti u odnosu na ostale ispitanike, otvorenijeg su duha prema unutrašnjim doživljajima, skloniji eksperimentiranju, novim idejama i nekonvencionalnim vrijednostima. Takvi rezultati pokazuju sličnost s prethodnim istraživanjima koja su ukazala na važnost svojstva nonkonformizma za ostvarivanje visokog učinka u području likovne umjetnosti (Csikszentmihalyi i Getzels, 1973; Kemp, 1981, prema Feist, 1999; Pekić, 2010).

Kada je u pitanju *suradljivost*, statistički značajne razlike prisutne su između samoprocjene sportaša i matematičara, i to u korist sportaša. Izraženija dominacija tog svojstva kod sportski darovitih mogla bi se pripisati njihovu timskom duhu, koji najčešće nije prisutan kod matematičara.

Rezultati samoprocjene sugeriraju veću *savjesnost* sportski darovitih u odnosu na glazbeno i likovno darovite učenike. Takvi rezultati pokazuju da se sportski daroviti učenici u svom ponašanju pridržavaju etičkih principa i rukovode osjećajem dužnosti, kao i osobnim visokim težnjama. Stoga bi se moglo reći da je kod te grupe ispitanika značajno razvijena motivacija koju pojedini autori nazivaju orijentacijom na zadatak ili posvećenosti zadatku, a koja podrazumijeva motiviranost „iznutra", odnosno intrinzičnu motivaciju (Ames, 1992; Winner, 1996).

S obzirom na samoprocijenjenu značajniju sklonost glazbeno i likovno darovitih učenika da koriste predsvjesne procese – što podrazumijeva prihvaćanje sanjarenja i iracionalnosti kao izvora ideja, težnje prema ekspresivnosti i kreativnosti, neovisnost mišljenja i toleranciju nejasnih i dvosmislenih sadržaja – može se reći da je potvrđeno da je kreativnost značajna odrednica umjetničkih domena darovitosti.

## Zaključak

Tim je istraživanjem liderskog potencijala darovitih učenika ostvaren određeni doprinos na način da je ponuđen detaljniji opis specifičnih kvaliteta različitih vrsta darovitosti. Jasno je da domenu određuje kvaliteta darovitosti koja se unutar nje manifestira i da se specifičnost te kvalitete ogleda kako u aspektu sposobnosti, tako i u aspektu osobina osobnosti. Detaljnije razmatranje samoprocjene osobina osobnosti unutar područja liderskih dispozicija omogućilo je uočavanje određenih distinkcija koje su ovisne o vrsti domene. Kada se usporede domene sporta i glazbe s domenama matematike i likovne umjetnosti, mogu se uočiti specifične konstelacije liderskih dispozicija u aspektu dominantnih osobina koje su povezane s javnim nastupanjem. Introspektivnost i upućenost na intrapsihički plan značajne su odrednice domene matematike i likovne umjetnosti. Domene glazbe i likovne umjetnosti u odnosu na domene sporta i matematike zahtijevaju veću razvijenost osobina osobnosti s predznakom interesa za novo i različito, a za domene sporta i matematike posebno je važno „ponašanje prema utvrđenim pravilima".

Rezultati istraživanja upućuju na važnost domena u stvaranju specifičnog liderskog potencijala koji se u njima manifestira. To ne znači nužno da domena oblikuje darovitu osobu i njezin liderski potencijal, već da odnos između liderskih dispozicija i domene u kojoj se darovitost manifestira može biti dvosmjeran: kao što postoji mogućnost da se određena ponašanja javljaju kao odgovor na zahtjeve domena, tako je moguće i da darovita osoba, uz izuzetne sposobnosti, posjeduje i neke osobine koje je usmjeravaju prema određenoj domeni (Altaras, 2006). Na kraju, rezultati koji impliciraju da darovitost podrazumijeva različite konstelacije dispozicija liderstva ovisno o vrsti domene s kojom pojedinac ostvaruje interakciju upućuju na zaključak da se liderski potencijal darovitih osoba može precizno provjeriti i adekvatno podržavati jedino ako se locira u okvire pojedinačnih domena.

Kada je riječ o ograničenjima ovoga istraživanja važno je reći da je istraživanje uključivalo darovite učenike koji su definirani kao daroviti na temelju njihova pohađanja specijaliziranih srednjih škola za darovite zbog čega rezultate dobivene ovim istraživanjem nije moguće generalizirati na sve darovite učenike u određenim domenama. Nadalje, za svaki znanstveni rad koji se temelji na kvantitativnoj metodologiji istraživanja postoje određena ograničenja koja proizlaze iz nepotpunih metoda prosudbe određene pojave. U tom je smislu pitanje bi li odabir nekog drugog instrumenta pružio drugačiji prikaz liderskog potencijala darovitih učenika u različitim domenama. Domena samovrednovanja ispitanika identificirana je

kao moguće ograničenje provedenog istraživanja; uvođenjem ocjenjivanja koje bi provodile druge osobe upotpunile bi se informacije o istraživanim pojavama. Budući da je liderstvo pojava koja ima društvenu pozadinu, kvalitativno istraživanje kojim bi se analizirali korelati liderstva svakako bi predstavljalo adekvatan korak naprijed i u drugim područjima.

### *Napomena*

Rad je nastao kao rezultat rada na projektu „Pedagoški pluralizam kao osnova strategije obrazovanja" br. 179036 (2011.-2014.), čiju realizaciju financira *Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije*. U radu su se koristili rezultati iz doktorske disertacije „Značaj moralnih i liderskih svojstava za ostvarenje darovitosti" koja je obranjena na Filozofskom fakultetu Univerziteta u Novom Sadu.