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# **BOOK OF ABSTRACTS**





### 17680 | Open, benevolent and responsible for their successes? Comparative analysis of personality traits and locus of control in early adolescence polish students

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The aim of this study was analysis of personality traits and locus of control in 12, 13 and 14-years old polish students. The paper presents a summary of the results of first of the planned three stages of longitudinal study between 2016 and 2019. At the time of conducting this research in 2016, students were at sixth grades of primary schools (12,13 year olds) and first grades of junior high school (14 year olds). All of them were on the verge of introduction of a new reform in the polish education system which terminated junior high schools and prolonged education in primary schools (in 7 and 8 grades consecutively). Personality was assessed on the base of Big Five Model (Costa, McCrae), locus of control – on Rotter's theory of control of reinforcement. Picture Based Personality Survey for Children by Maćkiewicz and Cieciuch and Locus of Control Questionnaire by Kupis and Kurzyp-Wojnarska were used. Both tests are adequate for students in early adolescence in terms of their cognitive requirements. 775 students took part in this study from lubelskie voivodship, which is the eastern border of Poland and the European Union. The research sample was made up of 47% boys and 53% girls, including 32% 12-year-olds and 34% 13 and 14-year-olds each. 14-year old students were less open to experience and conscientious than 12 and 13-year old girls. 14-year old boys had higher general external locus of control than their younger 13 and 12 years old colleagues. Further analyses indicated on interraction effect of sex for connections between agreeableness and locus of control of succesess in 12 year olds and openness to experience and locus of control of succesess in 12 year olds and openness to experience and locus of control of succeses in 12 year olds and openness to experience and locus of control of succeses in 12 year olds and openness to experience and locus of control of succeses in 12 year olds and openness to experience and locus of control in successes in 14 year olds.

#### 17555 | School space and community

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As a public equipment, the school building substantiates its importance due to its impact on urban consolidation. Moreover, the school space carries a social responsibility that not only affects its users, but also contributes to the context and its population. The strategy implemented by Parque Escolar has particularly strengthened the school's role in society, due to the new participative model which amplifies the interactions between school communities and populations. In order to fulfill this goal, conditions have been created to encourage the population to use school facilities in extracurricular activities.

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In addition to the sports areas, the multifunctional spaces and, most importantly, the symbolic space of knowledge — the library — are a major factor in the relationship with the outside community. This emphasis was also extended to spaces dedicated to science, art, technology, laboratory research and workshops. It works as a strategy that stimulates both spaces and activities in the interest of the general population. Furthermore, this attitude pursues the recognition of school by the community, seeking the reassertion among its social context and the redefinition of its role in the urban environment.

The management performance is fostered when the pedagogic autonomy of the school building is prompted, and at the same time, school communities are more involved in the school's didactic commitment.

This proposal is embedded in the project investigation ESCOLAS: Complexidade e Interpretação, in which several students are conducting their master thesis. Each approach relies on studying 74 schools located in Northern Portugal, which were transformed after the Modernization Program. This particular one seeks the significance of associating school architecture with the urban and social dimension.

## 17669 | Does learning music help with math? Portuguese final math test results of musicians and nonmusicians high school students

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There are currently studies that analyze the effects of music expertise, both theoretical and instrumental, at the academic, cognitive, structural and functional levels of the brain. However, is still scarce the evidence that demonstrate the clear existence of a relationship between the study of music and academic performance in general and, especially, in mathematics. The present study investigated whether Portuguese students who studied music obtained better results in the 9th grade Final Exam (2018), compared to their peers who had never participated in formal music education. Participants are 34 boys and 40 girls in the Regular Education between 14 and 15 years of age (M=14,65; SD=0,481) and 42 boys and 50 girls students of Specialized Music Education also between 14 and 15 years of age (M=14,53; SD=0,502). The sample collection was carried out in Portugal with 13 schools, of which 9 are specialized in Music Education and 4 are Regular Education. Our results showed that musicians students registered a better score in the Portuguese National 9th grade Final Exam (2018), in all their domains Numbers and Operations (NO), Geometry and Measurement (GM), Functions, Sequences and Successions (FSS), Algebra (ALG) and Organization and Data Processing (OTD), compared to students who do not have music classes in their curriculum. Learning