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The Impact of Extracurricular Activities and Creativity on Academic Performance of Peruvian Elementary Students

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Abstract This study aimed to evaluate the importance of extracurricular activities for Peruvian elementary students and their effect on their academic performance. The statistical population included all fifth-grade elementary students in Arequipa, Peru, 420 of whom were selected through cluster sampling. Three questionnaires were used for data collection. According to the obtained results, extracurricular activities affected academic achievement, and creativity played a mediating role in this regard. It is also notable that among different extracurricular activities, art and organizational activities had significant effects on academic performance. Furthermore, among the components of creativity, innovation had a significant impact on students' academic performance. The study concluded that extracurricular activities are important for Peruvian elementary students, as they can foster their creativity and boost their academic performance. The study also suggested some implications and recommendations for educators and policymakers.

Keywords: *Extracurricular activities, Academic performance, Creativity, Education, Peruvian students*

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1. Introduction

Without a doubt, good citizen education is one of the most important concerns of education systems in most countries. Studies conducted in many developed and developing countries have shown that education authorities have prioritized good citizen education with firm determination and by developing various educational programs. As mentioned in the latest report of the study of citizenship education by the International Association for Evaluation and Academic Progress, all modern communities are concerned about preparing their children for urban life and citizenship and teaching them the ways and customs of participation in social issues. In fact, the life of many children has been considerably enriched by their participation in extracurricular activities. These activities can be considered organized activities that include most actions performed by elementary students outside the classroom (Karakozov & Ryzhova, 2019).

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The majority of elementary students lack the necessary abilities and skills when faced with life issues, and formal education has not contributed that much to this matter. Therefore, it is necessary for education systems to create the required competencies in elementary students by laying the foundation for teaching how to face and deal with issues through extracurricular activities (Albuquerque et al., 2023).

In general, extracurricular activities are important educational activities through which elementary students can acquire social skills. This study seeks to show the necessity and importance of these activities. Today, elementary students seem to be unable to achieve the objectives of educational, cultural, and social development in full due to the complexities of today's society with the courses and educational activities offered in the current formal and general education courses (Kushkimbayeva et al., 2023). Therefore, they fail to prepare and practice for future experiences and responsibilities and cannot achieve an adequate level of mental health. In addition to the dynamics of the educational system and highlighting its role in the development of society at all levels, enriching the curriculum and providing opportunities and platforms for developing elementary students' talent and creativity and deepening their learning will also become the basis for raising a dynamic and creative generation, the results of which can be observed in society in the near future (Saddhono et al., 2023). On the other hand, extracurricular activities must be designed and implemented to improve education quality, thereby enhancing school development. By using the methods of implementation of these activities, school authorities can make the necessary decisions for the improvement of these activities to achieve the desired feedback (Schroth & Slade, 2021). One of the main responsibilities of schools is to prepare children for social life. Children need to have certain qualifications to effectively participate in their social life. In other words, there will be no success and satisfaction in social life until the children of a society develop certain skills and habits. Based on this principle, some instructors consider nurturing and developing necessary social skills in elementary students as one of the responsibilities of the education system, especially the schools (Indriyani et al., 2021; Ren et al., 2021).

The relationship between creativity and academic performance has been widely studied in elementary education. However, most of these studies have ignored the role of extracurricular activities as a potential factor that influences both creativity and academic performance. Therefore, this study aims to extend the research of Yazdanseta and Nazari (2019) by addressing three research questions:

1. Do extracurricular activities affect students' academic performance with the mediating role of creativity"
2. Do the components of extracurricular activities affect elementary students' academic performance?
3. Do the components of creativity have a significant effect on elementary students' academic performance.?"

In fact, the present study aimed to evaluate the effects of extracurricular activities on the academic performance of elementary school students in Arequipa, Peru, with the mediating role of creativity.

2. Theoretical Framework

2.1. Educational Extracurricular Activities

Educational instructors believe that interest and effort are intertwined with education; interest leads to attention and understanding, and no progress can be made without interest. Extracurricular activities lay the foundation for identifying students' interests and taking steps toward the flourishing of their talents. According to Bakoban and Aljarallah (2015), extracurricular activities are legal activities that are considered a part of a school's programs and are determined based on students' curricula. These programs are implemented under the supervision of the school and change based on the curriculum for the academic year. Given that extracurricular activities are recognized as an inseparable part of the school, their use has increased in schools today. These activities are performed to maintain students' motivation and create a challenge in their learning in order to experience events that are related to school subjects and are experienced in an open space. Notably, these activities are offered both inside and outside the school. These relatively informal activities are not just limited to the classroom and even the school, and, more than any other factor, they are affected by the level of interest, experience, and initiative of the teacher, students, and the school.

According to Ismuwardani et al. (2019), extracurricular activities are a set of experiences, activities, and opportunities designed and implemented inside or outside a classroom, which have objectives such as eliminating the shortcomings of the curriculum and enriching the programs in order to deepen learning, pay attention to the different talents, needs, and interests of the students, help develop their individual abilities, and transform the educational environment into a lively and dynamic environment. On the other hand, these activities prepare learners for social responsibilities and roles and result in their participation in the continuous development of life achievements.

2.2. Creativity

Creativity has attracted significant attention in the past two decades, especially after Joy Paul Guilford's work. However, the main question about creativity definition has remained unanswered because it has been defined by each scholar differently. Weber and Perkins (1992) define creativity as the ability to see a new relationship to produce unusual ideas and deviate from traditional patterns of thinking. According to Eysenck (1979), creativity is a mental process that leads to problem-solving, ideation, conceptualization, creation of artistic forms, and theorization that is original and unique. In general, creativity is a mental process, the result of which is a new phenomenon that has value. However, creativity is a general ability and exists in all people to a greater or lesser extent. The process of creativity is a purposeful or directed one, either for personal benefit or for the benefit of the social group. In fact, creativity is a way of thinking caused by divergent thinking and is not synonymous with intelligence, which includes mental abilities. Creative people have characteristics such as high-level motivation, extreme curiosity, high interest in order, the power of self-expression and self-sufficiency, unconventional and modest personality, perseverance and discipline in work, autonomy, as well as critical and intuitive thinking.

2.3. Educational Performance

Educational success or failure problems are among the most important concerns of the education system. Educational performance improvement and success in any society show the success of its education system in areas of goal achievement and meeting individual needs. In other words, students' academic performance is one of the most important and obvious criteria for assessing the efficiency of education systems. In fact, this system dedicates all efforts to achieve this goal. In general, academic performance shows a person's level of learning that is tested by various exams, such as math, statistics, and science exams. An education system is considered efficient when students have the highest levels of academic performance in various courses. Academic performance refers to a person's learned or acquired ability in academic subjects, which is measured by standard or teacher-constructed tests. Many cognitive and emotional factors affect academic performance (Kaplan & Flum, 2010).

2.4. Research Background

Several studies have been conducted to evaluate the role of creativity and extracurricular activities in the academic performance of students, some of which are briefly mentioned below. In a study entitled "The Effect of Extracurricular Activities on Social Growth and Academic Performance of High School Girl Students in Marvdasht, Iran", Atabaki et al. (2014) evaluated 100 randomly selected female students. According to the results, extracurricular activities had a positive impact on students' social growth. In addition, a significant relationship was observed between extracurricular activities and the improved performance of the participants. In another study entitled "Relationship of Academic Achievement with Postschool Activity", Aminzadeh and Sarmad (2004) examined academic progress with three major after-school homework, extracurricular activities, and television viewing. Intelligence, achievement motivation, number of siblings, and type of school (private or public) were control variables, and the gender of students and their mother's level of education were moderator variables. According to the results, there was a significant curvilinear relationship between out-of-school extracurricular activities and academic achievement. In general, a higher amount of finished homework and out-of-school extracurricular activities was associated with better grades. Yazdanseta and Nazari (2019) similarly suggested that suggests that extracurricular activities can enhance creativity, which in turn can lead to better academic performance.

In a study entitled "Extracurricular Activities and their Effect on the Student's Grade Point Average: Statistical Study", Bakoban and Aljarallah (2015) demonstrated the positive effect of participation in extracurricular activities on students' GPAs. According to the results, higher GPAs were obtained by those who participated in extracurricular activities. Craft (2012) prepared a dissertation entitled "The Impact of Extracurricular Activities on Student Achievement at the High School Level" to evaluate the extracurricular activities of high school students in Georgia. They also assessed the financial pressure of the government in the education sector and the pressure put on them by parents to implement extracurricular activities in order to increase the chances of their children's academic achievement. In addition, the research focused on the effects of these activities on students' success. According to the results, students participating in these activities obtained higher grades. At the same time, they experienced stronger social and communication skills. Pham and Taylor (1999) showed that students' active participation in extracurricular activities led to higher grades in exams. In addition, students acquired group work, management, interaction, and communication skills by participating in these activities and attending class more regularly. Moreover, they had a more positive self-image compared to those who attended no such classes.

In another study, Pham and Taylor (1999) evaluated the impact of entrepreneurial leadership on the creativity and innovation of elementary teachers, for which they randomly selected 200 individuals from Jakarta, Indonesia. Their results were indicative of the direct, positive effect of entrepreneurship leadership on teachers' creativity. In fact, entrepreneurial leadership and teachers' creativity positively and directly affected their innovation. In a study entitled "Implementation of Project-based Learning Model to Increased Creativity and Self-reliance of Students on Poetry Writing Skills" by Ismuwardani et al. (2019), the participants were selected from fourth-grade elementary students in the academic year 2017-2018 in Cirebon, West Java. According to the results, project-based learning improved students' creativity and self-reliance in poetry writing. In another research entitled "Recreational Mathematics in the Development of Creative Thinking of Peruvian Students of Primary School", Ortega et al. (2021) assessed the possible effect of recreational math on the development of creative thinking in 125 fourth to sixth-grade students in a public education center in Huanuco, Peru. In the foregoing study, 100 subjects were selected by random sampling and were then divided into two test and control groups. Afterward, the subjects were assessed by using a creativity test. In the end, the results showed an increase in the creativity of 66% of students in the test group. Therefore, it seems that recreational mathematics could be used as an important tool to improve students' creative thinking.

3. Methodology

3.1. Participants

The statistical population included all fifth-grade male and female students in Arequipa, Peru, in the academic year 2019-2020. Considering that the total number of students in the community under investigation was 2222, the target sample was calculated at 420 students using Cochran's formula at a 5% error rate. The following tools were used to assess the impact of extracurricular activities on the academic performance of students with the mediating role of creativity.

3.2. Instrument

3.2.1. Extracurricular Activities Questionnaire

In this study, a researcher-made questionnaire developed and validated by Yazdanseta and Nazari (2019) was used to evaluate the effect of extracurricular activities on students' academic performance. At first, the instrument encompassed 25 items, which was reduced to 20 following performing exploratory and confirmatory factor analysis. The questionnaire was initially considered with the two dimensions of educational, extracurricular activities, and nurturing extracurricular activities. Due to the inadequacy of the confirmatory factor analysis, the exploratory factor analysis tool was used, and the components of the reinforcement, artistic, group, organizational, and religious activities were extracted. The questionnaire's reliability was approved at a Cronbach's alpha of 0.824.

3.2.2. Academic Performance Questionnaire

The questionnaire was developed by Pham and Taylor (1999) to measure academic performance. The instrument comprised 48 items categorized under self-efficacy, emotional effects, planning, lack of outcome control, and motivation. The questionnaire's reliability was approved at a Cronbach's alpha of 0.813.

3.2.3. Creativity Questionnaire

A researcher-made questionnaire was developed to measure creativity in elementary students. It encompassed four components of politics: flexibility, innovation, and detailed expansion. The tool comprised 60 items, and its reliability was approved at a Cronbach's alpha of 0.761. It was also validated through Confirmatory Factor analysis (CFA).

3.3. Procedure

The participants were asked to complete the three questionnaires: the Extracurricular Activities Questionnaire, the Academic Performance Questionnaire, and the Creativity Questionnaire. The participants were instructed to answer the questions with the help of their parents. The data collection process took about 40 minutes for each participant. The data were then analyzed using SPSS software. Descriptive statistics were used to describe the characteristics of the participants and their scores on the questionnaires. Inferential statistics were used to test the hypotheses and examine the relationships among the variables**.**

4. Results

The Kolmogorov-Smirnov test was used to evaluate the normality of the data. Moreover, the hypotheses were analyzed using regression analysis and path analysis. The output of the one-sample Kolmogorov-Smirnov test is presented in Table 1.

Table 1
The One-Sample Kolmogorov-Smirnov Test for Data Normality

Test	Academic Performance	Creativity	Extracurricular Activities
Total Number	420	420	420
Mean Parameters	108.225	78.195	38.3529
The standard deviation of parameters	19.915	16.55882	15.38736
The most definite	0.049	0.032	0.036
Positive	0.038	0.031	0.0380
Negative	-0.049	-0.025	-0.025
Kolmogorov-Smirnov test	0.889	0.568	0.812
Level of Significance	0.418	0.905	0.669

The first research hypothesis is that extracurricular activities affect students' academic performance with the mediating role of creativity. To test this hypothesis, we used multivariate regression analysis, for which the variables of creativity and extracurricular activities were entered into a regression equation, the results of which are presented in Table 2.

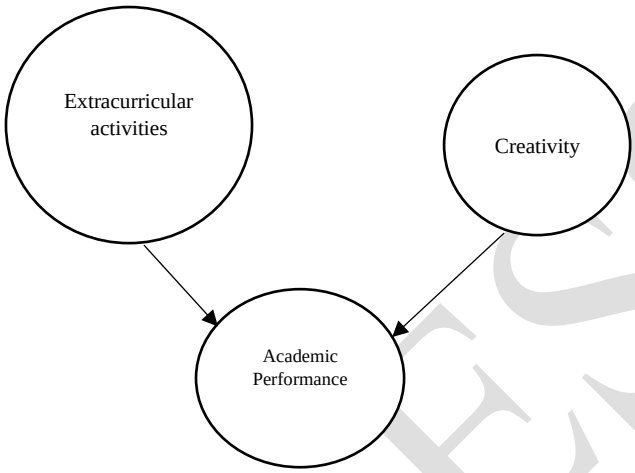
Table 2
Multivariate Regression Coefficients of Factors Affecting Academic Performance

Model	Non-standard coefficients		Standard coefficient	t	Level of Significance	Collinearity Test	
	B	Standard Deviation Error	Beta			Tolerance	Variance Inflation Factor
Extracurricular activities	0.569	0.088	0.356	6.777	0.00	0.985	1.066
Creativity	0.063	0.066	0.066	1.129	0.253	0.985	1.066

First, the collinearity between the variables was investigated to evaluate the effect of creativity and extracurricular activities on the academic performance of students. Given that the tolerance value was estimated at 0.985, as shown in Table 2, it could be concluded that collinearity was low. A tolerance size of a multivariate regression analysis close to 1 indicates a low level of collinearity. Therefore, the variable in question plays a considerable role in the model. Finally, the variance inflation index should be close to 2, which was observed in the current model.

Figure 1

The Role of Extracurricular Activities in Academic Performance of the Direct Model



As shown in model 1 (Figure 1), the variable of creativity had no direct, significant effect on the academic performance of students. The variable of extracurricular activities with a beta of 0.356 had an impact on the academic performance of students. The indirect effect of extracurricular activities on academic performance is shown in Tables Tables 3 and 4.

Table 3

The Impact of Extracurricular Activities on Creativity

Model	Non-standard Coefficient		Standard Coefficient	t	Level of Significance
	B	Standard Deviation Error	Beta		
Extracurricular activities	0.355	0.085	0.236	4.377	0.00

According to Table 3, extracurricular activities with a beta of 0.236 had a significant effect on students' creativity.

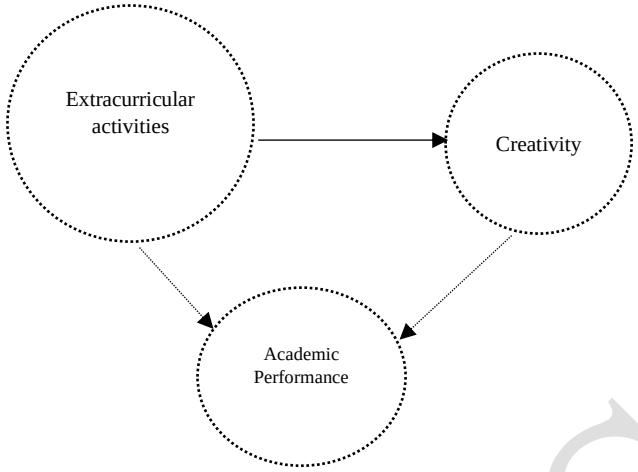
Table 4

The Impact of Creativity on Students' Academic Performance

Model	Non-standard Coefficient		Standard Coefficient	t	Lesvel of Significance
	B	Standard Deviation Error	Beta		
Creativity	0.235	0.055	0.156	4.227	0.00

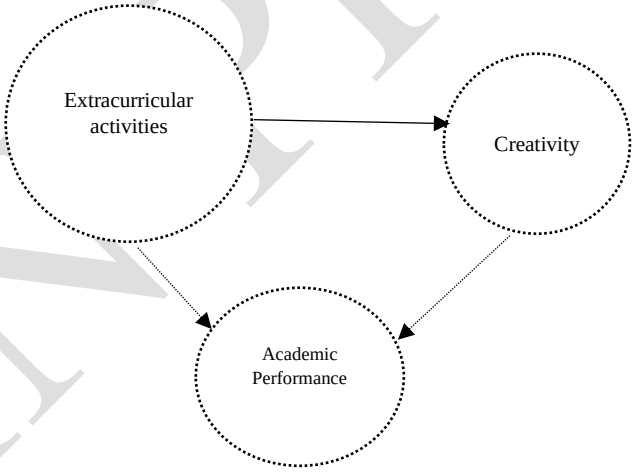
According to Table 4, creativity, with a beta of 0.156, had a significant effect on students' academic performance.

Figure 2
The Indirect Role of Extracurricular Activities in the Academic Performance of Students



In order to estimate the amount of indirect effect of the extracurricular activities variable on performance, the beta obtained from the direct effect of extracurricular activity on creativity, which was equal to 0.236, was multiplied by the beta coefficient obtained from the effect of creativity on performance, which was equal to 0.156. In this regard, the indirect effect of extracurricular activities on academic performance was reported to be 0.036.

Figure 3
The Role of Extracurricular Activities in the Academic Performance of Students with the Mediating Role of Creativity



In the end, we assessed the mediating role of creativity in the relationship between extracurricular activities and the academic performance of students, the results of which are shown in Table 5.

Table 5
Level of Direct, Indirect, and Total Impact of Independent Variables on the Dependent Variable

Variables	Types of Impact		
	Direct	Indirect	Total
Extracurricular activities	0.356	0.036	0.392
Creativity	-	0.156	0.156

According to the analysis results, extracurricular activities had a significant effect on the academic performance of students. On the other hand, the analysis of the mediating variable of creativity demonstrated its role in the increase of the impact of extracurricular activities on students' performance, such that its beta increased from 0.356 to 0.392. Therefore, it could be concluded that creativity positively mediated the effect of extracurricular activities on students' academic performance. In the end, the hypothesis of the effect of extracurricular activities on students' academic performance with the mediating role of creativity was approved, and the null hypothesis was rejected.

The second research hypothesis is that the components of extracurricular activities affect students' academic performance. A multivariate regression analysis was used to evaluate the effect of the components of extracurricular activities on students' academic performance, the results of which are presented in Table 6.

Table 6

Multivariate Regression Coefficients of Components of Extracurricular Activities Affecting Academic Performance

Model	Non-standard Coefficients		Standard Coefficients	t	Level of Significance
	B	Standard Deviation Error	Beta		
Strengthening activities	0.449	0.325	0.081	1.359	1.66
Art activities	1.299	0.432	0.192	21.895	0.00
Group activities	0.195	0.282	0.049	0.711	0.489
Organizational activities	0.659	0.275	0.151	2.286	0.02
Religious activities	0.663	0.395	0.109	1.811	0.07

Among the components of extracurricular activities, art activities with a beta of 0.192 and organizational activities with a beta of 0.151 had a significant impact on academic performance, and components of strengthening, group, and religious activities had no significant impact on the academic performance of students.

The third research hypothesis is that the components of creativity have a significant effect on students' academic performance. In order to test this hypothesis, multiple regression analysis was used, where the independent variable that has the highest correlation with the dependent variable is included in the analysis. The results of the process are shown in Table 7.

Table 7

Multivariate Regression Coefficients of Creativity Components on Academic Performance

Model	Non-standard Coefficients		Standard Coefficient	t	Level of Significance
	B	Standard Deviation Error	Beta		
Innovation	3.177	1.069	0.159	2.991	0.00

Considering that in the multiple regression analysis, only the variables that have the most significant effect on the dependent variable were included in the analysis, and only the innovation component with a beta of 0.159 had a significant effect on the students' performance. Therefore, other creativity components were removed from the model. In relation to the above hypothesis, it was concluded that among the components of fluidity, flexibility, expansion, and innovation, only the innovation dimension had a significant impact. Therefore, the research hypothesis was confirmed, and the null hypothesis was rejected.

5. Discussion

The present study aimed to evaluate the effect of extracurricular activities on the academic performance of students with the mediating role of creativity. In general, the academic performance of students is indicative of the quality of the educational system. Considering that in an educational system, we deal with humans and humans are complex beings, various variables could be involved in their academic performance. However, we assessed the impact of extracurricular activities on the academic performance of students with the mediating role of creativity. Extracurricular activities are a step towards expanding the horizon of education activities, being dynamic, and participating in it as a communication channel between home and school, which causes the development of thinking and reasoning, the creation of new attitudes, and improving the academic performance of students. Extracurricular activities make students spend more time learning outside the school curriculum and in their free time. Psychologically, the more a person is exposed to information, the more they will be interested in the issues and information presented. Ultimately, the student's participation in such programs will improve their desire and interest. As observed in the structural analysis section, extracurricular activities had a significant effect on the creativity and academic performance of students. Notably, similar to the finding of Yazdanseta and Nazari (2019), extracurricular activities had a greater effect on academic performance through the mediating role of creativity, and creativity strengthened the effect of extracurricular activities on academic performance.

Several studies have been conducted on the factors affecting the academic progress of students, the results of which are in line with our findings. For instance, Bakoban and Aljarallah (2015) achieved similar results in a study. Based on their findings, extracurricular activities had a significant impact on academic performance, especially in female students. Gilman et al. (2004) suggested the need to motivate students to participate in out-of-school activities, which leads to experiencing more experimental activities. Ismuwardani et al. (2019) realized that students' participation in extracurricular activities increased their creativity and problem-solving, especially in math courses. In other words, some school subjects require more creativity, which can be created in students through participation in extracurricular activities. In a study, Fleith et al. (2002) evaluated the effects of a creativity training program on divergent thinking abilities and self-concept in elementary students. Based on their reports, the creativity training program had a slight effect on students' self-concept and had a great effect on their divergent thinking abilities. The results obtained by Massoni (2011) were indicative of a high correlation coefficient between extracurricular activities and the psychosocial adaptation of students, which is congruent with our findings. In another study, Massoni (2011) concluded that students learn democratic concepts by participating in extracurricular activities, and these programs can teach concepts that students do not learn in formal classes. In line with our findings, Kaplan and Flum (2010) concluded that the extracurricular activities of students helped to advance their academic and professional goals. It was also reported that extracurricular activities are the basis for creating opportunities for friendship, the development of social interactions, and opportunities for the development of social skills. As observed in previous studies, extracurricular activities have an undeniable effect on the academic progress and creativity of students.

Today, experts emphasize the role of non-formal education according to students' desires and talents in strengthening and completing curricula. The importance of extracurricular activities is so high that it cannot be ignored. Therefore, providing opportunities for students to express and present their abilities and creativity can be the primary prerequisite for creative movements and discovering students' potential talents. It is clear that people's lives will be problematic without compatibility and interaction with each other. Therefore, the process of education seeks to familiarize people with everything that is the source of a good, suitable, and stable life and put them on the path of growth and improvement so that they can continue their effective life in the light of it. This was the responsibility of families in the past, and other institutions played no such role in this regard. As a result of social, economic, cultural, and even political transformations that occurred in human societies, a huge part of this task of education was entrusted to the institution of education. Education has also attempted to achieve its goals in the form of curriculum and content of textbooks. However, it was realized that the education system is not able to achieve these goals alone. Therefore, educational-social and extracurricular activities were added to the official process of education. Accordingly, parents, teachers, and guardians of education

should pay more attention to education outside of school and should focus on extracurricular activities. The same activities that were mentioned in the current research are organizational and art extracurricular activities. This will strengthen students' creativity and improve their academic performance. By creating a scientific environment and placing students in such environments, we can help them improve their educational performance and flourish their creativity. Today's transformative world, in which competition increases every day in the industry section, needs the flourishing creativity of successful students in order to prepare themselves for this field. The flourishing of students' creativity has a great impact and role in their future careers and other social and professional skills. According to our findings and the effect of extracurricular activities on the academic performance of students, there is a great emphasis on extracurricular activities in order to enhance students' creativity and academic performance. On the other hand, organizational, art, and group activities should be further included, and nurturing creative talents in students should be more emphasized (Yazdanseta & Nazari, 2019). Furthermore, based on our findings, students with higher innovative abilities are more likely to achieve better academic results. Last but not least, there are a few potential areas for further research: The role of extracurricular activities as a tool for social and emotional development for elementary students and its impact on their overall well-being and academic performance. The effects of participation in extracurricular activities on the socio-emotional development of elementary students and the implications for school policy, teacher training, and curricula. The relationship between extracurricular activities and academic motivation and performance, as well as the role of extracurricular activities in promoting and fostering social support and relationships among students.

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References

Albuquerque, F., Silva, B., & Silva, D. (2023). A cultural approach to oral communication apprehension by accounting students in Brazil and Portugal. *International Journal of Society, Culture and Language*, *11*(1), 30-46. https://doi.org/10.22034/ijscl.2023.1985832.2896

Aminzadeh, A., & Sarmad, Z. (2004). Rabete pishraft tahsili ba clas-hay-e bad az madrese [Relationship of academic achievement with postschool activity]. *Journal of Psychology*, *8*(3), 249-312.

Atabaki, A. M., Mostafa Pour, M., & Mostafa Pour, J. (2014). Tasir-e fa'aliat-haye fogh-e barnameh bar roshd-e ejtemaee va amalkard-e tahsili danesh amoozan-e dokhtar-e dabirestani-e shahrestan-e Marvdasht [The effect of extracurricular activities on social growth and academic performance of high school girl students in Marvdasht] [Conference presentation]. First National Conference on Educational Sciences and Psychology, Andisheh Sazan Mobtaker Javan Company, Marvdasht, Shiraz, Iran.

Bakoban, R. A., & Aljarallah, S. A. (2015). Extracurricular activities and their effect on the student's grade point average: Statistical study. *Educational Research and Reviews*, *10*(20), 2737–2744. https://doi.org/10.5897/ERR2015.2436

Craft, S. W. (2012). *The impact of extracurricular activities on student achievement at the high school level* [Doctoral dissertation, The University of Southern Mississippi]. Aquila Digital Community.

Eysenck, M. W. (1979). Anxiety, learning, and memory: A reconceptualization. *Journal of Research in Personality*, *13*(4), 363–385. https://doi.org/10.1016/0092-6566(79)90001-1

Fleith, D. D. S., Renzulli, J. S., & Westberg, K. L. (2002). Effects of a creativity training program on divergent thinking abilities and self-concept in monolingual and bilingual classrooms. *Creativity Research Journal*, *14*(3-4), 373-386. https://doi.org/10.1207/S15326934CRJ1434_8

Gilman, R., Meyers, J., & Perez, L. (2004). Structured extracurricular activities among adolescents: Findings and implications for school psychologists. *Psychology in the Schools*, *41*(1), 31–41. https://doi.org/10.1002/pits.10136

Indriyani, I. E., Syaharuddin, S., & Jumriani, J. (2021). Social interaction contents on social studies learning to improve social skills. *The Innovation of Social Studies Journal*, *2*(2), 93-102. https://doi.org/10.20527/iis.v2i2.3085

Ismuwardani, Z., Nuryatin, A., & Doyin, M. (2019). Implementation of project-based learning model to increase creativity and self-reliance of students on poetry writing skills. *Journal of Primary Education*, *8*(1), 51-58. https://doi.org/10.15294/JPE.V8I1.25229

Kaplan, A., & Flum, H. (2010). Achievement goal orientations and identity formation styles. *Educational Research Review*, *5*(1), 50–67. https://doi.org/10.1016/j.edurev.2009.06.004

Karakozov, S. D., & Ryzhova, N. I. (2019). Information and education systems in the context of digitalization of education. *Journal of Siberian Federal University, Humanities and Social Sciences*, *12*(9), 1635-1647. https://doi.org/10.17516/1997–1370–0485

Kushkimbayeva, A., Tymbolova, A., Murzinova, A., Kuchshanova, A., Akchambayeva, S., & Bostekova, A. (2023). Formation of students' language competence based on linguistic personality's verbal-semantic level. *International Journal of Society, Culture and Language*, *11*(3), 213-225. https://doi.org/10.22034/ijscl.2023.704994

Massoni, E. (2011). Positive effects of extra-curricular activities on students. *ESSAI*, *9*, 83-87.

Ortega, F. P., Bardales, J. C. T., & Cipriano, F. V. (2021). Recreational mathematics in the development of creative thinking of Peruvian students of primary school. *Turkish Journal of Computer and Mathematics Education*, *12*(14), 3569-3575.

Pham, L. B., & Taylor, S. E. (1999). From thought to action: Effects of process- versus outcome-based mental simulations on performance. *Personality and Social Psychology Bulletin*, *25*(2), 250–260. https://doi.org/10.1177/0146167299025002010

Ren, L., Chen, J., Li, X., Wu, H., Fan, J., & Li, L. (2021). Extracurricular activities and Chinese children's school readiness: Who benefits more? *Child Development*, *92*(3), 1028–1047. https://doi.org/10.1111/cdev.13456

Saddhono, K., Rohmadi, M., Setiawan, B., Suhita, R., Rakhmawati, A., Hastuti, S., Islahuddin, I. (2023). Corpus linguistics use in vocabulary teaching principle and technique application: A study of Indonesian language for foreign speakers. *International Journal of Society, Culture and Language*, *11*(1), 231-245. https://doi.org/10.22034/ijscl.2022.1971972.2823

Schroth, S. T., & Slade, M. L. (2021). Talent development: From theoretical conceptions to practical applications. In T. L. Cross & J. R. Cross (Eds.), *Handbook for counselors serving students with gifts and talents* (2nd ed., pp. 45-62). Routledge. https://doi.org/10.4324/9781003235415

Weber, R. J., & Perkins, D. N. (Eds.). (1992). *Inventive minds: Creativity in technology* (Vol. 10). Oxford University Press.

Yazdanseta, F., & Nazari, P. (2019). Studying the effect of extracurricular activities on the academic performance based on the mediator role of creativity. *Journal of Research in Teaching*, *7*(1), 87-107.