*International Journal of Engineering Education* Vol. 39, No. 5, pp. 1297–1304, 2023
Printed in Great Britain

0949-149X/91 $3.00+0.00


# Impact of College Culture on Enthusiasm and Quality of Life of Students: A Case Study in China*

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The purpose of this study is to investigate the relationship between school culture (previous norms, values, and traditions) and the quality of life and the academic enthusiasm of students at Zhejiang College of Security Technology in the city of Wenzhou, China. The number of participants is 363 male students, they were selected using cluster-random sampling. Three standard questionnaires were utilized to collect data. With the use of SPSS software, Pearson's correlation coefficient and regression analysis were utilized to evaluate the data. The results show that the variables of school culture and quality of life at school jointly predicted 23.4% of the variance in academic enthusiasm. Also, the components of "relationship with teachers," "general satisfaction," and "opportunity" from the quality of life in school and the components of "student teacher relationships" and "educational opportunities" from the school culture played the most important role in predicting the academic enthusiasm of students. According to the results, it can be stated that the school's culture and quality of life have a significant impact on the academic enthusiasm of students.

**Keywords:** school culture; life quality in school; academic eagerness; Zhejiang College of Security Technology; Wenzhou City

## 1. Introduction

Project based learning (PBL) is widely used in engineering education because it can effectively cultivate students' ability to cope with the complex challenges of society [1]. Current higher education is based on the development of competencies, including universal competencies for the overall development of the student. Strategies for the development and assessment of generic competencies are discussed in the context of engineering technology courses and degrees [2]. It has been recognized that the underlying data of trends, in addition to their inherent randomness, may play an important role in the risk estimation of engineering design [3]. Based on the results-based education and ideation-design-Implement-operation education model, combined with the emerging engineering education (integration, inheritance and innovation), the 3I-CDIO-OBE talent training model of engineering education in China, which fully embodies the attributes of general education, professional education and innovative education in engineering practice teaching [4]. Engineering education is based on technical science and trains engineers who can transform science and technology into productive forces. Engineering education is to train talents under the international environment, and to update the traditional training mode of engineers from the aspects of education concept, model, goal, way and means [5]. Many recent software engineering graduates often face difficulties starting their careers because the skills they learned in their college education are not aligned with those required by the industry [6]. Academic success of today's youth is contingent on their enthusiasm for learning. These children are more engaged in school and exhibit a stronger sense of initiative [7]. Insofar as it is viewed as a crucial aspect of learning, students' motivation to study is a crucial determinant of academic achievement [8]. Academic enthusiasm refers to the effort expended to complete academic tasks, and its efficiency. Academic enthusiasm as students' psychological capital and their direct efforts to learn and acquire skills, as well as their desire to increase their level of success, which results in effective participation in school and class activities, adaptation to school culture, and appropriate relationships with teachers and their peers. Academic growth, the improvement of students' academic performance in school, and the reduction of risky behaviors are significantly influenced by the enthusiasm for learning [9, 10]. Students with academic enthusiasm are more attentive and focused on the

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* Accepted 29 June 2023.

topics, more committed to school rules and regulations, avoid incompatible and undesirable habits, and achieve higher credits [11]. In contrast, a lack of enthusiasm for education is linked to severe negative outcomes, such as failing to make academic progress, engaging in deviant behavior, and dropping out of school [12].

Personal perspectives and life experiences in a variety of contexts, including school, are among the factors that impact students' enthusiasm for school and participation in extracurricular activities [13]. Quality of life refers to the conditions that allow a person to live well, so that he or she is able to perform daily tasks in an optimal physical, mental, and social state [14].

School culture influences the academic motivation of students in addition to other factors. One of the variables influencing the academic achievement of students is the school's cultural climate [12]. In general, culture's existence can be perceived, but it is extremely challenging to describe and objectively evaluate. The values, beliefs, and customs that govern the school's atmosphere make up the institution's culture. Each school's culture is unique and individualized, distinguishing it from others. Each school has its own culture, which consists of the shared values, ideas, and beliefs of its students.

Given the positive effects academic enthusiasm has on students and the downsides of its absence, it is crucial to identify the factors that influence academic enthusiasm. One of the goals of families and schools is the upbringing of children while attaining quality educational achievements. Students' families provides them with resources and privileges that can serve as capital in their academic disciplines and propel them forward in the educational world. Consequently, it is crucial to evaluate the cultural capital of the family in the community and its effects on academic enthusiasm, as well as the distinctive culture of each school and its underlying variables that directly or indirectly influence students' academic enthusiasm.

Today, the determinants of school quality of life and culture play a crucial role in enhancing students' motivation and academic achievement. Therefore, having an understanding of these determinants plays a major role in attaining educational goals. The first step in this direction would be to assess the connection between these factors. In this study, the relationship between school culture, quality of life at school, and academic motivation among students will be investigated.

In order to do this, the current study looks at the link between school culture, quality of life, and academic drive among male students of Zhejiang College of Security Technology, and it statistical significance.

## 2. Theory and Hypotheses Development

### *2.1 School Culture and Academic Eagerness*

The influence of schools on student performance cannot be denied. The previous norms, values, and traditions, and consequently the school's culture, are contributors to improved academic performance. School culture can have a positive impact on students' learning and academic enthusiasm, or if it is hostile and negative, it can inhibit good school performance [15]. The school's culture should have qualities that distinguish it from other schools while fostering commonalities among the students' fundamental beliefs, values, and customs. According to the form of social support, Alessandro and Sadh have classified four elements of school culture. The first dimension, student relationships, refers to the interactions between students [16]. The second dimension, the relationship between students and teachers, pertains to the nature and quality of student-teacher interactions. The third dimension, normative expectations, refers to the extent to which students comply with school regulations; the fourth dimension, educational opportunity, refers to how educational opportunities and facilities are provided in school; and the fifth dimension, educational opportunity, refers to how educational opportunities and facilities are provided in school [17].

School culture is a complex form of traditions and customs that are formed over time through the interaction of teachers, students, parents, and administrators in response to crises and problems, and then passed on to the following school generations. School culture plays a significant role in the development and refinement of educational frameworks. All innovations and reforms will fail if school enhancements are not integrated into the institution's dominant culture [15]. Consequently, efforts should be made to establish a successful and positive school culture, as this enables school administrators to more effectively enforce its unwritten rules, traditions, norms, and expectations in order to achieve the desired results. This association has also been established by prior research.

According to Harbison and Rex, school culture comprises elements such as school goals, its structure and organization, classroom atmosphere, organizational hierarchical connections, and colleagues' work relationships [18]. The perception of the school environment by Beijing students affects their academic engagement and academic development, suggesting that the culture of each school may promote student autonomy [12].

### *2.2 Quality of Life and Academic Eagerness*

Academic enthusiasm is manifested by behaviors

such as attending class and actively participating in class-related matters, the student's positive attitude toward school, and the ability to meet performance expectations. And it causes effective participation in school activities, participation in class activities, proper relationships with teachers and other students, academic progress, and academic improvement of students in schools. Academic enthusiasm is manifested by behaviors such as attending class and actively participating in class-related matters, the student's positive attitude toward school [19]. In contrast, the quality of life in school refers to the well-being and overall happiness of children in terms of good and negative school-related experiences [20]. These positive and negative experiences that impact the student's overall assessment of their well-being and general contentment with school life reveal the extent to which pupils are satisfied with school life on a daily basis. The greater the level of student satisfaction with school life, the more positive attitude they have toward school and their activities. This positive attitude offers the required foundation for children to attend school more often, their dedication to school and participation in associated activities, and the enthusiasm and desire to do their homework and enhance their education day by day. This association has also been established by prior research.

Kostereliogloo assessed the relationship between high school students' perceptions of the quality of life at school and their academic motivation in the province of Amasya [21]. Wang and Eccle investigated the relationship between school location, success motivation, and academic fervor among middle school students in Michigan [22]. Wang and Holcombe analyzed the connection between a student's academic enthusiasm and academic performance [12].

### *2.3 Research Hypotheses and Hypothesized Path Model*

This study is unique in that it analyzes the association between school culture and quality of life and academic enthusiasm among male students of Zhejiang College of Security Technology. In light of the relevance and significance of environmental elements in students' academic enthusiasm and quality of life, the researcher conducted the present study on the basis of the following hypotheses:

*Hypothesis 1:* There is a significant relationship between school culture and academic enthusiasm among male students in Zhejiang College of Security Technology.

*Hypothesis 2:* There is a significant relationship between quality of life and academic enthusiasm among male students in Zhejiang College of Security Technology.

*Hypothesis 3:* Quality of life and school culture are able to predict academic enthusiasm of male students in Zhejiang College of Security Technology.

Fig. 1 depicts the proposed conceptual model for the research, which is based on the research's back-

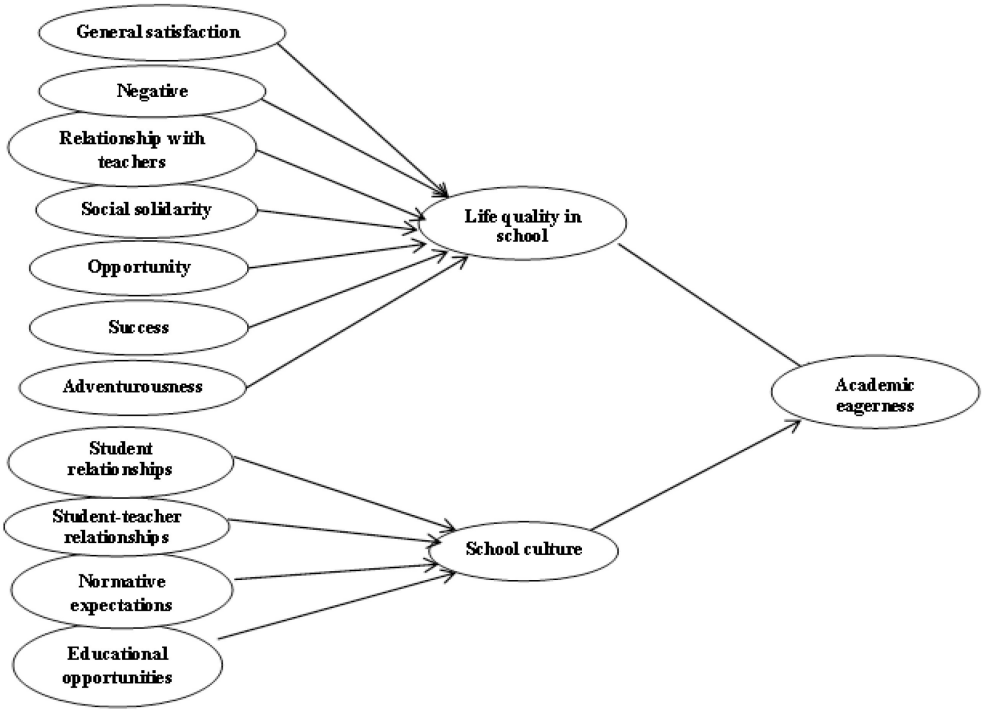


**Fig. 1.** Conceptual model of the research.

ground in examining the relationship between school culture and quality of life and academic enthusiasm.

## 3. Method

### *3.1 Participants and Procedures*

In terms of methodology, this research is a descriptive survey-correlation type. In terms of purpose, it is considered an applied research. Because it investigated the relationship between school culture and the quality of life at school and the academic enthusiasm of male students of Zhejiang College of Security Technology.

The participants are 363 male students studying at Zhejiang College of Security. The total number of students of the college is 6635. Data were collected using a questionnaire.

### *3.2 Measures*

In this study, standard questionnaires were utilized to investigate the qualitative variables of the research. The school culture variable is measured on a five-option Likert scale using the standard questionnaire of Alexander and Saad [16], which consists of 25 questions and four components (student relationships, student-teacher relationships, normative expectations and educational opportunities). The quality of life at school was measured using the standard questionnaire which consists of 39 questions and seven components (overall satisfaction, negative affect, teacher, social solidarity, opportunity, success, and adventure).

In order to ensure that the selected constructs and items are able to measure the relationship between the parameters, additional refinements were made after consulting seven experts in this field. It should be noted that factor analysis was used to confirm the validity of the questionnaires. Cronbach's coefficient was also calculated to evaluate the reliability of the research questionnaire. Table 1 presents the reliability coefficient of the research variables.

**Table 1.** Cronbach's alpha coefficient of research variables

| Variable | Dimensions | Cronbach's alpha coefficient |
|---|---|---|
| School culture | Student relationships | 0.80 |
| | Student-teacher relationships | 0.79 |
| | Normative expectations | 0.77 |
| | Educational opportunities | 0.76 |
| Life quality in school | General satisfaction | 0.76 |
| | Negative emotions | 0.80 |
| | Relationship with teachers | 0.81 |
| | Social solidarity | 0.80 |
| | Opportunity | 0.77 |
| | Success | 0.79 |
| | Adventurousness | 0.74 |
| Academic eagerness | | 0.79 |

### *3.3 Analytical Procedures*

Descriptive and inferential statistical methods were used to analyze the data in this study. In fact, each variable is initially described in the form of tables and statistical indicators using SPSS software. Finally, the data were analyzed using the Pearson's correlation coefficient and regression methods in SPSS statistical software.

## 4. Results

### *4.1 Descriptive Statistics*

The goal of this study was to examine the association between school culture and quality of life and academic eagerness among male students of Zhejiang College of Security Technology. According to

**Table 2.** Descriptive statistics of research variables

| Variable | Number | Average | Standard deviation | Lowest | Most | Variance |
|---|---|---|---|---|---|---|
| **School culture** | 363 | 2.91 | 1.012 | 1.00 | 4.00 | 1.051 |
| **Student relationships** | 363 | 3.02 | 0.985 | 1.00 | 4.00 | 0.974 |
| **Student-teacher relationships** | 363 | 2.88 | 1.014 | 1.00 | 4.00 | 1.067 |
| **Normative expectations** | 363 | 2.85 | 0.992 | 1.00 | 4.00 | 0.968 |
| **Educational opportunities** | 363 | 2.82 | 0.976 | 1.00 | 4.00 | 0.983 |
| **Life quality in school** | 363 | 3.89 | 1.158 | 1.00 | 5.00 | 1.313 |
| **General satisfaction** | 363 | 3.74 | 1.121 | 1.00 | 5.00 | 1.219 |
| **Negative emotions** | 363 | 3.84 | 1.089 | 1.00 | 5.00 | 1.091 |
| **Relationship with teachers** | 363 | 3.90 | 1.106 | 1.00 | 5.00 | 1.236 |
| **Social solidarity** | 363 | 3.85 | 1.130 | 1.00 | 5.00 | 1.209 |
| **Opportunity** | 363 | 3.76 | 1.093 | 1.00 | 5.00 | 1.108 |
| **Success** | 363 | 3.79 | 1.134 | 1.00 | 5.00 | 1.261 |
| **Adventurousness** | 363 | 3.71 | 1.065 | 1.00 | 5.00 | 1.073 |
| **Academic eagerness** | 363 | 3.43 | 1.283 | 1.00 | 5.00 | 1.645 |

**Table 3.** Kolmogorov-Smirnov test results of research variables

| Variable | K-S test statistic value | Level of Significance | Test result |
|---|---|---|---|
| **School culture** | 1.098 | 0.096 | $H_0$ |
| **Life quality in school** | 1.083 | 0.079 | $H_0$ |
| **Academic eagerness** | 1.075 | 0.092 | $H_0$ |

Table 2, school culture variable has a mean score of 2.91 and a standard deviation of 1.012. In addition, the average quality of life score was 3.89 with a standard deviation of 1.158, and the average academic enthusiasm score was 3.43 with a standard variation of 1.283.

### *4.2 Hypotheses Testing*

In this research, the Kolmogorov-Smirnov test was used to check the normality of the data. In this test, according to the following assumptions, the normality of the data has been checked:

The data has a normal distribution: $H_0$
The data does not have a normal distribution: $H_1$

The significance level of the Kolmogorov-Smirnov test for all research variables is greater than 0.05, as evidenced by the data in Table 3. As a result, the present study's variables all exhibit a normal distribution.

*Hypothesis 1*: There is a significant relationship between school culture and academic enthusiasm among male students in Zhejiang College of Security Technology.

Pearson's correlation test was used to assess the link between quality of life in school, school culture and academic enthusiasm among pupils. According to Table 4, there is a significant correlation between the quality of school life and students' academic enthusiasm (r = 0.77). In addition, as shown in Table 4, there is a significant correlation between several characteristics of the quality of life at school and the academic enthusiasm.

*Hypothesis 2*: There is a significant relationship between quality of life and academic enthusiasm among male students in Zhejiang College of Security Technology.

Pearson's correlation test was used for the correlation between school culture variables and academic enthusiasm. Table 5 demonstrates that the school culture variable and its characteristics have a significant relationship with students' academic enthusiasm (r = 0.68).

*Hypothesis 3*: Quality of life and school culture are able to predict academic enthusiasm of male students in Zhejiang College of Security Technology.

As shown in Table 6, nearly 16.5% of the variance of the academic enthusiasm may be predicted using the quality of life. In addition, the second category of factors (dimensions of school culture) have been

**Table 4.** Correlation coefficient between quality of life variables and academic enthusiasm

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| **Life quality in school** | 1 | – | – | – | – | – | – | – | – |
| **General satisfaction** | 0.85** | 1 | – | – | – | – | – | – | – |
| **Negative emotions** | 0.74** | 0.35* | 1 | – | – | – | – | – | – |
| **Relationship with teachers** | 0.81** | 0.38** | 0.36* | 1 | – | – | – | – | – |
| **Social solidarity** | 0.81** | 0.30* | 0.41** | 0.36* | 1 | – | – | – | – |
| **Opportunity** | 0.79** | 0.47** | 0.43** | 0.36* | 0.25* | 1 | – | – | – |
| **Success** | 0.72** | 0.45** | 0.39** | 0.38** | 0.31* | 0.33* | 1 | – | – |
| **Adventurousness** | 0.86** | 0.31* | 0.51** | 0.39** | 0.29* | 0.35* | 0.27* | 1 | – |
| **Academic eagerness** | 0.77** | 0.72** | 0.11 | 0.73** | 0.60** | 0.68** | 0.55** | 0.67** | 1 |

* $p < 0.05$, ** $p < 0.01$.

**Table 5.** Correlation coefficient between school culture variables and academic enthusiasm

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| **School culture** | 1 | – | – | – | – | – |
| **Student relationships** | 0.81** | 1 | – | – | – | – |
| **Student-teacher relationships** | 0.75** | 0.37** | 1 | – | – | – |
| **Normative expectations** | 0.70** | 0.41** | 0.39** | 1 | – | – |
| **Educational opportunities** | 0.79** | 0.32* | 0.42** | 0.38** | 1 | – |
| **Academic eagerness** | 0.68** | 0.48** | 0.59** | 0.31* | 0.53** | 1 |

* $p < 0.05$, ** $p < 0.01$.

**Table 6.** Significant results of the regression model for predicting academic enthusiasm

| Stage | Multiple correlation coefficient (R) | Coefficient of determination ($R^2$) | Justified ($R^2$) | F changes | Significance of F change |
|---|---|---|---|---|---|
| First | 0.42 | 0.165 | 0.161 | 9.45 | 0.000 |
| Second | 0.26 | 0.069 | 0.065 | 5.07 | 0.003 |

**Table 7.** Regression coefficients for predicting academic enthusiasm

| Stage | Predictor variables | Beta | Std. Error | *B* | T | Sig |
|---|---|---|---|---|---|---|
| First | **General satisfaction** | 0.27 | 0.14 | 0.33 | 2.35 | 0.01 |
| | **Negative emotions** | 0.09 | 0.13 | 0.11 | 0.94 | 0.18 |
| | **Relationship with teachers** | 0.29 | 0.21 | 0.54 | 2.50 | 0.01 |
| | **Social solidarity** | 0.12 | 0.06 | 0.15 | 2.05 | 0.05 |
| | **Opportunity** | 0.21 | 0.23 | 0.49 | 2.10 | 0.05 |
| | **Success** | 0.18 | 0.11 | 0.29 | 2.63 | 0.05 |
| | **Adventurousness** | 0.14 | 0.08 | 0.21 | 2.62 | 0.05 |
| Second | **Student relationships** | 0.16 | 0.15 | 0.27 | 2.37 | 0.05 |
| | **Student-teacher relationships** | 0.24 | 0.06 | 0.23 | 3.72 | 0.00 |
| | **Normative expectations** | 0.07 | 0.23 | 0.02 | 1.13 | 0.24 |
| | **Educational opportunities** | 0.21 | 0.12 | 0.21 | 3.46 | 0.01 |

able to predict 6.9% of the variance in academic enthusiasm. The F ratio also reveals that the academic enthusiasm has a significant correlation with quality of life and school culture.

According to Table 7, relationship with teachers ($\beta$ = 0.29), general satisfaction ($\beta$ = 0.27), opportunity ($\beta$ = 0.21), success ($\beta$ = 0.18), adventurousness ($\beta$ = 0.14), and social solidarity ($\beta$ = 0.12) component, are capable of positively and significantly predicting students' academic enthusiasm. In addition, the obtained betas indicate that the relationship with the teacher is more predictive than other components.

In the second step, school culture was added to the model and was able to explain 6.9% of the variance of academic enthusiasm. Among these variables, student-teacher relationships ($\beta$ = 0.24), educational opportunities ($\beta$ = 0.21), and student relationships ($\beta$ = 0.16), contributed significantly to explaining the variance in students' academic enthusiasm. Notable is the fact that a total of 23.4% of the variance was accounted for by these two groups.

## 5. Discussion

The goal of this study was to examine the association between school culture and quality of life and enthusiasm among male students of Zhejiang College of Security Technology. School culture variable has a mean score of 2.91 and a standard deviation of 1.012. In addition, the average quality of life score was 3.89 with a standard deviation of 1.158, and the average academic enthusiasm score was 3.43 with a standard variation of 1.283.

The results of the study revealed a substantial correlation between the school culture and students' academic enthusiasm. The results of this investigation are consistent with those of Wang and Holcomb [12], Martinez [23], and Veeriah et al. [24]. According to the results, it is possible to create an interactive environment in which people can freely express their opinions and have a sense of belonging and emotional attachment to the school, thereby fostering an atmosphere of mutual respect in which the relationships between teachers and students are characterized by a high level of trust. It is possible to strengthen the school culture through fairness and mutual trust, so that students do not feel unjustly treated. If there is mutual respect and acceptance in the interactions between teachers and students, as well as amongst students, the school culture can be strengthened such that no person or group feels alienated. Also, teaching students how to express their opinions, respect the opinions of others, how to think and learn, have effort and perseverance, a sense of responsibility to maintain school equipment, and respect school rules, creates a more positive school culture, boosts students' academic enthusiasm, and enhances their academic performance.

The findings also revealed that the characteristics of school culture are capable of predicting students' academic enthusiasm. In addition, the results demonstrated that, among the elements of school culture, "teacher-student relationship" has the highest correlation with students' academic enthusiasm. Other aspects of school culture are also significantly related to students' academic enthusiasm. Therefore, it can be asserted that, in order to boost the academic enthusiasm, it is necessary to

pay attention to the aspects of school culture, particularly the ''connection between teachers and students.''

This study revealed that there is a significant correlation between the quality of life and the academic enthusiasm of pupils. These findings align with those of Gunuc and Kazu [9], Wang and Eccle [7], and Kosterelioglo et al. [21]. It can be said that the school environment is the atmosphere for the acquisition of knowledge and the all-around development of people, and it should be characterized by scientific advancement and vitality in order for students to perform more effectively. According to the findings of the study, the quality of life at school has a direct impact on the academic enthusiasm of pupils. It appears that the students' assessment of the school environment and its prevailing atmosphere raises their degree of satisfaction and leads to the establishment of a good attitude toward school, as well as their desire and enthusiasm to study and attend school. This optimistic outlook can offer the foundation for increased student attendance and strengthen their commitment to school and extracurricular activities.

The research results also revealed that the characteristics of the quality of life in school can predict the academic enthusiasm of students and that there is a significant association between these dimensions and the academic enthusiasm of students. In addition, the results of the study revealed that, of all the aspects, the ''relationship with teachers'' had the highest link with academic enthusiasm among pupils. Other aspects of quality of life have a substantial effect on the academic enthusiasm of pupils. The computed Beta indicates that the ''relationship with teachers'' of school quality of life has greater predictive ability than other components.

### *5.1 Limitations*

This study has some limitations, the most significant is its implementation among male students. This limits its generalizability. Other researchers could expand on this work by conducting a similar study but with more participants from various colleges.

## 6. Conclusion

The purpose of the present study was to determine the relationship between school culture and quality of life in school and their components and students' academic enthusiasm, as well as the extent to which academic enthusiasm may be predicted using these variables. In overall, the findings of this study revealed a substantial positive association between school culture characteristics, quality of life in school, and their constituents, and students' academic enthusiasm.

In addition, the quality of life in school and its components were able to predict academic enthusiasm among students. The components of school culture were also capable of accurately predicting academic zeal. Therefore, it is recommended that education professionals implement initiatives to enhance the quality of life for pupils at school. It is important to note that these data can be shared with administrators and parents in order to raise academic enthusiasm and enhance the quality of life for students, hence promoting their academic success.

*Compliance with Ethical Standards*

*Conflict of Interest*: All Authors declares that they have no conflict of interest.

*Ethical approval*: This article does not contain any studies with human participants or animals performed by any of the authors.

*Funding*: This study is the phased result of ''Zhejiang Province Education Science Planning Project, grant number 2022SCG205'' and ''Special Task of Humanities and Social Science Research of Ministry of education, grant number 20JDSZ3160''.

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