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**Original Article** 

## Effectiveness of Motivational Patterns on Creativity, Self-Worth & Ethical Commitment to School

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Abstract		
Background: This study aimed to evaluate	the effectiveness of motivational mod	els on creativity, self-worth, and commitment to
the school as ethical factors in female high	school students in Ahvaz.	·
Material and Methods: The type of research	ch was based on the purpose of the ex	perimental field research method of pre-test and
		des all-female high school students in Ahvaz who
		. One hundred twenty Participants were selected
as a sample group. The data collection too	ol included a questionnaire. Finally, the	e data were analyzed by multivariate analysis of
covariance.		
<b>Posults:</b> The results showed that the difference	ances between the group of motivation	nal models and the control group were 41.67 in

**Results:** The results showed that the differences between the group of motivational models and the control group were 41.67 in self-worth, 9.94 in commitment to school, and 11.34 in creativity, which was significant at all levels of 0.005.

**Conclusions:** Based on the present study's findings, it can be inferred that intervention programs related to motivational patterns can lead to increased levels of creativity and ethical components such as a sense of self-worth and self-importance, and commitment to the school.

Keywords: Motivational Patterns, Creativity, Ethical Components, Self-Worth, Commitment

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#### **INTRODUCTION**

Lack of motivation is one of the main problems of the country's education system that is becoming more and more colorful. Schools are considered the most important centers of education, humanization, and culture because the most critical years of growth and flourishing of the young years of students in the field of knowledge, information explosion, and waves of progress should be formed in them. Therefore, these students need to be motivated in the age of the "global village" [1].

Motivation for progress is considered a symbol of students' academic psychological function. This motivation dramatically affects the different characteristics of students. One of the dimensions that are affected by this component is creativity. Creativity is considered the use of mental abilities to perform a new thought or concept, which starts with small things to do a particular task and is the result of doing the work before it shows genius. In educational centers with a culture of creativity, the communication of school staff with students will be reciprocal and reciprocal, new ideas will be accepted, and the culture of asking questions will be supported. In these centers, the abilities of all students will be used, and people will try spontaneously. Finally, the educational center constantly anticipates customer needs, and students turn to these educational centers with self-motivation [2]. Creativity is an important factor in academic performance and is influenced by motivation. Since the existence of conscious, efficient, and creative people is an essential condition for the growth and prosperity of any society, cultivating and strengthening the motivation for progress causes energy and proper orientation to the creative behaviors of people in line with valuable and determined goals [3].

Motivational patterns of individuals can also affect some ethical components. Ethical components have a wide range, and ethics is used in two areas, first: individual discernment (good from the bad), and second: behavioral methods. In French, the word moral is also

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used to mean customs. The definition of ethnology in Le Petit Larousse is as follows:

A set of rules of conduct and values that are recognized as the norm in a society.

Theory of ultimate goals of human action Aims and practical conclusions of a story The doctrine of human happiness and the ways to achieve this Special goal set of rules of conduct [4] Moral is also defined in Le Petit Robert: the science of good and evil, the principles of behavior; Theory of human behavior as tasks to achieve well.

Given the breadth of ethical components, two underlying ethical components have been considered in this research that plays a significant role in school processes: self-esteem, which is known as self-worth, and commitment.

Commitment means duty or guarantee to someone or something and obliges oneself to do something. Personal commitment is the work that is done for the sake of duties and obligations. These duties and responsibilities may be self-imposed, bilateral, or written. Commitment comes in many forms. For example, students at school need to be committed to their performance and behavior at school. Commitment to school may be an essential intervention goal for school-based interventions and an effective way to reduce students' behavioral problems. Some researchers [5] have shown that commitment to school decreases nonlinearly from the sixth to the eighth grades; Boys have a weak commitment to school from the beginning and show a greater decrease in these periods than girls. According to Perkins's ecological theory, factors related to social-environmental contexts facilitate (inhibit) developmental outcomes; In the meantime, having a sense of sociability and a sense of commitment to school may directly affect one's self-worth, selfefficacy, and creativity because a sense of belonging and commitment to school affects adolescents' self-efficacy and self-worth by influencing participatory group learning, performance, play, and services that foster social bonding and networking between students and staff. Although poor commitment to the school is conceivable, the researchers explained, it should be noted that high levels of school affiliation are associated with positive youth outcomes such as academic outcomes increased academic motivation, self-efficacy, and high scores. Research has also shown that adolescents who have a high attachment, commitment, and commitment to school and who accept their school experience high levels of creativity. The researchers explained that a quarter of the creativity changes are explained by a sense of belonging to the school. They believe that creating opportunities to increase students' experiences in school can improve their self-efficacy [6].

After school, school is the most important place where students live and play an important role in shaping individuals' values, norms, and social opportunities. One of the most important educational variables that can be used to assess the efficiency of the school education system. And measuring the amount and quality of student performance can refer to academic motivation [7]. Students always have a lot of worries about their educational status, and sometimes this worry and anxiety go so far as to endanger their general health. Meanwhile, what has always been considered an important structure in increasing students' academic performance, and its importance has been emphasized is student motivation [8]. The results of various studies indicate that motivated students are interested in activities, hardworking Are, have self-confidence, show continuity in performing tasks, and have a more desirable performance [9]. Numerous studies also indicate a significant relationship between motivation and academic achievement [10].

Researchers in recent years have tried to make changes in these variables through various interventions. One of the theories on which interventions in academic motivation and other educational variables are designed is the motivational model of value expectation. The structure of anticipation in the expectation pattern value reflects a person's beliefs and expectations about their abilities and capabilities in doing a job and succeeding in it. The concept of value is also one of the various reasons students give for doing something [9].

Another ethical component that is considered in the present study is self-esteem and self-worth. Self-worth is one of the results of statistical analysis and analysis between the mind and personality [11], and are everyday events that show their effects on different levels of individual, family, educational and social life, self-worth including components such as family support, divine love, righteousness and piety, a sense of competition, a positive feeling to aspects physical, physical and physical, scientific competence and successful experience compared to others, the first three components represent the inner aspects of self-worth. The other four components represent the outer aspects of self-worth [12].

Self-worth can be a mechanism to reduce students' psychological and social harm and improve the level of adaptation to the educational environment [13].

Therefore, according to the above, this study aims to determine the effectiveness of motivational models on creativity and the moral components of self-worth and commitment to the school for female high school students in Ahvaz.

## MATERIAL AND METHODS

Type of research Based on the purpose of the experimental field research method, pre-test and post-

test design with a control group was used. The statistical population of this study includes all-female high school students in Ahvaz who were studying in the 99-98 academic year. The sampling method was multi-stage. One hundred twenty participants were selected as a sample group.

The data collection tool included three questionnaires:

# Torrance Multi-Answer Creativity Test (MPPT) Questionnaire:

This questionnaire is known in the psychological literature as the Torrance Creativity Test and is based on his definition of creativity. The principle of the Torrance Creativity Test is very detailed and lengthy. It takes hours to complete. The test, known as the Torrance Creativity Assessment in Iran, is a shortened and standardized form of it [14]. It includes 16, 22, 11, and 11 options, respectively. Questions 1 to 22 of the fluid factor measure 23 to 33 of flexibility. Of course, each of these questions is a subtest.

Never have three different answers, A, B and C (qualitative), with a value converted to a numerical quantity of 0, 1, and 2. It is assumed that the selector of option A has the least in each question, and selector C has the highest level of creativity. The sum of the scores obtained in each subtest indicates the subject score in that section, and the sum of the subject scores in the four subtests shows the overall score of the individual's creativity. The scores obtained from measuring all four factors alone and the sum of the scores in total can be analyzed and interpreted. The total score of the invention for each subject will be between 0 and 120. The test used in this research is known as Dr. Abedi's form. This questionnaire is presented to students whose primary purpose of the study is to measure and fertilize their creative powers, and they are asked to choose the appropriate option [15].

In the present study, Cronbach's alpha method was used to determine the reliability of this questionnaire, which is equal to 0.85 for the whole questionnaire, which indicates the optimal reliability coefficients of the questionnaire.

#### School Commitment Questionnaire:

This scale is part of the questionnaire on risk and protective factors [16]. And accurately measures commitment to the school. This 12-item scale is scored on a 5-point Likert (1 = strongly disagree to 5 = strongly agree). A higher score on this test indicates a low commitment to the school. Here are two examples of the questionnaire questions: 1. Many days I do not like to go to school. 2. Getting good grades is very important to me. To ensure the validity of the questionnaire, content, predictor, and structure have been examined [17].

Content validity was examined through a survey of 5 psychologists and was considered a useful tool. The correlation between academic average and commitment to school was obtained to calculate the predictive validity. In the present study, Cronbach's alpha method was used to determine the reliability of this questionnaire, which is equal to 0.81 for the whole questionnaire, which indicates the optimal reliability coefficients of the questionnaire.

#### **CSWS Self-Esteem Questionnaire**

The CSWS Self-Esteem Questionnaire was developed by Crocker et al. [12]. This questionnaire has seven subscales and 35 items. This questionnaire's scoring and interpretation method are based on the weekly Likert rating. The inverted items of this questionnaire are 4, 6, 10, 13, 15, 23, and 30 (i.e., "strongly agree" is given a score of 1, and "strongly disagree" is given a score of 7). To calculate the score of each subscale, add up the scores of each item on that subscale. To calculate the overall score of the questionnaire, add the scores of all the items in the questionnaire. The score range of this questionnaire will be between 35 and 245. The higher the score obtained from this questionnaire, the more self-esteem it will show and vice versa. In the present study, Cronbach's alpha method was used to determine the reliability of this questionnaire, which is equal to 0.79 for the whole questionnaire, which indicates the optimal reliability coefficients of the questionnaire.

Due to the circumstances of the Corona epidemic, the questionnaire was published online and completed by those who wished to participate in the study. Statistical samples and experimental and control groups were selected from them.

In the preliminary stage, several girls' high schools in Ahvaz (District 2) were randomly referred. In the pretest phase of self-esteem questionnaires, commitment to school and creativity of all three groups (experimental, control) and independent variables that motivational patterns (during two months and in 10 sessions) were held for the experimental groups. The control group did not receive any training during this period. Then, the effectiveness of these two methods on self-worth, commitment to school, and students' creativity was examined. In the follow-up phase, which took place one month after the end of the treatment intervention, the mentioned questionnaires were administered to all three groups.

Motivational patterns intervention program: The researcher performed the motivational patterns intervention program in this study for ten months in 10 sessions of 75 minutes for the experimental group, the summary of which is presented in Table 1.

Sessions	Title of Sessions	Content of Sessions
1	Research objectives	Provide explanations about research goals and the importance of motivation in life
2	Differences in motivational patterns and goals of individuals	Explain the importance of purpose in life, differences in goals and motivations of people, explain goal setting methods
3	Investigate the causes of success and failure	Explain the details of the documents, examine the causes of failures and successes
4	Value of goals	Explain the value of goals, the value of success, the importance of success in education and school, and the acceptance of courses
5	Students' perceptions of their abilities	Writing an essay on the importance of success in lessons Students' perceptions of their abilities in different subjects and explaining motivational theories
6	Internal and external motivation	Description of internal and external motivation and related factors
7	Factors affecting motivation	Factors affecting motivation (family, individual, school and environment)
8	Self-concept and self-efficacy	Explain self-concept and its effect on self-efficacy and performance and factors affecting self-efficacy and self-concept
9	Identify the motivational pattern	Identify and understand the practical value and value of achievement and success in courses and assignments
10	Conclusion	Summarize and review past sessions

#### Table 1. Title and Content of each Session

Table 2. The effect of motivational patterns program on creativity, self-worth & Ethical commitment in pre-test, post-test and follow-up stages

Variable / Stage		Pre-7	Test	Post-Test		Follow Up	
Groups		Mean	SD	Mean	SD	Mean	SD
Self-efficacy							
Motivational patterns		41.93	10.1	85.07	23.59	85.33	21.25
Control		42.8	11	43.8	8.97	42.73	7.97
Ethical Commitment							
Motivational patterns		15.2	3.48	25.73	6.22	24.93	5.03
Control	~	16.6	4.83	16.93	5.37	17.6	5.13
Creativity of students	1						
Motivational patterns		12.6	2.35	24.73	5.81	25.73	6.56
Control	$\sim$	13.07	3.61	13.53	3.62	13.8	3.82

Table 3. Results of multivariate analysis of covariance (MANCOVA) on post-test scores of self-worth, Ethical commitment, and creativity in experimental and control groups.

sis df. of error Sig.
76 0.001
74 0.001
72 0.001
38 0.001

Table 4. Results of univariate analysis of covariance in MANCOVA text related to self-worth post-test score, Ethical commitment, and creativity

Res./Variable	SS	df.	MS	F	Sig.	Effect size
Groups	11	مح عل مرار	a. 1.1			
Self-worth	14257.51	2	7128.75	16.9	0.001	0.452
Ethical Commitment	947.77	2	743.88	18.44	0.001	0.486
Creativity	1112.53	2	556.26	18.38	0.001	0.485

 Table 5. Results of Bonferroni post hoc test to compare the adjusted means of self-worth scores, ethical commitment, and creativity of the three groups

Variable	Compared Groups	DM	SE	Sig.
Self-worth	Motivational patterns with control	41.67	7.81	0.001
Ethical Commitment	Motivational patterns with control	9.94	1.88	0.001
Creativity	Motivational patterns with control	11.34	2.04	0.001

Finally, the data were analyzed by multivariate analysis of covariance.

#### RESULTS

Descriptive findings of this study include statistical indicators such as mean and standard deviation for all

variables studied in the study. Table 2 shows the mean and standard deviation of self-esteem, commitment to school, and creativity in female students in the motivational and control patterns groups in the pre-test, post-test, and follow-up stages. After examining the ANCOVA and MANCOVA assumptions, the data obtained from the pre-test and post-test stages were analyzed, and the research hypotheses were examined. The research hypotheses were:

Teaching motivational patterns increases the moral component of self-worth in female high school students in Ahvaz.

Teaching motivational models increases the moral component of ethical commitment to the school in female high school students in Ahvaz.

Teaching motivational patterns increases creativity in female high school students in Ahvaz.

To compare experimental and control groups based on post-test scores after controlling the effect of the pre-test, to determine the effectiveness of motivational patterns and control over self-worth, ethical commitment, and creativity of female high school students in Ahvaz, first, an analysis of Multivariate covariance (MANCOVA) was performed, then research hypotheses were tested. The multivariate analysis of covariance results are shown in Table (3).

As can be seen in Table (3), the multivariate analysis of covariance (MANCOVA) statistical tests in the groups of motivational and control patterns show that these groups are significantly different from each other in at least one of the dependent variables. Therefore, the use of analysis of covariance is permissible. Table (4) shows the univariate analysis of covariance results in the MANCO text for post-test scores and independent variables.

Table 6. Results of multivariate analysis of covariance (MANCOVA) on self-esteem tracking scores, ethical commitment and creativity in the experimental and control groups

Test	Value	F	df. of hypothesis	df. of error	Sig.
Pillai's trace	0.738	7.4	6	74	0.001
Wilks' Lambda	0.366	8.04	6	76	0.001
Hotelling's trace	1.44	8.66	6	72	0.001
Roy's Largest Root	1.20	15.31	3	38	0.001

Table 7. Results of univariate analysis of covariance in MANCOVA text related to self-esteem tracking score, ethical commitment and creativity in students

Res./Variable	SS	df.	MS	F	Sig.	Effect size
Groups	X M					
Self-efficacy	15574.59	2	7787.29	21.21	0.001	0.521
Ethical Commitment	809.75	2	404.87	19.43	0.001	0.499
Creativity	1238.01	2	619	19.04	0.001	0.494

Table 8. Results of Bonferroni post hoc test to compare the adjusted means of self-esteem, ethical commitment and creativity of the three groups

Variable	Compared groups	DM	SE	Sig.
Self-efficacy	Motivational patterns with control	43.08	7.1	0.001
Ethical Commitment	Motivational patterns with control	8.19	1.69	0.001
Creativity	Motivational patterns with control	19.12	2.11	0.001

As can be seen in Table (4), the F-ratio of analysis of variance in self-esteem (F = 16.09 and P = 0.001), commitment to school (F = 18.44 and P = 0.001) and creativity (F = 18.38). P = 0.001) were obtained. These findings show a statistically significant difference between the motivational and control patterns groups in the dependent variables (self-worth, commitment to school, and creativity). To test the research hypotheses and determine exactly which groups have difference in the dependent variables, the Bonferroni follow-up test was used, the results of which can be seen in Table (5). dAs can be seen in Table (5), the difference between the group of motivational patterns and the control group in self-value is 41.67, which is significant at the level of 0.005. This finding shows a significant difference between the mean of the group of motivational patterns

compared to the mean of the control group in self-worth in favor of the group of motivational patterns. This finding confirms research hypothesis 1.

As shown in Table (5), the difference between the group of motivational models and the control group in commitment to the school is 9.94, which is significant at the level of 0.005. This finding shows a significant difference between the motivational pattern therapy group's mean and the control group's mean in commitment to the school in favor of the motivational pattern group. This finding confirms research hypothesis 2.

As shown in Table (5), the difference between the group of motivational patterns and the control group in creativity is 11.34, which is significant at the level of 0.005. This finding shows a significant difference between the mean of the group of motivational patterns compared to the mean of the control group in creativity in favor of the group of motivational patterns. This finding confirms the research hypothesis 3.

In the follow-up phase, three other hypotheses were examined:

4 .The effect of motivational patterns on increasing the moral component of students' self-worth in the follow-up phase has continued.

5 .The effect of motivational patterns on increasing the moral component of commitment to students' school in the follow-up phase has continued.

6 .The effect of motivational patterns on increasing students' creativity in the follow-up phase has continued. To compare the experimental and control groups based on the follow-up scores after controlling for the pretest effect, to determine the persistence of the effectiveness of motivational patterns on self-esteem, school commitment, and creativity, a multivariate analysis of covariance (MANCOVA) was performed. The research items were tested. The multivariate analysis of covariance results is shown in Table (6).

As can be seen in Table 5, the multivariate analysis of covariance (MACNOVA) statistical tests in the group of motivational and control patterns show that these groups are significantly different from each other in at least one of the dependent variables. Therefore, the use of analysis of covariance is permissible. Table (7) shows the results of the univariate analysis of covariance in MANCO text for follow-up scores independent variables.

The Bonferroni follow-up test was used to test Hypotheses 4 to 6 of the study and determine whether the effect of motivational patterns was continuous or not. The results are shown in Table (8).

As shown in Table (8), the difference between the group of motivational patterns and the control group in selfworth is 43.08, which is significant at the level of 0.005. This finding shows that the effect of motivational patterns on self-worth has continued in the follow-up phase. This finding confirms the research hypothesis 4. As shown in Table (8), the difference between the group of motivational models and the control group in commitment to the school is 8.19, which is significant at the level of 0.005. This finding shows that the effect of motivational patterns continued in the follow-up phase. This finding confirms the research hypothesis 5.

As shown in Table (8), the difference between the group of motivational patterns and the control group in creativity is 19.12, which is significant at the level of 0.005. This finding shows that the effect of motivational

patterns on creativity has continued in the follow-up phase. This finding confirms the research hypothesis 6.

## DISCUSSION

This study was conducted to investigate the effectiveness of motivational patterns on self-worth, commitment to school, and creativity of female high school students in Ahvaz. The results showed that the difference between the group of motivational practices and the control group in self-worth is 41.67, which is significant at 0.005. This finding shows a significant difference between the mean of the group of motivational patterns compared to the mean of the control group in self-worth in favor of the group of motivational practices. Also, the difference between the group of motivational models and the control group in commitment to the school is 9.94, which is significant at the level of 0.005. This finding shows a significant difference between the motivational pattern therapy group's mean and the control group's mean in commitment to the school in favor of the motivational pattern group. Also, the difference between the group of motivational patterns and the control group in creativity is 11.34, which is significant at 0.005. This finding shows a significant difference between the mean of the group of motivational patterns compared to the mean of the control group in creativity in favor of the group of motivational patterns. These results have been continued in the follow-up phase.

In explaining these findings, it can be said that education is a wide-ranging and multidimensional process and achieving its goals requires a comprehensive view of the underlying individual and interpersonal factors that interfere with academic progress. One of the necessities of the educational system is successful in continuing and developing the necessary academic skills in students. Undoubtedly, recognizing the effective factors in academic achievement is one of the most basic goals of any educational system. Many variables and factors are effective in students' academic achievement. One of these variables is academic motivation. Human societies have always considered the concept of motivation, especially among researchers and education specialists. Recently, many theorists and researchers in educational psychology have given special importance and place to motivational and psychological patterns of academic behavior. Some psychologists have defined motivation as processes such as need, cognition, excitement, and external events that give behavior, strength, and direction. Therefore, people who have received the necessary training related to motivational patterns direct the goals of God and can better make them a reality, and better understand the value of goals and the value of goals and in the way to achieve these values more they try. [18] Success is valuable. Failure implicitly means a weakness in one's ability, which is why people strive to avoid failure in any way possible to protect their selfesteem and avoid judging others' inabilities.

Adolescence is also a critical stage in everyone's life. At this age, individuals must acquire the necessary competencies and skills to achieve social status and value and commitment to the position in which they are, recognize their identity, and have a clear and acceptable vision of the programs. Have your future. Also, due to certain issues, this period can be accompanied by a kind of confusion with decreased self-esteem, low self-esteem and negative self-concept along with feelings of anger and aggression, which reduces commitment to school, other natural activities, and social interactions. Be. Commitment to school is the focal point of most theories about academic failure. Commitment to school is rooted in a part of the theory of social control that emphasizes the role of individual feelings of attachment and belonging to social institutions.

In this view, the anti-social behavior of young people is explained based on the links between the individual and society, so non-commitment can also result from weakening the individual's relationship with educational institutions. These links are characterized by commitment, beliefs, attachment, and passion in social control theory. In the new models of academic failure, these theoretical elements have significantly impacted the conceptualization of the student commitment structure [19]. In general, one of the most critical educational levels that plays an important role in the future of individuals is the elementary level. In this course, students become interested in different fields and identify their talents, and decide and take action on choosing a field and their future course of study, which will take place in the next level, i.e., high school. Studies show that the education system in our country has a more traditional style and is less promoter of creativity. Educational systems by using traditional teaching methods that do not create much motivation in students to continue their education. In fact, they destroy creativity. Research evidence shows that the increasing emphasis on performance outcomes hinders the student from learning the lesson. In other words, there is practically no deep, cohesive, creative, and creative learning in educational systems where traditional teaching methods, voluminous curricula, and evaluation and grading methods are the criteria for education. Researcher [5], in his study that examined students' academic motivation over time, found that the level of academic motivation has decreased over time. The main

reason is the traditional school atmosphere and lack of creativity. In this regard, research [20] indicates a challenging point. They showed that only students spent more time studying than those with higher academic motivation. Researchers [21] in his research showed that it is the internal motivation that is the cause of creativity and not the external motivation. Intrinsic motivation is actually the feeling and attitude that is established between a person and work or task; Researcher later added to this view that in many people, there is a dual relationship between their internal and external motivation; That is, they not only maintain a high level of intrinsic motivation; But their creativity also grows in the face of external stimuli; Therefore, a complementary relationship must be considered between the two motives. In the emergence of creativity, both the individual's will and desire are involved, as well as social and family encouragement and support.

Research limitations were:

1. Lack of knowledge and necessary cooperation from some subjects regarding research.

2. Lack of sufficient relevant background about research variables

3. There were problems due to the distribution of questionnaires virtually to receive and analyze.

Based on the research findings, it is suggested:

1. Because the questionnaires have a self-assessment aspect, there may be bias in the answers. Therefore, it is suggested that the interview method be used to collect information in future research.

2. It is suggested that other variables related to motivational patterns in knowledge be researched in future research.

3. Research should be done in a wider statistical community and in different cultures to study cultural differences and their impact in this field.

## CONCLUSION

Based on the findings of the present study, it can be concluded that intervention programs related to motivational patterns can increase the level of creativity, the most important and basic human ability and the most fundamental factor in creating value, as well as the ethical component such as a sense of self-worth and commitment in general and commitment to the school in particular increase.

## ETHICAL CONSIDERATIONS

The writers have fully considered ethical issues (such as plagiarism, conscious satisfaction, misleading, making and or forging data, publishing or sending to two places, redundancy, etc.) have been fully considered by the writers.

### **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

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