



Research Article

Investigating the relationship between creativity and mental health and spiritual happiness and the parent's popularity of high school students and designing a model of spiritual happiness

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Abstract

This study aimed to investigate the relationship between creativity and mental health and spiritual happiness, and the parent's popularity of high school students and design a model of spiritual happiness. The present study was correlational. The statistical population in this study was all high schools in Tehran, and Sepehr Maarefat school was selected as the available sample. The sample size in this study was 200 female students. The tools used in this study were: The creativity test, Mental health test, Spiritual Happiness test, and Parental Popularity test. In this study, the obtained data from the questionnaires were analyzed by SPSS software version 26 and Smart PLS software version 3. Finally, the model of spiritual happiness was designed using the GOF index. The results showed that these variables have a significant relationship with a 95% confidence Interval ($p < 0.05$).

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Introduction

The field of creativity is one of the basic and key concepts in psychology. After decades of studying in this field, its relationship with mental health is still much debated. Creativity is one of the complex concepts related to human beings. There are different ideas between mental health and creativity. Humanistic approaches in psychology consider creative thinking and action as a tool for self-fulfillment.

Creativity is generally described as the ability to create authentic and consistent products (Simonton, 2021). However, authenticity alone is not enough. To be considered a creative output, it should also be practical and useful for existing issues (Hennessey & Amabile, 2010). According to Cropley (1990), one aspect of creativity is a general feature that is different in each person and is called everyday creativity. Because of this, we can call creativity an everyday

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phenomenon that all human beings can benefit from and it guarantees the mental health of individuals. People can guarantee their mental health to some extent by cultivating their creativity. Creativity and well-being are common topics in psychological studies (Akare et al., 2021).

Creativity is enumerated as one of the necessities of life and people need it for spiritual happiness, innovation, and dynamism. However, less research attention has been paid to creativity than intelligence in academia. Lack of attention in this field has created problems in the field of measuring creativity (Bonnie & Furnham, 2006). Among the elements related to creativity, just a little research has been done on creativity and mental health. It is worthwhile to do more research in this field in the future to witness the flourishing of the creative society. Research has also shown that creativity and health mental are correlated (Martin & Leki, 2011).

Dastjerdi and Dehshiri (2010) in their research achieved a positive relationship between creativity and mental health. Khosravani and Gilani (2007) emphasized the relationship between mental health and creativity and showed that creative people experience less anxiety and depression during their life. Good mental health can be defined as a state of mental health that allows individuals to cope with normal life stresses and have productive performance (Fussar et al., 2020). Parenting styles play a mediating variable in the relationship between digital creativity and academic performance (Fuentes et al., 2019). There is a good agreement among researchers about parenting styles that influence creativity (Oliwa et al., 2008, Fuentes et al., 2015, Riquelme et al., 2018). Pelegrina et al. (2002) stated that parental affection and communication is a necessary conditions for achieving creativity, desirable self-esteem, and self-confidence.

Maslow (1954) stated that there are two categories of basic and primary needs and non-basic and secondary needs on the path of growth and flourishing of human personality. He considered the basic and primary needs in five categories, including physiological (natural) needs, safety needs, the need for love and affection, the need for respect, and the need for self-fulfillment. According to Maslow, one of the basic needs of everyone is the need for love and affection. Human is thirsty for emotional connection with others, that is, he seeks to find a foothold and backrest to meet the needs of self-reliance (Maslow, 1954 & Core, 2013). According to Afrooz (2010), parental affection for each other can lead to self-esteem, self-confidence, happiness, mental health, overcoming narcissism, and positivity in children. Mahdavi et al. (1401) showed that parental affection plays an important role in positive perfectionism. Safaei Rad et al. (2015) showed that there is a relationship between maternal mental health and the creativity of girls.

One of the important factors influencing creativity is the spiritual happiness that governs the family atmosphere. By definition, spiritual happiness means a feeling of peace, devotion, and hope through deliverance, forgiveness, and enjoying inner freshness and clarity and heartfelt belief in the creator of the universe (Afrooz, 2016). Abolhari et al. (2012) showed that students who live in a family full of love and have spiritual happiness, and mental health, can flourish in their creativity.

Problem of Study

In fact, the current research was trying to answer the question that does creativity have a relationship with factors of mental health and spiritual happiness and popularity of parents of high school students, and if there is a relationship with which of these factors is it most related? And finally, from the relationships obtained between these variables, the model of spiritual happiness was designed, which is an innovative model.

Method

Research Model

The present study was correlational research. The statistical population was of all high schools in Tehran and Sepehr Marefat School was selected as the available sample. The sample size in this study was 200 female students and the measurement tools used were creativity, mental health, spiritual happiness, and parental popularity scale. In this study, the obtained data from the questionnaires after classification through SPSS software and Smart PLS software were analyzed, and finally, the model of spiritual happiness was designed using the GOF index.

Data Collection Tools

Goldberg Health Questionnaire

Goldberg's mental health questionnaire (GHQ28) was designed by Goldberg in 1972 and is used to identify non-psychotic disorders in various conditions. This scale has acceptable validity and reliability. It includes 28 questions that have four subscales, each of the subscales consists of 7 questions.

These 4 subscales of Goldberg's Mental Health Questionnaire are; Physical signs and symptoms, Anxiety signs and symptoms, Social dysfunction signs and symptoms, Depression signs and symptoms.

Questions 1 to 7 are related to the physical symptoms subtest, questions 8 to 14 are related to the anxiety and insomnia subtest, questions 15 to 21 are related to the social dysfunction subtest, and questions 22 to 28 are related to the depression subtest. Scores are on the Likert scale.

Torrance Creativity Thinking Test, Figurative Form B

It was developed in 1974 by Torrance, has a visual nature, and includes three activities. In each activity, four scores are awarded for each elaboration, fluency, flexibility, and originality variable. The sum of scores of these components constitutes the creativity score. The validity of this test is reported to be 0.51 (Pirkhaefi et al. 2012).

Afrooz Spiritual Happiness Questionnaire

It was made by Afrooz in 2018 and has 2 subscales of beliefs of 20 items, and feeling and behavior of 40 items. Scores are on the Likert Scale. Cronbach's alpha of this questionnaire is reported to be 0.95, which indicates high validity and reliability (Mehrivartiab, 2017).

Parents' Popularity Questionnaire

It is developed by Asadi et al. in 2013. It consists of two 30-question items and must be answered by the student in each item separately. The reliability of this tool has been evaluated by Cronbach's alpha and has been reported to be 0.63 (Asadi et al., 2013). In previous studies, the psychometric properties of this tool are also examined in the research sample. In previous studies, Cronbach's alpha is 0.78 and at the same time, a questionnaire was administered to 30 students after an interval of 7 days and the correlation between two runs was equal to 0.65.

Data and information obtained from the questionnaires were analyzed by SPSS software and Smart PLS software.

Results

The values of descriptive indicators for the variables of creativity, parental popularity, mental health, and spiritual happiness and their dimensions are given in Table 1.

Table 1. Descriptive Indicators Regarding Research Characteristics

Variable	N	Ave	Median	Mode	SD	Min	Max
Originality	200	114/95	116	116	1/48	110	118
Fluency	200	27/64	28	28	6/26	22	114
Elaboration	200	26/92	28	28	1/62	20	28
Flexibility	200	26/93	28	28	1/63	20	28
Creativity	200	196/44	196	198	7/19	176	286
Beliefs	200	56/94	59	63	7/01	15	63
Emotion & Behavior	200	123/4	127/5	134	13/29	41	134
Spiritual happiness	200	180/34	186	197	20/04	56	197
Somatic symptoms	200	3/28	3	1	2/12	0	9
Anxiety symptoms	200	4/1	4	4	1/51	0	11
Social dysfunction	200	13/21	13	13	1/001	10	16
Depression	200	3/11	3	3	1/63	0	14
Mental health	200	25/97	26	25	3/41	17	42
Father's popularity	200	92/56	93	90	5/41	61	120
Mother's popularity	200	87/53	88	88	3/64	62	97

Parent's popularity	200	90/04	90	89	3/74	61/5	104
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According to the results, It is observed that the average of the initiative is 114.95, which indicates a high initiative according to the maximum amount of initiative (116). The average expansion is 26.92. The average fluidity is 27.64, which indicates high fluidity according to the maximum amount of fluid (28). The average flexibility is 26.93, which also indicates flexibility is high according to the maximum amount of flexibility (28); and in general, creativity with an average of 196.44 shows a high rate. Furthermore, the average of beliefs is 56.94 and the average of feelings and behaviors is 123.4, which means that the average total spiritual happiness is 180.34, and because it is more than 160, shows an excellent level of spiritual happiness. On the other hand, the average of physical symptoms is 3.28, anxiety symptoms 4.1, social disorder 13.21, depression 3.11, and mental health, in general, is 25.97 and shows a low rate which indicates good mental health of sample people. The popularity of the father is 92.56 and the popularity of the mother is 87.53, which indicates that in the sample, the popularity of the father is higher than the popularity of the mother. In general, the popularity of parents with a rate of 90.04 indicates an appropriate value and is above average (75).

Normality of Tests

The values of skewness and kurtosis were calculated for each of the research variables. But skewness and kurtosis coefficients for fluidity variables, creativity, beliefs, feelings and behavior, spiritual vitality, anxiety symptoms, depression symptoms, mental health symptoms, father popularity, mother popularity, and parents' popularity are not between 3 and +3, and therefore the normality of these variables are rejected, therefore the nonparametric test of Spearman correlation coefficient and structural equations using Smart PLS3 software is used to test the assumptions.

Correlation Coefficients

In this part of the research report, the relations between independent variables and their dimensions with the dependent variable are tested. Spearman correlation coefficient is used to investigate the relationship between research variables (creativity, spiritual happiness, mental health, and parents' popularity) considering that some variables do not have a normal distribution. The results are shown in Table 2:

Table 2. The Result of the Pearson Correlation Coefficients between Variables

Variables	1	2	3	4
Creativity	1			
Spiritual happiness	0/479*	1		
Mental health	-0/548*	-0/205*	1	
Parent's popularity	0/295*	0/171*	-0/288*	1

Assumption 0: There is no significant relationship between the two variables. Assumption 1: There is a significant relationship between the two variables.* At the level of 0.05 significant

Considering the significant values in Table 3, it can be seen that these variables have a significant relationship with each other with 95% confidence (p<0.05.) It is also observed that the correlation coefficients between creativity with spiritual happiness, creativity with parent's popularity, and spiritual happiness with parents' popularity are positive, so it can be said that as each of the variables increases the other variable increase, and as one of them decreases the other one decreases, but the correlation coefficients of mental health with creativity, mental health with spiritual happiness and mental health with parents' popularity are negative and they are the opposite of each other (because an increase in mental health score indicates a mental disorder and as it increases, the creativity, spiritual happiness, and popularity of parents decrease).

The General Model of Research Using Smart PLS Software

To analyze the developed model, Smart PLS 8.2.3 software was used. In this model, a total of 118 items (spiritual happiness: 60 items, mental health: 28 items, parents' popularity: 30 items) were included in the model. The spiritual happiness variable has two components, the creativity variable has 4 components, the mental health variable has 4 components and the parents' popularity variable has 2 components. First, first-order factor analysis (items as index) and

then second-order factor analysis (components as index), and then structural equations were performed for the components. The model analysis was performed in three stages: in the first stage, the external model (measurement model), in the second stage, the internal model (structural model), and in the third stage, the whole model.

After fitting the first model, if an item with a factor load of less than 0.4 was removed (in our model, m12, m13, m21, m24, m25, m26, m27, m6, mm22, mm21, mm23, mm27, mm28, mm29, mm30, mm8, mm7, mm5, n7, s11 and s26 items were removed from the model) and then the final model was fitted. The final model is shown in Figures 1 and 2.

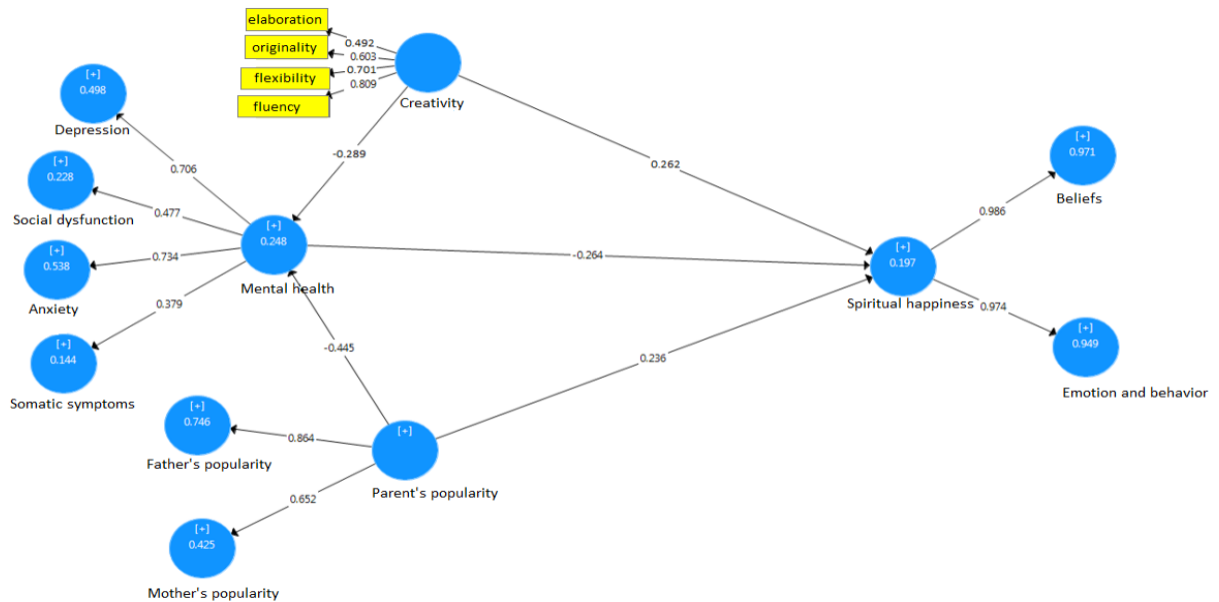


Figure 1. Path Diagram Along with Standard Coefficients in the Final Model

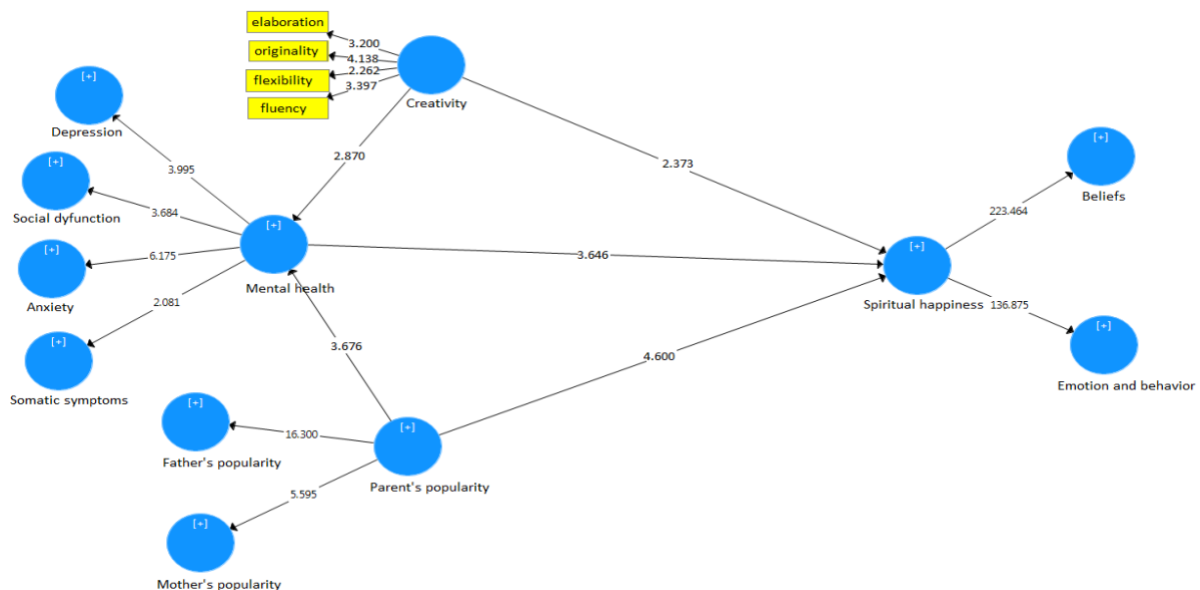


Figure 2. Diagram Along with T coefficients in the Final Model

Measurement Model

Three criteria including reliability, convergent validity, and divergent validity were used in the study of external models. The reliability of the reagent was evaluated by measuring the factor loads and the reliability of the latent variables was evaluated by the combined reliability.

Reliability at the indicator level is the factor loads square of the items, which must be at least 0.4; it means that at least half of the variance of the index is explained by the latent variable. Therefore, the factor loads greater than 0.7 are desirable and the factor loads below 0.4 need to be eliminated. Factor loads between 0.4 and 0.7 can be eliminated if removing them can increase the value of convergent validity (AVE) (Nonali and Bernstein, 1994). Given that in reflective

variables, the indicators are related to a domain and have a high correlation with each other, it is possible to replace them, and deleting one or more items does not have much effect on content validity. The results indicate that all retained items have good reliability.

An analysis of study instruments' reliability and validity illustrated that the Combined Reliability (CR) of all constructs within the model recommended for this study was more than 60% and their Cronbach's alpha was also higher than 70%. Moreover, the Average Variance Extracted (AVE) for all the constructs within the study's recommended model was higher than 50%. In addition, the whole range of latent variables within the same recommended model was of acceptable reliability and validity.

Table 3. Confirmatory Factor Analysis Results for the Measurement Model

Variables	Items	β	t	Items	β	t	Items	β	t
Creativity	Expansion	0/492	3/2	Flexibility	0/701	2/262	Fluid	0/809	3/397
	Innovation	0/603	4/138						
	AVE: 0/58		CR: 0/745		α : 0/731				
Depression	S22	0/441	2/99	S23	0/478	3/17	S24	0/422	2/78
	S25	0/619	3/95	S26	0/5	3/56	S27	0/536	3/35
	AVE: 0/53		CR: 0/76		α : 0/703				
Social disorder	S15	0/416	3/61	S16	0/567	2/36	S17	0/428	2/29
	S18	0/615	3/19	S19	4/69	0/615	S20	0/47	2/98
	S21	0/532	2/16			2/16	0/532	S21	
AVE: 0/52		CR: 0/762		α : 0/732					
Anxiety symptoms	S8	0/56	2/37	S9	0/684	2/083	S10	0/588	2/13
	S11	0/485	2/13	S12	0/478	2/505	S13	0/416	2/61
	AVE:0/594		CR: 0/709		α : 0/718				
Physical symptoms	S1	0/467	2/52	S2	0/538	2/88	S3	0/596	3/99
	S4	0/461	2/52	S5	0/694	4/02	S6	0/604	2/78
	S7	0/4	2/19						
AVE: 0/574		CR: 0/711		α : 0/761					
Father's popularity	M1	0/47	4/95	M2	0/403	4/89	M3	0/534	10/43
	M4	0/493	3/42	M5	0/42	2/13	M7	0/675	5/28
	M8	0/408	4/77	M9	0/499	7/22	M10	0/481	4/303
	M11	0/429	2/3	M14	0/571	12/59	M15	0/629	6/64
	M16	0/439	6/66	M17	0/558	12/16	M18	0/42	5/2
	M19	0/414	3/92	M20	0/408	2/34	M22	0/454	3/23
	M23	0/741	4/94	M28	0/709	4/35	M29	0/566	3/21
	M30	0/623	3/48						
AVE: 0/572		CR:0/887		α : 0/865					
Mother popularity	Mm1	0/533	3/27	Mm2	0/609	3/7	Mm3	0/445	2/49
	Mm4	0/405	2/2	Mm6	0/412	2/37	Mm9	0/421	2/4
	Mm10	0/418	3/37	Mm12	0/441	2/11	Mm13	0/43	3/37
	Mm14	0/42	2/6	Mm15	0/432	2/1	Mm16	0/438	3/15
	Mm17	0/602	7/006	Mm18	0/509	3/94	Mm19	0/59	6/73
	Mm20	0/566	7/45	Mm24	0/72	8/13	Mm25	0/514	6/14
	Mm26	0/595	6/84						
AVE: 0/538		CR: 0/848		α : 0/809					
Beliefs	N18	0/576	9/85	N19	0/549	5/85	N20	0/562	7/79
	N21	0/59	7/46	N22	0/592	7/47	N23	0/469	5/35
	N24	0/478	5/4	N25	0/542	9/56	N46	0/665	11/52
	N47	0/551	8/23	N48	0/571	9/09	N49	0/569	10/33
	N50	0/571	7/27	N51	0/642	8/38	N54	0/617	9/24
	N55	0/573	9/78	N56	0/724	11/62	N57	0/565	7/67
	N58	0/525	8/03	N59	0/655	12/7	N60	0/576	8/99
AVE: 0/539		CR: 0/914		α :0/901					

Feeling & Behavior	N1	0/429	5/37	N2	0/491	5/92	N3	0/583	7/38	
	N4	0/549	6/701	N5	0/563	7/87	N6	0/49	5/408	
	N8	0/42	3/33	N9	0/405	2/33	N10	0/563	7/34	
	N11	0/54	8/27	N12	0/615	9/904	N13	0/529	8/02	
	N14	0/616	12/13	N15	0/43	6/13	N16	0/495	5/45	
	N17	0/55	8/84	N26	0/526	6/89	N27	0/508	7/34	
	N28	0/633	10/63	N29	0/48	4/85	N30	0/539	8/05	
	N31	0/608	9/67	N32	0/582	7/703	N33	0/633	12/18	
	N34	0/57	8/31	N35	0/598	11/29	N36	0/582	9/87	
	N37	0/598	11/28	N38	0/606	8/83	N39	0/626	12/34	
	N40	0/618	8/15	N41	0/705	23/45	N42	0/47	5/68	
	N43	0/596	9/32	N44	0/563	7/25	N45	0/569	10/22	
	N52	0/583	8/91	N53	0/52	6/28				
			AVE: 0/51		CR: 0/944		α: 0/939			

To study the latent variables, Cronbach's alpha and combined reliability (CR) have been applied. However, due to the conservative nature of Cronbach's alpha as well as the consideration of similar weight for all the nominators, CR is the most used solution in Partial Least Square (PLS) approach (Azar, Gholamzadeh, & Ghanavati, 2012). A value of 0.7-0.9 is considered the satisfactory range for CR and values lower than 0.6 are considered unfavorable. In this model, all the variables include a CR > 0.7, thus, it can be inferred that the study model is of good reliability. The next stage concerning the analysis of the external model is the analysis of convergent validity. The AVE is the main criterion for analysis of convergent validity, meaning the average covariance of the latent variable and its nominators and its minimum value is 0.5 (Davari & Rezazadeh, 2014).

It can be argued in this model that variables' convergent validity has been obtained higher than 0.5, and all the latent variables are of appropriate convergent validity.

Table 4. Fornell and Larcker Matrix to Check Divergent Validity

	1	2	3	4	5	6	7	8	9	10	11	12
1 Depression	0.503											
2 Belief	-0.328	0.582										
3 Emotion And Behavior	-0.324	0.28	0.557									
4 Social Dysfunction	0.229	-0.23	-0.245	0.49								
5 Creativity	-0.071	0.14	0.139	-0.145	0.508							
6 Mother's Popularity	-0.365	0.461	0.45	-0.136	0.12	0.488						
7 Father's Popularity	-0.393	0.303	0.257	-0.364	0.022	0.345	0.521					
8 Parent's Popularity	-0.451	0.378	0.32	-0.318	0.082	0.251	0.174	0.872				
9 Anxiety Symptoms	0.22	-0.235	-0.204	0.306	-0.172	-0.172	0.218	-0.25	0.542			
10 Somatic Symptoms	0.138	-0.185	-0.187	0.085	-0.147	-0.153	0.077	-0.139	0.262	0.523		
11 Spiritual Happiness	-0.336	0.248	0.27	-0.242	0.141	0.464	0.293	0.363	-0.22	-0.182	0.986	
12 Mental Health	0.406	-0.383	-0.376	0.477	-0.226	-0.363	0.397	-0.461	0.341	0.379	0.387	0.558

Divergent validity is the third criterion for the analysis of external models' goodness of fit. Divergent validity is the value illustrating how well any construct is distinguished from others based on an experimental criterion. This validity is to be calculated in two levels of nominator and latent variable. At the nominator level, cross-loads are applied to calculate the divergent validity, requiring that any construct's corresponding nominator would be higher than a total load of that nominator on other study constructs. This condition has been met for all the nominators; however, due to space constraints, it has been removed from the table. Fornell-Larcker criterion has been applied for latent variables, such that the square root of AVE for any latent variable must be higher than the correlation of that constructs with other constructs within the study model. The main logic behind this construct is that any construct must include a higher variance with its nominators than other constructs (Fornell-Larcker, 1981). The results displayed in Table 5 illustrate that all the latent variables are of an acceptable divergent validity. Besides, considering the reliability, convergent and divergent validity results, one can argue that the external models are highly capable of measuring the study's latent variables. Therefore, the study's internal (structural) model is to be studied in later sections of this paper.

Findings and Discussion

The main purpose of this study is to investigate the correlation between creativity, mental health, the parent's popularity of high school students, and spiritual happiness as well as design a model of spiritual happiness. To study the correlation between study variables (i.e. creativity, spiritual happiness, mental health, and parents' popularity), Spearman's Correlation Coefficient has been used because some of the variables weren't of a normal distribution. Study variables are significantly correlated within a 95% confidence interval ($p < 0.05$). Moreover, it has been observed that the correlation coefficient between creativity and spiritual happiness, creativity and parent's popularity, spiritual happiness and parent's popularity are positive. Thus, it can be argued that any increase within any of these variables would lead to an increase in another, and any decrease in a variable would lead to a decrease in another. Meanwhile, the correlation coefficients between mental health and creativity, mental health and spiritual happiness, and mental health with parents' popularity are negative and are inversely correlated (since any increase in mental health score suggests the presence of a mental disorder and its decrease would lead to lower levels of creativity, spiritual happiness, and parents' popularity).

The results displayed in Table 6 have been derived based on the following hypotheses:

Hypothesis 1: there's a significant correlation between students' creativity and their spiritual happiness.

According to Table 6, the significance value of this path is 0.015 and is lower than 0.05. Thus, with a 95% certainty, one can conclude that creativity would significantly increase spiritual happiness. Thus, this hypothesis is validated. Therefore, one would argue that there's a positive significant correlation between students' creativity and their spiritual happiness.

Hypothesis 2: there's a significant correlation between parents' popularity and students' spiritual happiness.

According to Table 6, one can decipher that the significance value of this path is 0.001 and is lower than 0.05. Thus, it can be argued with 95% confidence that parents' popularity is significantly correlated with students' spiritual happiness. Further, considering the path coefficient of 0.236, it can be concluded that this correlation is positive. Therefore, this hypothesis would be accepted and one can argue that there's a positive significant correlation between parents' popularity and students' spiritual happiness.

Hypothesis 3: there's a significant correlation between students' mental health and their spiritual happiness.

According to Table 6, one can observe that the significance value of this path equals 0.001 and is lower than 0.05. Thus, it can be argued with 95% confidence that mental health is significantly correlated with spiritual happiness. Moreover, considering the path coefficient value which is equal to -0.264, one can conclude that this correlation is negative. Therefore, this hypothesis is accepted. This, it can be argued that there's a negative significant correlation between students' mental health and their spiritual happiness.

Hypothesis 4: There's a significant correlation between creativity and students' mental health.

According to Table 6, one can observe that the significance of this path is 0.008 and is lower than 0.05. Thus, it can be argued with 95% confidence that creativity is significantly correlated with mental health. In addition, considering the value of the path coefficient (i.e. -0.289), we can conclude that such correlation is negative. Thus, the hypothesis would be accepted and it can be argued that there's a negative significant correlation between students' creativity and their mental health.

Hypothesis 5: there's a significant correlation between parents' popularity and students' mental health.

According to Table 6, the significance of this path equals 0.001 and is lower than 0.05. Thus, it can be argued with 95% confidence that parents' likeability is significantly correlated with students' mental health.

Also, according to the value of the path coefficient, which is equal to -0.445, it is concluded that this effect is negative. Therefore, the hypothesis is confirmed. Hence, it can be said that there is a negative and significant relationship between parents' popularity and students' mental health.

Hypothesis 6: Mental health plays a mediating role between students' creativity and spiritual vitality.

According to Table 6, it can be seen that the significant value of this path is equal to 0.276 and more than 0.05. Therefore, it can be said with 95% confidence that mental health does not play a mediating role between creativity and spiritual happiness. But considering the value of the path coefficient which is equal to 0.076, it is concluded that this effect is positive and non-significant. Therefore, the hypothesis is not confirmed. It can be said that creativity has no significant effect on spiritual happiness due to the mediating role of mental health.

Hypothesis 7: Mental health plays a mediating role between parents' popularity and students' spiritual happiness.

According to Table 6, it can be seen that the significant value of this path is equal to 0.021 and less than 0.05. Therefore, it can be said with 95% confidence that mental health plays a mediating role between parents' popularity and spiritual happiness. Also, considering the value of the path coefficient, which is equal to 0.117, it is concluded that this effect is positive and significant. Therefore, the hypothesis is confirmed. Therefore, it can be said that the parents' popularity has a positive and significant effect on spiritual happiness due to the mediating role of mental health.

Table 5. Results of Hypotheses

Hypothesis	γ	t	P Value	Result
H1: creativity → spiritual happiness	0/262	2/373	0/015	Accept H1
H2:Parent's popularity→ of spiritual happiness	0/236	4/6	0/001	Accept H2
H3: Mental health→ spiritual happiness	-0/264	3/646	0/001	Accept H3
H4: creativity→ mental health	-0/289	2/87	0/008	Accept H4
H5: parent's popularity→ of mental health	-0/445	3/676	0/001	Accept H5
H6: creativity→ mental health→ spiritual happiness	0/076	1/09	0/276	RejectionH6
H7: parent's popularity→ mental health→ spiritual happiness	0/117	2/33	0/021	AcceptH7

In the internal model section, the relation between latent variables of the research is examined. The evaluation criteria of the internal model are path coefficients; the self-management procedure has been used to study their significance. These coefficients, along with T-values, have a significant level in Table 6.

Table 6. R2 and Q2 Indicators (Redundancy) of the Internal Research Model

Variable	R2	Q2
Spiritual Happiness	0/124	0/184
Mental Health	0/248	0/036

The next criterion, coefficient of determination (R^2), is the most common criterion for evaluating the internal model which indicates the accuracy of the model prediction. The three values of 0.19, 0.33, and 0.67 are considered the criterion values for the weak, medium, and strong values, respectively (Chin, 1998). As the results of Table 7 show, the coefficients of determination for both variables are average. The last criterion for evaluating the internal model is Q^2 Stone-Geisser (1974) which indicates the predictive fit of the model. This criterion is calculated by the ignore procedure where data points in the endogenous variable reagents are omitted and parameters are estimated using the residual points. For an endogenous latent variable, the Q^2 value greater than zero indicates the predictive fit of the path model for this particular structure. The results of this criterion are presented in Table 7 and are desirable.

Checking the Overall Model

After evaluating the measurement and structural models, the general model (sum of measurement and structural models) should also be considered. For this purpose, Tenenhaus et al. (2004) have introduced the GOF index. This index is obtained from the geometric mean of communalities (Communality) and the coefficient of determination. The closer this index is to one, the higher the strength and quality of the model.

As can be seen in the table above, the GOF criterion value was 0.366 and more than 0.36, which is a strong fit for the overall research model.

$$GOF = \sqrt{\text{Communalities} \times R^2}$$

Table 7. R2 and Q2 Indexes (redundancy) of the Internal Model of the Research

Variable	R^2	Communality	GOF
Spiritual happiness	0/184	0/664	0/366
Mental health	0/248	0/583	
Average	0/216	0/623	

In short, it can be said that the first descriptive statistics of research variables including central indicators and dispersion and correlation coefficients were presented. Then, the validity and reliability of the research measurement model were evaluated and then the normality test of variables was pointed out. Then, a preliminary estimate of the model was obtained; after applying the necessary modifications, the main research model was obtained and through path analysis, the research hypotheses were examined to finally reflect the results.

The results of this study are consistent with many results, including Than et al. (2021) who concluded that there is a significant relationship between creativity and spiritual happiness; Bo Jacks et al. (2014) in their research showed engaging in a creative work reinforces both positive emotions (hedonistic well-being) and good performance.

Dirzite et al. (2021) also showed that there is a statistically significant relationship between spiritual happiness and creativity. Ski et al. (2016) that creativity capacity was not significantly correlated with spiritual happiness, but it was significantly correlated with positive and negative emotion scales and their absolute sum. Kar and Sharma (2021) showed that all scopes of creativity and happiness have a positive correlation with each other. Stearns (2019) indicated that there is a correlation between parents' popularity and their children's happiness. Mamghani et al. (1398) showed that there is a relationship between parents' creativity and popularity and parenting styles. Ahmadi Gatab et al. (2011) showed that there is a relationship between mental health and spiritual happiness. Lombardo et al. (2018) showed that there is a correlation between mental health and spiritual happiness. The study of Eligbileh and Zachariah et al. (2011) showed that participation in creative activities prevents mental disorders. Kalantar Qureshi et al. (2012) stated that conscience, openness to experience, and agreeableness have a direct and positive relation with creativity and neuroticism has an inverse and significant relationship with creativity.

The results of the study do not agree with the results of some researchers, including, Fink (2014) showed that there is no relation between mental health and creativity. He showed that some creative thoughts of schizotypal and schizophrenia people can be the same as creative people. Fink has many opponents and the majority of researchers questioned his research. One of the limitations of this research is gender. In this study, only female students have been

studied, for future research, it is suggested to compare these variables in both sexes. One of the strengths of this research is the development of the spiritual happiness model, which is an innovative model, and schools and children and adolescents' psychiatric clinics can benefit from its results.

Limitations of Study

All researches have limitations in addition to their strengths. One of the limitations of this research was gender. The present research was conducted only on female students. As a result, caution should be taken in generalizing the results to boys. The next limitation of this research was age. This research was conducted on female students in the first grade of high school. As a result, caution should be taken to generalize the results to other age groups.

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