# AN INVESTIGATION ON THE RELATIONSHIP OF EXAMINATION PHOBIA AND ITS FACTORS WITH SELF-CONCEPT OF STUDENTS

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**ABSTRACT:** *The current study was an investigation on the relationship of examination phobia and its factors with the self-concept of students at higher secondary level. Two study hypotheses were generated; first, to investigate the relationship of examination phobia with self-concept and second to investigate the relationship of the different factors of examination phobia with self-concept of students. The sample of four hundred students was derived by using cluster sampling technique from ten higher secondary schools/colleges of Islamabad. Student's examination phobia was measured by the Westside test anxiety scale by Driscoll, R. [1]. Moreover, second instrument of the study consisted of two sections was developed by the researchers. Section A included the questions on the factors that cause examination phobia among students and section B was consisted of the questions related to measure the self-concept (self-confidence, self-worth and competence) of the students. Results revealed that examination phobia and its factors have a significant relationship with academic self-concept of students. Moreover, results also revealed that factor of examination phobia and self-concept endorsed some common factors that further need to be studied. Important limitation and implication of the study were also discussed with future directions.*

**Keywords:** *Examination phobia, Test anxiety, Self-concept*

## INTRODUCTION

Examinations are the integral part of any education system. Education systems of today become highly competitive due to grate emphasize on quality. In this achievement-oriented scenario students make tremendous effort to put out their maximum because exams and tests are gateway to seek admission in higher education and ensure better jobs in labor market. So, the researchers and educationists are continuously struggling for finding the ways to maximize the performance of students by promoting better metal health and self-image. One step in this regard is to improve student's self-concept and reduced exams related anxieties.

Students during their whole academic year naturally remain in constant worry and pressure of exams whether they are highly prepared or not. Though a little bit fear or anxiety due to examination is common, but when it get excessive and severe it is called examination phobia. It is the excessive worry or fear and anxiety regarding upcoming exams [2].

Moreover, it is considered that anxiety always comes from unidentified danger [3], while phobia is excessive fear of particular object, thing or situation that exceeds from the normal limits of fear [4]. Students before and during examination experience great amount of fear and worry from upcoming exams due to the feeling of incompetence or poor preparation and also shows the symptoms of excessive anxiety and uneasiness due to unknown outcomes of the exams. So, we can say that extreme fear of examination is both an anxiety and phobia because literature shows both terms to express students' extreme fear of examination [5]. Basically test anxiety is the personality disposition that comes from cognitive and personality characteristics of the students [6].

The cognitive element of test anxiety is associated with mental and thinking process of students (i.e. consequences of anxiety such as, irrational and intrusive thought before and during examination). While different variables related to personality traits also predict test anxiety among students [6]. Furthermore, it is admitted fact that environment and situational variables also influence human feelings and thinking. It also plays a vital role in shaping person's attitude towards other and also about him/herself. Moreover, a person develops the complex feelings of inner 'self' by interacting with others (i.e. parents, siblings, teachers, and with peer group). From the above perspective of the development of "self", person's self-concept refers to one's perception about him/herself [7]. In other words it can be defined as; it is the mental representation of a person, by interpreting their experiences in relation to environment [8]. It includes the feeling of self-confidence, self-worth, self-acceptance, competence and ability [9]. However, these terms are overlapping to each other and often use interchangeably.

As discussed earlier, people in one's life play significant role in shaping self-concept so, the students' self-concept is the result of the behavior of others towards them in academic matters. Furthermore, it is also considered that other's behavior, expectations and student's personal variables heighten the examination related anxieties and phobia [5]. Among the different factors, parent and teacher's attitude such as unrealistic expectations and harsh criticism play significant role in predicting examination phobia [5]. Meanwhile, the students whose parents play supporting and encouraging role to accomplish the challenging tasks have more positive self-concept; have confidence in their academic capabilities and have less academic and exams anxieties. In contrast, parents who scold and punish their children for those tasks that they have not ability to do rather than praising them for things that they can do mostly have low global self-concept [10]. Furthermore, global self-concept that commonly known as 'self-esteem' is the characteristic of self-confidence and self–assertiveness [11].

Likewise, teacher's behavior has similar effect on students. Those teachers who provide positive reinforcement to their students accomplished school related task with more confidence and their ultimate success reinforce their self-confidence. Contrary teacher's negative behaviour develops the sense of inferiority among students [12]. Such sense of inferiority and lack of worthiness decreases the self-concept [12]. Furthermore, self-concept and self-esteem also depend on the tendency of how much the students successfully achieve their academic tasks [10]. Students likely believe that they can easily accomplish their tasks when they have been successful in their previous tasks [13]. While poor performs in previous tasks leads towards poor competence believe that is also a cause of examination phobia.

Though, poor competence belief is linked with anticipated failure in exams but also with assuming examination as threatening [14, 15, 16]. When the test anxious students come across evaluative threat, they exhibit pessimist and more negative thinking [17, 18]. Their negative self-perception about the consequences of exams interferes with their task accomplishment. Moreover, highly test anxious subjects reflect self-doubts in evaluative situation that results in poor performance [19]. In addition, debilitating test anxiety is positively correlated with students' self-doubts on their abilities and avoidance orientation to any evaluative tasks, while negatively correlated with the importance of ability [20]. In this regard, one's self-concept plays an important role in predicting his/her academic performance.

Students' academic self-concept is the evaluation of their abilities in specific academic domains [21]. In addition, it is assumed that self-efficacy and self-concept cover many domains of self-perception and functioning because both measure one's perception about his/her abilities [22]. Moreover, it is also denoted that general perceived self-efficacy and students' academic performance are positively correlated to each other [23].

Research studies revealed that highly test anxious students score low at self-efficacy and the relationship between them is negative [24]. In addition, As compared to non-test anxious students, test anxious students generally have low self-concept and self-assurance [25]. Moreover, the correlation between self-concept and test anxiety is negative among the students of all age groups [26]. It is also stated that their negative self-image is often develops due to failure in exams [27].

However, among all the aspects of the self-concept educational and psychological researchers have widest interest in global self-concept that is self-esteem because positive self-concept mostly associated with better performance. Though, researchers sometime use this term interchangeably with self-concept but it is assumed that self-esteem is only a part and evaluative dimension of the self-concept [28]. Moreover, students' self-concept is considered to be associated with their esteem and self-worth judgment, and both concepts are based on past judgments and consider examination as threat to them [16]. It is well documented that high self-esteem increases academic performance [29, 30, 31] and the relationship is negative between test anxiety and self-esteem [30, 32].

Though self-esteem provides a dimension to measure self-worth that is a part of global self-concept but to measure the multi-dimensional facets of self-concept for present study three dimensions (self-confidence, self-worth and competence/ ability believe) were taken to measure student's self-concepts in academic setting. Therefore, the primary purpose of this research is to test the hypothesis, examination phobia has a significant relationship with self-concept. Where student's self-concept is measured by the appraisal threat of exams to their self-confidence, self-worth and competence /ability believe. In addition, to test the relationship between different factors of student's examination phobia (that are lack of concentration, fear of teachers, previous class result, poor preparation and fear of losing affection of parents) with the overall self-concept and individually with self-confidence, self-worth and ability believe.

## HYPOTHESES

$H_1$: There is a significant relationship between examination phobia and self-concept of students.

$H_2$: There is a significant relationship between the factors of examination phobia and self-concept of students.

### Objectives

1. To find out the relationship between examination phobia and overall self-concept (self-confidence, self-worth and competence/ability believe) of students.
2. To identify the factors of examination phobia (that are lack of concentration, fear of teachers, previous class result, poor preparation and fear of losing affection of parents) prevailing among students as the predictor of examination phobia.
3. To draw the relationship between different factor of student's examination phobia with the overall self-concept.
4. To draw the relationship between different factors of student's examination phobia with self-confidence, self-worth and competence/ability believe.

## MATERIAL AND METHODS

### Group of participants

The participants of the study were, four hundred (400) students studying in higher secondary schools and public colleges of Islamabad city. Two-stage cluster sampling technique was used to draw the sample. The cluster of ten public higher secondary school/colleges was randomly selected from Islamabad at first stage. Then at the second stage, from each institution forty students (40) studying at $12^{th}$ grade were randomly selected.

### Material

Two self-reported scales were used as instruments for data collection from students. First, the standardize "Westside Test Anxiety Scale" by Driscoll, was employed that measure the cognitive and anxiety impairment due to test anxiety [1]. In addition, to measure appraisal threat of the factors of examination phobia to students' self-concept instrument was developed by the researches.

### Construction of instrument

Instrument was consisted of two sections and included demographic information (name, class, gender and institution name). Same five point rating scale was used to avoid the confusion for respondents that was used in Westside test anxiety scale. Students were instructed to rate how frequently they experience such feeling or thought during examination. Section A: consisted of the factors that evoke examination phobia i.e. previous class result, poor preparation, fear of parent, fear of teachers and lack of concentration. Section B: consisted of the items related to students' appraisal threat to self-confidence, self-worth and competence/ability believe by examination phobia. The questionnaire was pilot tested and the reliability of final questionnaire was .61.

### Procedure

For data collection permission was obtained from the respective institutions and data were collected from the students just one month before their final board exams. Firstly, examination phobia scorring was done according to prescribed procedure of scale (sum of all questions divided by the total). Regression analysis was applied to test the hypotheses. For testing first hypothesis mean score of self-concept constructs (self-worth, self-confidence and

competence/ ability believe) was taken. Students' scores of examination phobia were taken as independent variable and their self-concept was taken as dependent variable. To identify significant predictors of examination phobia stepwise regression was run. Then to test second hypothesis, relationship of the factors of examination phobia with overall self-concept composite scores of all the constructs self-worth, self-confidence and competence/ ability believe were taken and stepwise regression was applied. For individualized relationship of factors of examination phobia with each construct of self-concept stepwise regression analysis was applied.

## Data analysis

Data analysis was accomplished by using SPSS 16. Examination phobia was measure by the given scoring procedure of scale. Stepwise regression analysis was run for testing the hypothesis and objectives. While, effect size was calculated by using the criteria of Cohen (1988, 1992) according that is r = .10 (small effect), r = .30 (medium effect), r = .50 (large effect).

## RESULTS

**Table 1: Regression model to predict the effect of examination phobia on self-concept**

| Model | R | $R^2$ | F | Sig. | t | Sig. |
|---|---|---|---|---|---|---|
| Effect of examination phobia on the overall self-concept | .477 | .227 | 117.027 | .000 | 10.818 | .000 |

Table 1 shows the impact of examination phobia on overall self-concept of students. The ANOVA table shows F (1, 398) = 117.027, p < .001 that is significant whereas R= .477 is moderate correlation. $R^2$ is .227 that represents 22.7% variance in self-concept is due to examination phobia however, effect size is medium.

**Table 2: Factors of examination phobia as the predictors of students' examination phobia**

| Model | R | $R^2$ | F | Sig. |
|---|---|---|---|---|
|  | .544 | .296 | 41.521 | .000 |
| Model | t | | Sig. | |
| Included Variables | | | | |
| Lack of concentration | 5.611 | | .000 | |
| Fear of teachers | 4.620 | | .000 | |
| Previous class result | 4.801 | | .000 | |
| Poor preparation | 3.896 | | .000 | |
| Excluded Variables | | | | |
| Fear of parents | .842 | | .400 | |

Table 2 depicts the impact of students' factors of examination phobia on overall examination phobia scores of students that was measured through Westside test anxiety scale. The ANOVA table shows F (1, 398) = 41. 521, p < .001 that is significant whereas R= .544 is moderate correlation. $R^2$ is .296 that represents 29.6% variance in examination phobia is due to the factors of examination however the overall effect size is large.

Table 2 also presents the coefficient of the factors of examination phobia as the predictors of students'

examination phobia scores. The t value of the lack of concentration on material is (t= 5.611, p< .001), fear of teachers (t= 4.620, p< .001), previous class result (4.801, p< .001), poor preparation (3.896, p< .01) that are highly significant. Table also represents the excluded variable fear of parents (t= .842, p> .05) that is insignificant. So, results reflected that out of five factors of examination phobia four factors are found significant and only fear of parents is found insignificant in predicting examination phobia.

**Table 3: Regression model to predict appraisal threat of the factors of examination phobia to self-concept**

| Model | R | $R^2$ | F | Sig. |
|---|---|---|---|---|
| Impact of the factors of examination phobia on the overall self-concept | .553 | .306 | 43.589 | .000 |
| Model | t | | Sig. | |
| Included Variables | | | | |
| Lack of concentration | 5.504 | | .000 | |
| Fear of teachers | 5.987 | | .000 | |
| Previous class result | 3.555 | | .000 | |
| Poor preparation | 3.505 | | .001 | |
| Excluded Variables | | | | |
| Fear of parents | .575 | | .566 | |

Table 3 represents the impact of the factors of examination phobia on self-concept (consisted of self-confidence, self-worth and self-believe) of students. The ANOVA table shows F (1, 398) = 43.589, p < .001 that is significant whereas R= .553 that represent moderate correlation. $R^2$ is .306 that represents 30.6% variance in student's self-concept is due to the combine effect of the factors of examination phobia however the overall effect is strong.

Table also presents the coefficient of the impact of the factors of examination phobia on the overall self-concept of students. The t value of the lack of concentration on material is (t= 5.504, p< .001), fear of teachers (t= 5.987, p< .001), previous class result (t= 3.555, p< .001), poor preparation (t= 3.505, p< .01) that are highly significant. While, excluded variable fear of parents (t= .575, p> .05) is found insignificant.

**Table 4: Regression model to predict appraisal threat of examination phobia to self-confidence**

| Model | R | $R^2$ | F | Sig. |
|---|---|---|---|---|
| Impact of the factors of examination phobia on self-confidence | .332 | .111 | 16.405 | .000 |
| Model | t | | Sig. | |
| Included Variables | | | | |
| Lack of concentration | 3.751 | | .000 | |
| Fear of teachers | 3.800 | | .000 | |
| Poor preparation | 2.013 | | .045 | |
| Excluded Variables | | | | |
| Previous class result | 1.640 | | .102 | |
| Fear of parents | -.472 | | .637 | |

Table 4 shows the impact of the factors of examination phobia on self-confidence of students. The ANOVA table

shows F (1, 398) =16.405, p < .001 that is significant whereas R= .332 is moderate correlation. $R^2$ is .111 that represents 11.1% variance in academic self-confidence is due to their examination phobia however the overall effect size is moderate.

Table also presents coefficient the t-test value of the students' factors of examination phobia scores with self-confidence. Where factors of examination phobia are taken as predictor and self-confidence is dependent variable. The t value of lack of concentration on material is t= 3.751, p< .001, fear of teachers (t= 3.800, p< .001), poor preparation (t= 2.013, p< .05) that are highly significant. In table excluded variables are previous class result (t= 1.640, p> .05) and fear of parents (t= -.472, p> .05) that are insignificant.

**Table 5: Regression model to predict appraisal threat of examination phobia to self-worth**

| Model | R | $R^2$ | F | Sig. |
|---|---|---|---|---|
| Impact of the factors of examination phobia on self-worth | .457 | .209 | 26.062 | .000 |
| Model | | t | | Sig. |
| Included Variables | | | | |
| Lack of concentration | | 5.685 | | .000 |
| Fear of teachers | | 2.698 | | .007 |
| Poor preparation | | 2.871 | | .004 |
| Previous class result | | 2.584 | | .010 |
| Excluded Variables | | | | |
| Fear of parents | | 1.393 | | .164 |

Table 5 demonstrates the impact of the factors of examination phobia on self-worth of students. The ANOVA table shows F (1, 398) = 26.062, p < .001 that is significant whereas R= .457 that represent weak correlation. $R^2$ is that represents 20.9% variance in students' self-worth is due to their examination phobia however the overall effect size is medium.

The coefficient shows the t-test value of students'

**Table 6: Regression model to predict appraisal threat of examination phobia to competence/ability believe**

| Model | R | $R^2$ | F | Sig. |
|---|---|---|---|---|
| Impact of the factors of examination phobia on competence/ability believe | .393 | .155 | 24.163 | .000 |
| Model | | t | | Sig. |
| Included Variables | | | | |
| Fear of teachers | | 5.505 | | .000 |
| Previous class result | | 3.284 | | .001 |
| Poor preparation | | 2.547 | | .011 |
| Excluded Variables | | | | |
| Lack of concentration | | 1.836 | | .067 |
| Fear of parents | | .386 | | .700 |

examination phobia scores are taken as predictor and self-worth is dependent variable. The t value of lack of concentration on material is (t= 5.685, p< .001), fear of teachers (t= 2.698, p< .05), poor preparation (t= 2.871, p< .05), previous class result (t= 2.584, p< .05) that is highly

significant. Table also represents the excluded fear of parents (t= 1.393, p> .05) that is insignificant.

Table 6 shows the impact of the factors of examination phobia on competence/ability believes of students. In the model students' factors of examination phobia are taken as independent and competence/ability believe is dependent variable. The ANOVA table shows F (1, 398) = 24.163, p < .001 that is significant whereas R= .393 is weak correlation. $R^2$ is .155 that represents 15.5% variance in competence/ability believe is due to their examination phobia however the overall effect size is medium.

The coefficient t value of fear of teachers (t= 5.505, p< .001), previous class result (t= 3.284, p< .01), poor preparation (t= 2.547, p< .05) are significant. Table also represents the excluded variable lack of concentration on material (t= 1.836, p> .05) and fear of parents (t= .386, p> .05) that are insignificant.

## DISCUSSION AND CONCLUSIONS

The study's purpose was to examine whether examination phobia has significant relationship with self-concept of students along with to investigate the relationship of the different factors those are developing examination phobia with overall and also to the facets of academic self-concept. The regression analysis was applied to draw the relationship and testing the models.

As, the first hypothesis of the study was to test that examination phobia has significant relationship with academic self-concept of students. The relationship was found significant so we accept our first hypothesis. The study results revealed that student's examination phobia had significant impact on the academic self-concept of students. Moreover, results showed that the examination phobia predict 22% variance in the self-concept of students. That means there are other variables in student's life that share rest of variance which can be considered. This result provides further evidence to test whether different factors of examination phobia can predict variance in academic self-concept of students.

For this firstly, we have to test whether the factors (lack of concentration, fear of teachers, previous class result, poor preparation and fear of losing affection of parents) were significant predictors of examination phobia stepwise regression was applied. Results revealed strong impact of the factors of examination phobia on overall student's examination phobia that was measured by test anxiety scale while only one factor fear of parents was found insignificant. Due to this strong empirical evidence for the significance of model researchers move further to test second hypothesis that factors of examination phobia has significant relationship with self-concept of students.

As in present study students were instructed to rate the different factors that they consider generates examination phobia among them. As considering them the variables other than examination phobia which may affect the student's self-concept their combine effect was found through stepwise regression on the academic self-concept of students. The study result provides evidence that these factors had profound effect and share 30.6% variance in student's self-concept. Where out of five factors four factors; fear of teachers, previous class result, poor preparation and lack of concentration on study material were found significant

predictors that exert its impact on self-concept while fear of the annoyance or losing affection of the parents had no significant impact. That further provides evidence because in both models fear of losing affection of parents were insignificant which means factors that affect students' examination phobia and academic self-concept are common. For drawing the logical relationships between the factors of examination phobia with self-concept and its facets firstly we need empirical evidence and reasoning to clarify how these factors contribute to develop examination phobia which consequently affect self-concept.

When we talked about the relationship between examination anxiety and self-concept literature shows dual relationship as reciprocal effect. It means both variables affect each other (high examination phobia leads to lower self-concept and lower self-concept provide a base to heighten the examination phobia) [33]. So, in the same way different factors including people in one's life play significant role in developing positive and negative wellbeing which make their mindset to perform and believe in own abilities. Students during their whole academic year and especially in exams remain in undue stress of performing well. If their previous performance in exams was not good it creates stress and distortion in their learning [5]. Another probable reason for not able to concentrate on study material may be the threat to their self-worth in case of poor performance that lead to increase in test anxiety [30]. Due to these facts students' feel anxiety and irritation during examination period and are not able to concentrate on learning material. Because test anxious students obsessed and preoccupied with their prior performance [34]. Therefore, due to such intrusive thoughts students were not able to prepare the study material or have poor preparation [5]. The same relationship was found between self-concept and academic performance because poor performance in pervious exams affect the self-concept of students and self-concept also affect their performance that generate anxiety [12, 13]. Because, it is considered that self-concept and academic performance is positively correlated to each other but meanwhile it is also argued that, it is the consequences of good performance rather than a cause of good performance [35, 36]. So, we can say that poor performance in previous exams leads to examination phobia which affects the self-concept of students or vice versa [37]. Because it is noticed that low test anxiety and high self-concept leads to better performance [38].

Basically, two fundamental players of shaping students' personality are their parents and teachers. Therefore, their behavior such as support, encouragement and motivation increases child performance. While harsh criticism or scolding create huge tension, and subsequently lower their performance and self-concept [10,12,13]. The same is the case with examination phobia, parents and teachers' attitude underestimation or high expectations towards the child performance foster stress and exam anxiety among students and in response they cannot perform according to their potential [39]. But, present results show no evidence for the significance of the fear or loss of affection by the parents as a predictor of students' examination phobia as well as for self-concept the difference in results may be due to the culture or parental practices. While, fear of teacher for high performance was found significant such discrepancy between actual and desired performance leads to examination phobia

and lower performance in subsequent exams affect the self-concept of students [40].

As the overall relationship is found significant so we accept our second hypothesis. Therefore, it is concluded that examination phobia and its factors have significant relationship with self-concept of students. Moreover, the impacts of different factors of examination phobia on the all facets were also found significant. So, on the basis of above result and discussion it can also be stated that examination phobia and self-concept of students share some commonalities in its factors.

**Limitations and Future Directions**
However, despite all these facts some empirical limitations and implications of current research are subjected. Study was not an attempt to investigate the two way relationships of examination phobia and self-concept of students but only an attempt to draw the light on those factors of examination phobia that affect students self-concept. Therefore, only single instrument was developed for this study to identify the factors of examination phobia and its impact on self-concept of students.

As the results suggest examination phobia and self-concept share some common factor those are significant (fear of teachers, previous class result, poor preparation and lack of concentration on study material) and insignificant (fear of losing affection from parents). For future investigation separate measures will be needed to examine the separate mechanism behind the effect of the factors of examination phobia on self-concept and the factors that directly affect student's self-concept. Because, study does not provide evidence by the relationship between examination phobia and self-concept which come first. But only provide evidence through the channel of examination phobia that examination phobia and its factors affect the self-concept of students. For such investigations well-defined mechanism is needed in this regard reciprocal relationship models may be helpful to provide some theoretical basis.

Moreover, for future research further investigations can be carried out by using different factor of examination phobia and a comprehensive mechanism should be involved in investigating such factors and processes.

**Implications**
In spite of, all these limitations study may be helpful for educational and social psychologist to work upon those factors whether they are from home or school environment that generate examination phobia and affect the child's self-concept. Moreover, study was an effort to identify those factors that prevail in Pakistani culture those are affecting self-concept of students. In nutshell, study provides a glance of the various factors that contribute in examination phobia and decreases self-concept hence become the cause of poor academic performance of student. In this regard, study may also be beneficial for students, teacher and school counsellors for devising coping strategies by keeping in view the various factors discussed in present study to improve self-concept and reduce students' exams related anxieties for ultimate success in future life.

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