Relationship between Examination Anxiety and Academic Achievement among University Students

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ABSTRACT
The major aim of current study was to explore the relationship between examination anxiety and academic achievement of students at university level. Nature of study was descriptive, non-contrived, cross sectional and quantitative. Universal sampling technique was exploited to collect data from all students of department of education, university of Gujrat, Pakistan. An adopted questionnaire was used to measure anxiety level of students against thirty statements. Mean , Standard Deviation and Pearson correlation were run for data analysis. No relationship between examination anxiety and academic achievement was found among university students. It was explicated that examination anxiety is not caused of low, average and high achievement of the student.

Introduction

The period of examination is considered an extremely anxious time. Anxiety can cause medical problems or reduce the efficiency of exam performance. Of course, most people have some anxiety reaction to examinations. Examination anxiety is a combination of physiological over- arousal, tension and somatic symptoms, along with worry, dread, fear of failure, and catastrophizing, that occur before or during test situations. According to Phillips, Martin, and Myers (1972) anxiety is reaction of different environmental factors and emotionality and cognition are two basic sub components of test anxiety. Cognitive component causes worry which reduces attention, concentration and information processing process while emotionality is related to physical symptoms or physical reactions as horror of examination. Researches supported that cognitive element was more contributing factor of lower academic achievement among adolescent (Bandlos, Yates, & Thordike-Christ, 1995; Williams, 1991; Humblee, 1988; Lufie, 2004; Mathews, Zeidner & Roberts, 2006; Bembenutty, 2009; Unruh and Lowe 2010).

Examinations are tools to evaluate students knowledge, skills and attitude and achievement is struggle for success and avoidance from failure. (Covington, 2004; Heafner ,2004). However along with many other factors examination anxiety is consider as a major factor that effect student’s achievement in different countries (Sarason,1984; Zollar & Ben-chain, 1990; Spielberger, 1980).

Examination anxiety is the set of phenomenological, psychological, and behavioral responses that effect student’s achievement both positively and negatively. A positive level of anxiety can improve students’ learning ability and enhance academic achievement of students because this makes students efficient and striving. Low and moderate level of anxiety has positive impact on student’s achievement . When this level exceeds and persists for long time then cause failure and low performance (Chapell, Blanding, Takahashi, Silverstein, Newman, Gubi, & McCann, 2005; Onwayed,2005 ; Heather & April, 2009).

Studies explicated that examination anxiety has impact on university level students and results showed that high achievers had less examination anxiety. Literature support effect of examination anxiety and teachers evaluation practice on student’s academic achievement. High anxiety reduces level of motivation and academic achievement (Hancock, 2001; Khalid and Hasan, 2009).

Examinations at all stages of education, especially at higher education level have been considered an important and powerful tool for decision making in our competitive society, with people of all ages being evaluated with respect to their achievement, skills and abilities. Most of the researches about topic under study had been conducted at school level and under the circumstances of competitive examination. Therefore, current study was conducted to explore and validate the relationship of examination anxiety with academic achievement among university students enrolled in semester system. It was generally seen and observed that under semester system students did not consider the examination as a serious threat that leads them towards the state of anxiety. Therefore, the purpose of this study was to explore the relationship between examination anxiety with academic achievements among university students.

Objective of the study
Objectives of the study were to
1. Look at the academic achievement of students of education department in terms of CGPA.
2. Find out examination anxiety level of students of education department.
3. Determine the relationship between the levels of examination anxiety and academic achievement of students.

Methodology

Present study was descriptive in nature. Data was collected by single visit and no manipulation was done hence study was non-contrived and cross sectional.

Research Question

Following research questions were sought to be answered by this study:
1. How many students are high achiever, average achiever and low achiever?
2. What is the examination anxiety level of different academic achievement of students?
3. Is there any relationship between the level of examination anxiety and academic achievement of “high achiever” students? 
4. Is there any relationship between the level of examination anxiety and academic achievement of “average achiever” students? 
5. Is there any relationship between the level of examination anxiety and academic achievement of “low achiever” students?

**Participant**

Universal/census sampling technique was used for this study because all the students of running semesters of B.S. Education, M.A. Education and Associated Diploma of Education programs were taken as a sample for this research study. Total sample size was 230 students.

**Instrument**

Questionnaire was used as an instrument of research for exploring level of anxiety among students. CTAS (The Children’s Examination Anxiety Scale) by Wren & Benson (2004) was adopted for this study and under the circumstances of Pakistani universities needful modification was done with the help of previous studies. After discussion with experts, a 30 items questionnaire was finalized. Pilot testing was done to ensure validity of instrument in local setting. Chronbach alpha value was .89 that ensured validity of instrument. Data was gathered against five point likert scale comprised of description as Never, Rarely, Sometimes, Often, Always

**Data Collection and Analysis**

Data was collected personally and Mean, Standard Deviation and Pearson correlation were run for data analysis using SPSS.

**Findings**

**Table 1. Mean value of high achiever, average achiever and low achiever**

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>N</th>
<th>Percentage</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achiever</td>
<td>25</td>
<td>13.89</td>
<td>2.18</td>
<td>0.20</td>
</tr>
<tr>
<td>Average Achiever</td>
<td>144</td>
<td>80.00</td>
<td>2.98</td>
<td>0.24</td>
</tr>
<tr>
<td>High Achiever</td>
<td>11</td>
<td>6.11</td>
<td>3.58</td>
<td>0.15</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 showed that 14% students were low achiever (M=2.18, SD=0.20), 80.00% students were average achiever (M=2.98, SD=0.24) and 6% students were high achiever (M=3.58, SD=0.15)

**Table 2. Mean value of examination anxiety of high achiever, average achiever and low achiever**

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>N</th>
<th>Percentage</th>
<th>Anxiety</th>
<th>Anxiety Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achiever</td>
<td>25</td>
<td>13.88</td>
<td>2.58</td>
<td>.55</td>
</tr>
<tr>
<td>Average Achiever</td>
<td>144</td>
<td>80.00</td>
<td>2.33</td>
<td>.55</td>
</tr>
<tr>
<td>High Achiever</td>
<td>11</td>
<td>6.11</td>
<td>2.30</td>
<td>.51</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 reflected that 14% low achiever were average anxious (M=2.58, SD=0.55), 80.0% average achiever were low anxious (M=2.33, SD=0.55) and 6% high achiever were low anxious (M=2.30, SD=0.51).

**Table 3. Correlation between anxiety and academic achievement of high achiever**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>r-value</th>
<th>Sig. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>11</td>
<td>2.30</td>
<td>.51</td>
<td>.022</td>
<td>.949</td>
</tr>
<tr>
<td>High Achievement</td>
<td>11</td>
<td>3.58</td>
<td>.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 revealed insignificant relationship (r=0.02) between level of examination anxiety and academic achievement of high achiever because p=0.949>a=0.05. It is concluded that there was no relationship between level of examination anxiety and academic achievement of high achievers.

**Table 4. Correlation between anxiety and academic achievement of average achiever**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>144</td>
<td>2.33</td>
<td>.55</td>
<td>-.029</td>
<td>.732</td>
</tr>
<tr>
<td>Average Achievement</td>
<td>144</td>
<td>2.97</td>
<td>.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 exposed that insignificant relationship (r=0.02) between level of examination anxiety and academic achievement of average achiever because p=0.732>a=0.05. It was concluded that there exist no relationship between level of examination anxiety and academic achievement of average achievers.

**Table 5. Correlation between Anxiety and Academic Achievement of Low Achiever**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>r-value</th>
<th>Sig. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>25</td>
<td>2.58</td>
<td>.55</td>
<td>-.070</td>
<td>.740</td>
</tr>
<tr>
<td>Low Achievement</td>
<td>25</td>
<td>2.18</td>
<td>.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 demonstrated insignificant relationship (r=0.07) between level of examination anxiety and academic achievement of low achiever because p=0.740>a=0.05. It is concluded that there exist no relationship between level of examination anxiety and academic achievement of low achievers.

**Results and Discussion**

**Major conclusions of the study were**

1. **Achievement:** This study concluded that the strength of average achiever was high (144/180) as compared to high achievers and low achievers. The data showed that numbers of students of M.A, B. Ed and ADE were average achiever. 
2. **Anxiety level:** This study found that the low achiever had average anxiety and the high and average achiever had low anxiety. 
3. **Relationship:** Study revealed that there is no relationship between examination anxiety and students academic achievement. It was found that examination anxiety is not caused of low, average and high achievement of the student. Teacher, parents and educational administrator were playing effective role to mange examination anxiety of the students.

Student’s anxiety has been a long discussion among researchers. During 1950s and later studies explored no relationship between examination anxiety and students academic achievement (Robinson, 1966). In present situation students were studying under semester system so they do not feel much pressure of exam as compare to students who study under annual system. In annual system students have to study more content which they have read throughout the year while in semester system things are reverse. Another reason of reason of no relationship might be this that study sample consisted female students and its general perception that girl prepare their lesson daily hence during exam they feel less anxiety (Robinson, 1966).

Study conducted in Pakistan reflected that students of social sciences feel less anxiety as compare to pure sciences hence it might be the reason that current sample was from social sciences so they did not feel anxiety (Butt & Akram, 2013). Literature supported the fact that level of anxiety depends upon nature of subject not of preparation for exam (Rouxel, 2000). So sample of current study did not show examination anxiety because education subject is easy and student can easily cover content before exam.

As reported by Rana & Mahmood (2010) flexible test structure might be cause of low anxiety. Level of examination anxiety can be controlled by controlling many external factors. External factors like environment of examination hall, behavior of examiner etc while internal factors include clarity of context, organization of questions according to need and level of students, clarity of instructions. Hence no relationship between
examination anxiety and academic achievement might be due to favorable and better institution environment.

Suggestions

It was worth noted that no signification relation was executed between examination anxiety and academic achievements among university students therefore in order to remove the error of judgment and eliminate the fear of sampling error following suggestion were made:

1. Qualitative analysis may be conducted for in-depth analysis of the population.
2. Population of the study was comprised on female students and for further analysis of the situation male students may also be included.
3. Only one department was taken in this study, therefore it is suggested that data may be collected from other departments for further exploration.

References