# Test Anxiety Levels of Students Studying Under the Aga Khan University Examination Board in Pakistan

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Aga Khan University Examination Board, Pakistan

Education System in Pakistan

- Education System
  - ➢ Primary (grade 1-5)
  - ➢ Middle (grade 6-8)
  - ➢ Secondary/Higher Secondary (grade 9-12)
  - ➢ Tertiary Education

- The system faces critical issue of access and quality **(25M Out of School Children)**

- High dropout rates

- High stake Board Examinations - major issues of quality of assessment and conduct of examination – ***Cheating, leakage of exam papers, rote learning, poor assessment and marking etc.***

- 30 Government Examination Boards **(Operating District-wise)**
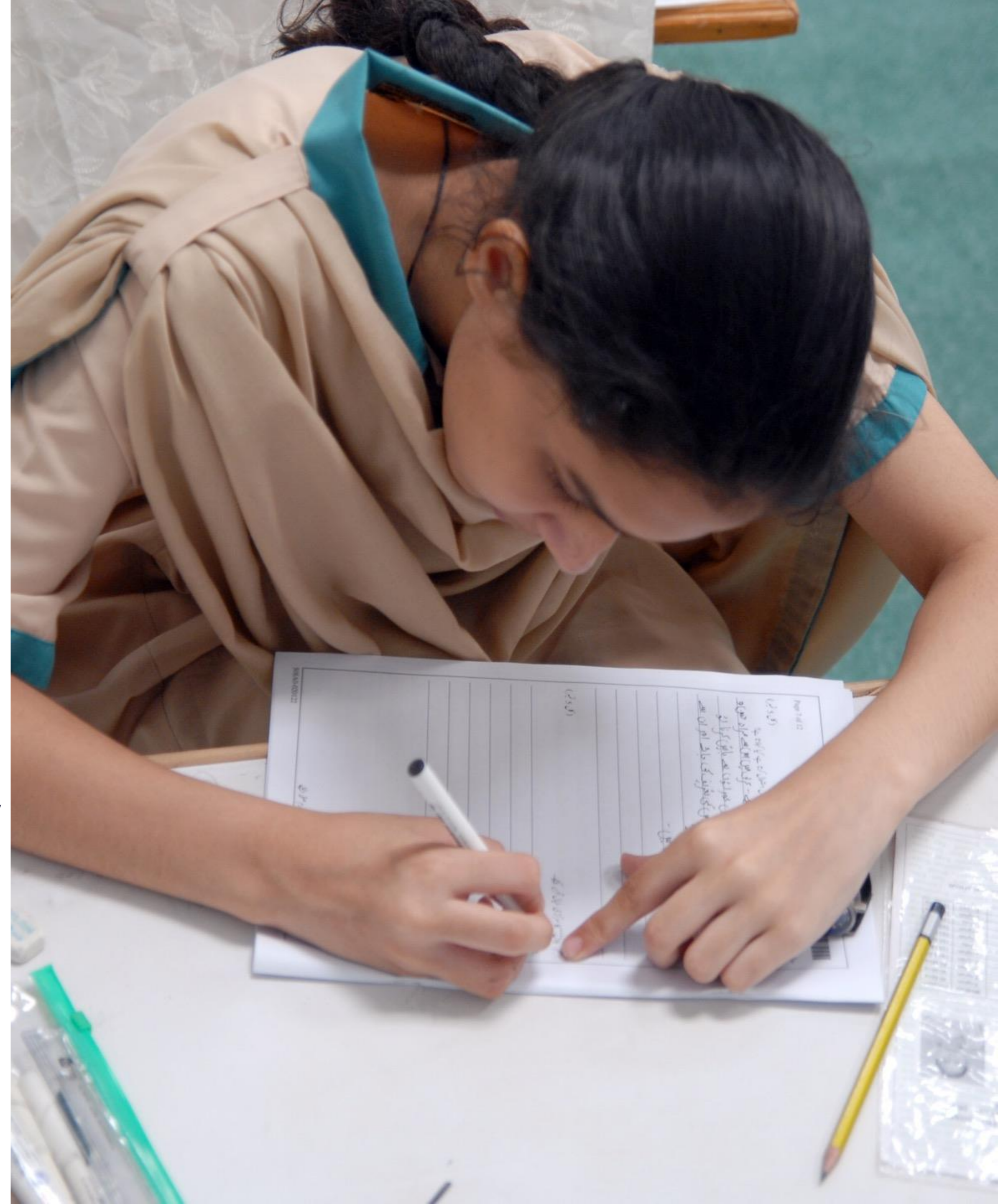
AKU-Examination Board

Vision

> AKU-EB aspires to be a model of excellence and innovation in education for Pakistan and the developing world.
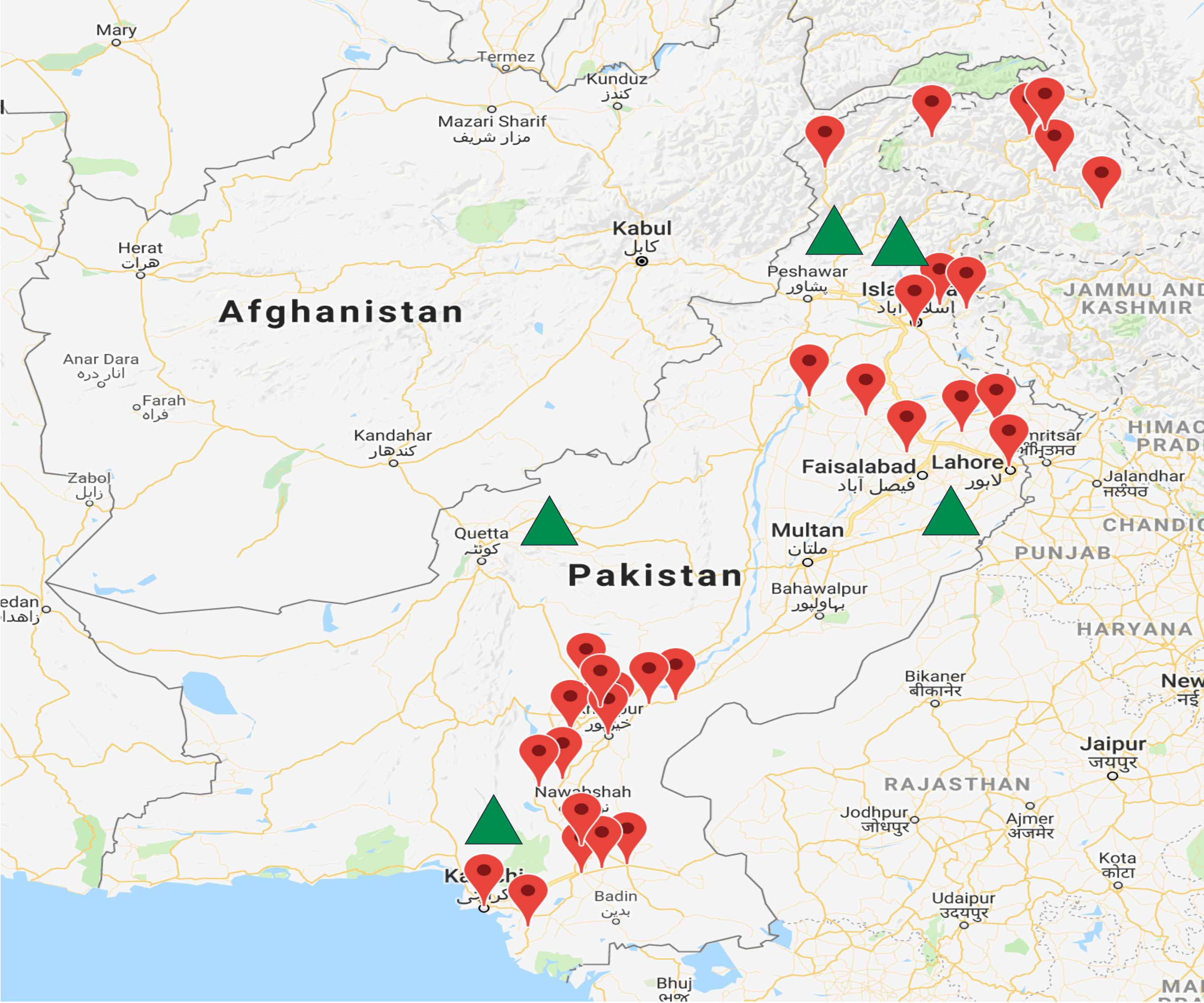
Impact

> a) Increase education quality for low and middle income students at secondary and higher secondary school level.
>
> b) Inculcate a culture of higher order thinking in youth through high quality, affordable assessments and educational development.

Goal

> Catalyze the market to impact quality of exam boards across the nation.

- Geographical locations
- Context
- Cultures
- Socioeconomic Background
- Public and Private

Anxiety

- An emotional and behavioral disorder taking place when sympathetic nervous system activates

- High level anxiety usually takes place in students taking high stake examinations

- Performance is affected depending on the level of anxiety

Hill and Wigfield, 1984; Hembree, 1988; McInerney & Marsh, 1997; Hancock, 2001; P. Vitasari, M. N. A.Wahab, et al 2010

- Parents and peer pressure – Race for marks/grades

- Admission to colleges and universities are highly competitive due to lack of institutions

- System level issue – reliability and validity issue; in some cases corruption and bribery

- Lack of counseling leading to unable to cope with fear of failure

- Several cases of suicide reported every year

Rationale

- Unchecked anxiety → risk that a person may end up in substance abuse or committing suicide

- No studies done on measure anxiety level of school going students in Pakistan.

                                                    (Cizek & Burg, 2006).

Objective of the Study

- Measure the test anxiety levels among secondary (9th and 10th) and higher secondary (11th and 12th) school students

- Find if there is any difference in anxiety levels based on student demographics

Method

01

Cross-sectional study of students across the country completing 9th (SSC I); 10th (SSC II); 11th (HSSC I) and 12th (HSSC II) grades in 2018 under the AKU-EB.
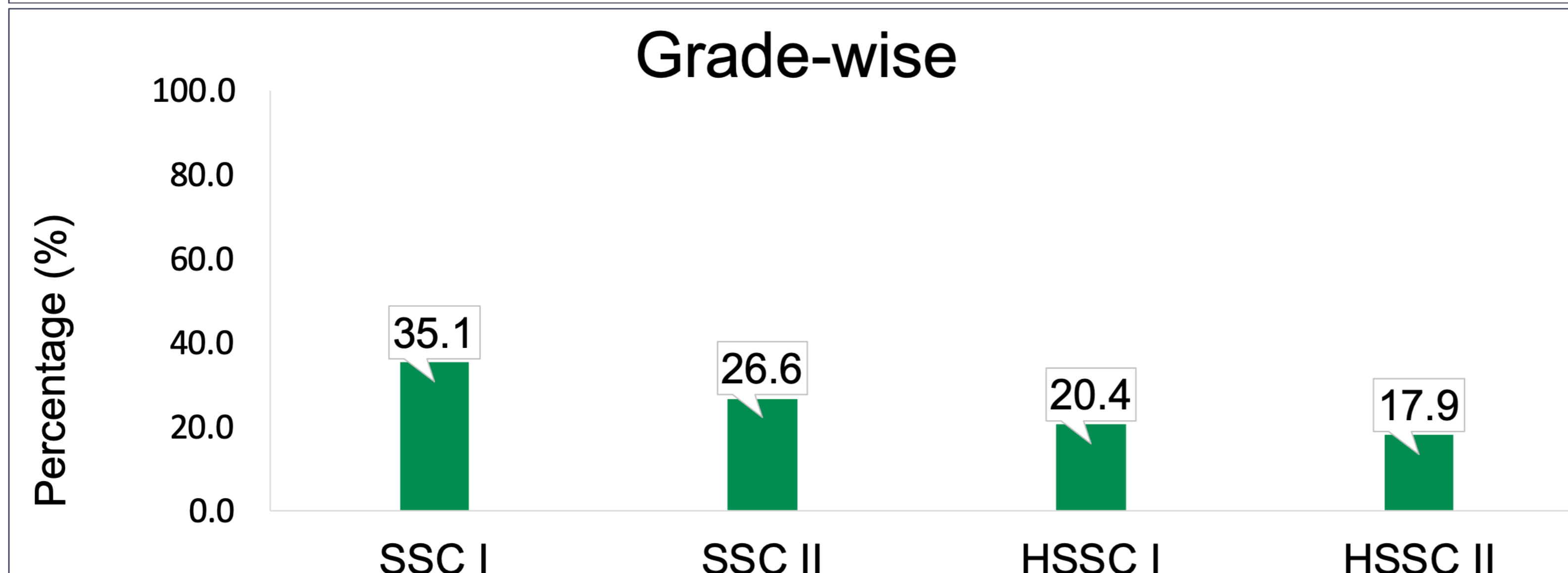
02

Westside Test Anxiety Scale of ten items were used to measure test anxiety levels (after review by three experts for relevance in the local context).

03

t-Test and ANOVA were used to find the differences at 95% confidence level.

Survey Respondents

Gender-wise

	Male	Female
Percentage (%)	47.3	52.7

Grade-wise

	SSC I	SSC II	HSSC I	HSSC II
Percentage (%)	35.1	26.6	20.4	17.9

Overall Respondents

9,474

Data Reliability

Overall data reliability by Cronbach's Alpha is

0.80

for all ten items

Average Anxiety Score
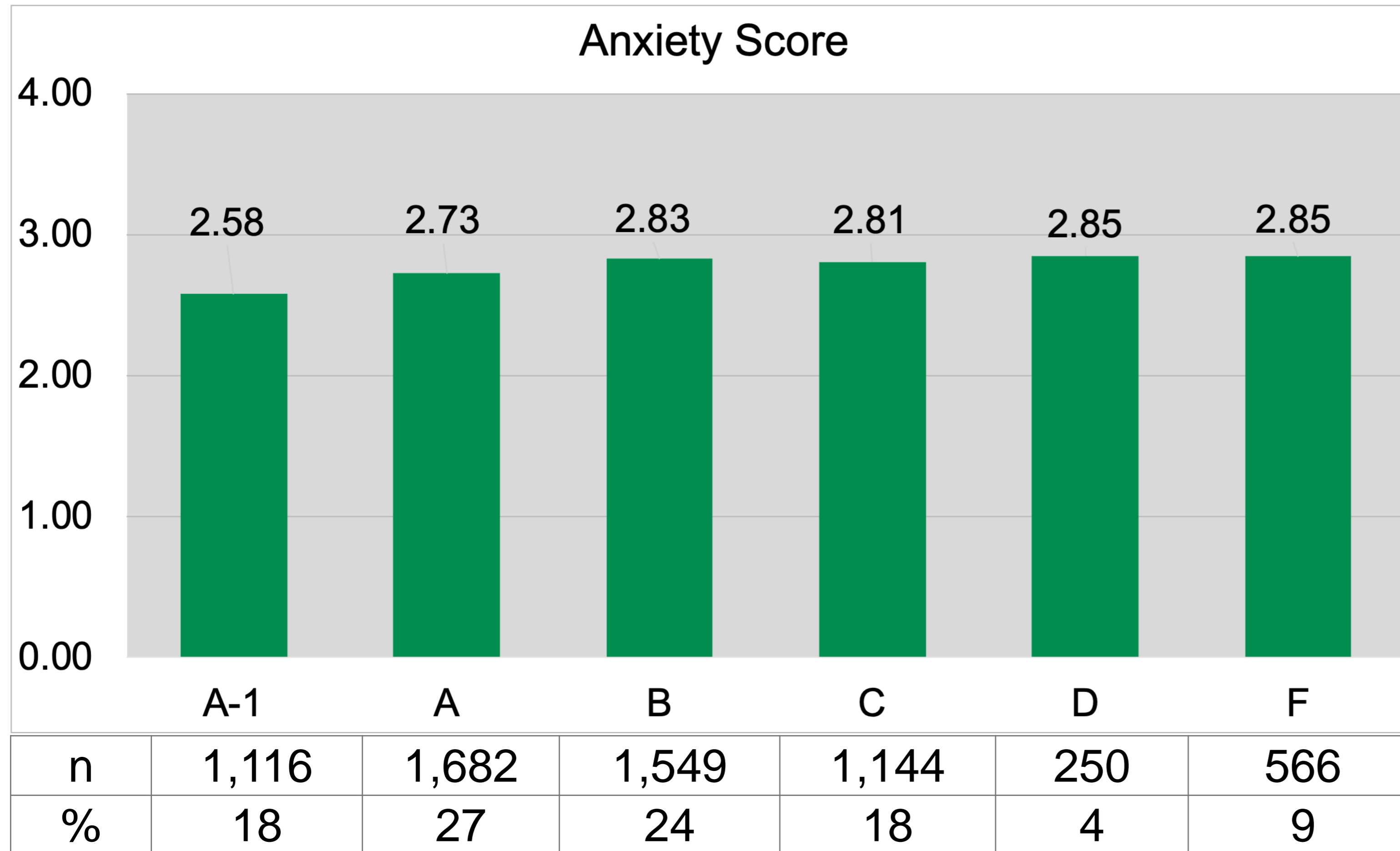
Parameters		Mean Scores	Standard Deviation	Results of t-Test & ANOVA
Overall		2.76	0.71	
Gender-wise	Male	2.71	0.69	Significant difference.
	Female	2.81	0.71	
Certification-wise	SSC	2.66	0.68	Significant difference.
	HSSC	2.89	0.73	
Grade-wise	SSC I	2.67	0.67	Significant difference.
	SSC II	2.66	0.68	
	HSSC I	2.94	0.72	
	HSSC II	2.83	0.72	

Point Scale	Description
1.0 - 1.9	Comfortably low test anxiety
2.0 - 2.5	Normal or average test anxiety
2.6 – 2.9	High normal test anxiety
3.0 – 3.4	Moderately high (some items rated 4 = high)
3.5 – 3.9	High test anxiety (half or more of the items rated 4 = high)
4.0 – 5.0	Extremely high anxiety (items rated 4 = high and 5 = extreme)

Low and High Anxiety Scale Proportion

Overall Frequency Distribution

	1.0 - 1.9	2.0 - 2.5	2.6 - 2.9	3.0 - 3.4	3.5 - 3.9	4.0 - 5.0
n	1,267	2,390	2,020	2,177	1,142	478
%	13%	25%	21%	23%	12%	5%

40.1%

59.9%

◻ Normal   ◼ High
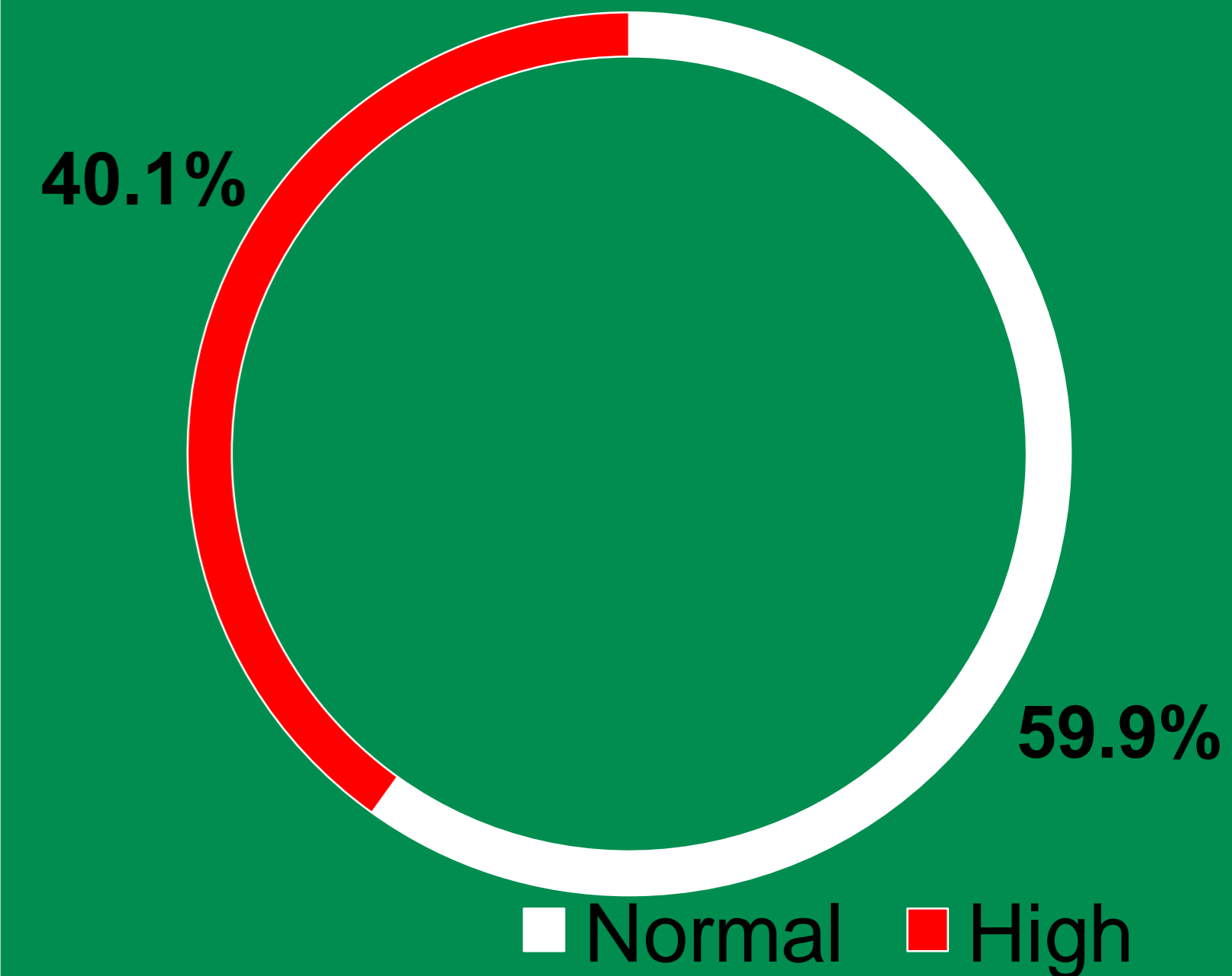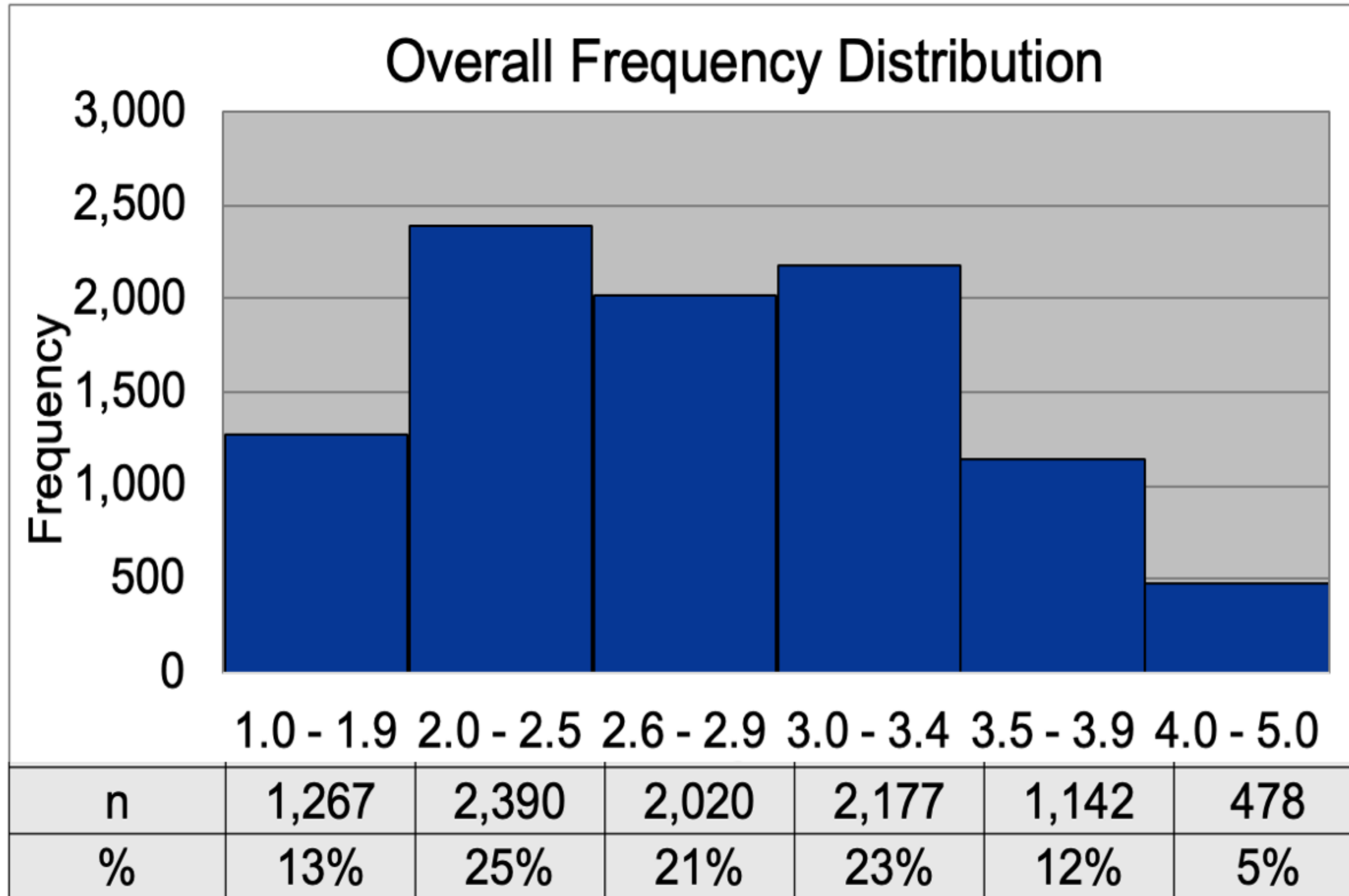
Annual Examination – Student Achievement

Anxiety Score

	A-1	A	B	C	D	F
	2.58	2.73	2.83	2.81	2.85	2.85
n	1,116	1,682	1,549	1,144	250	566
%	18	27	24	18	4	9

The mean difference is statistically significant at the 0.05 level.

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Father's Education

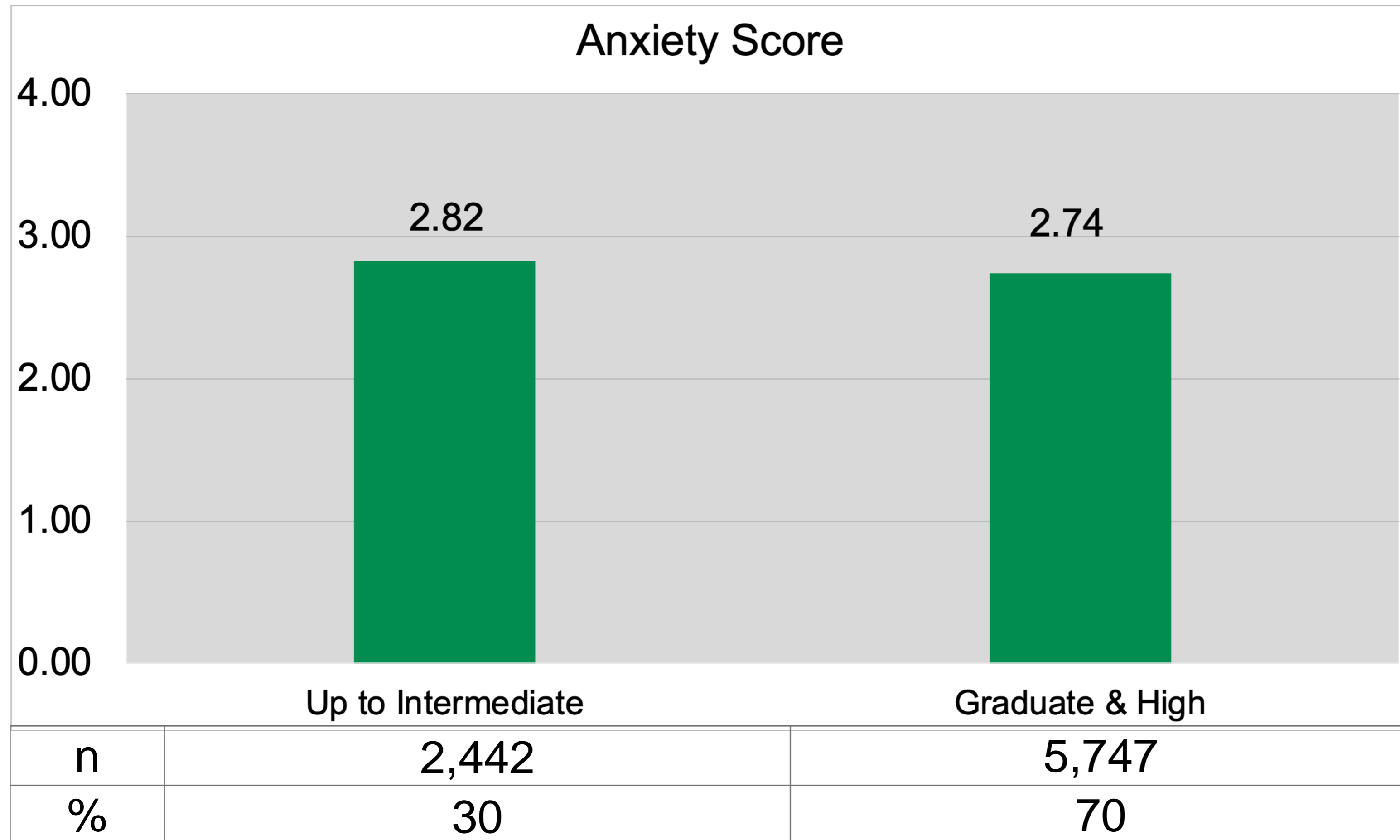Anxiety Score

	Up to Intermediate	Graduate & High
	2.82	2.74
n	2,442	5,747
%	30	70

The mean difference is significant at the 0.05 level.

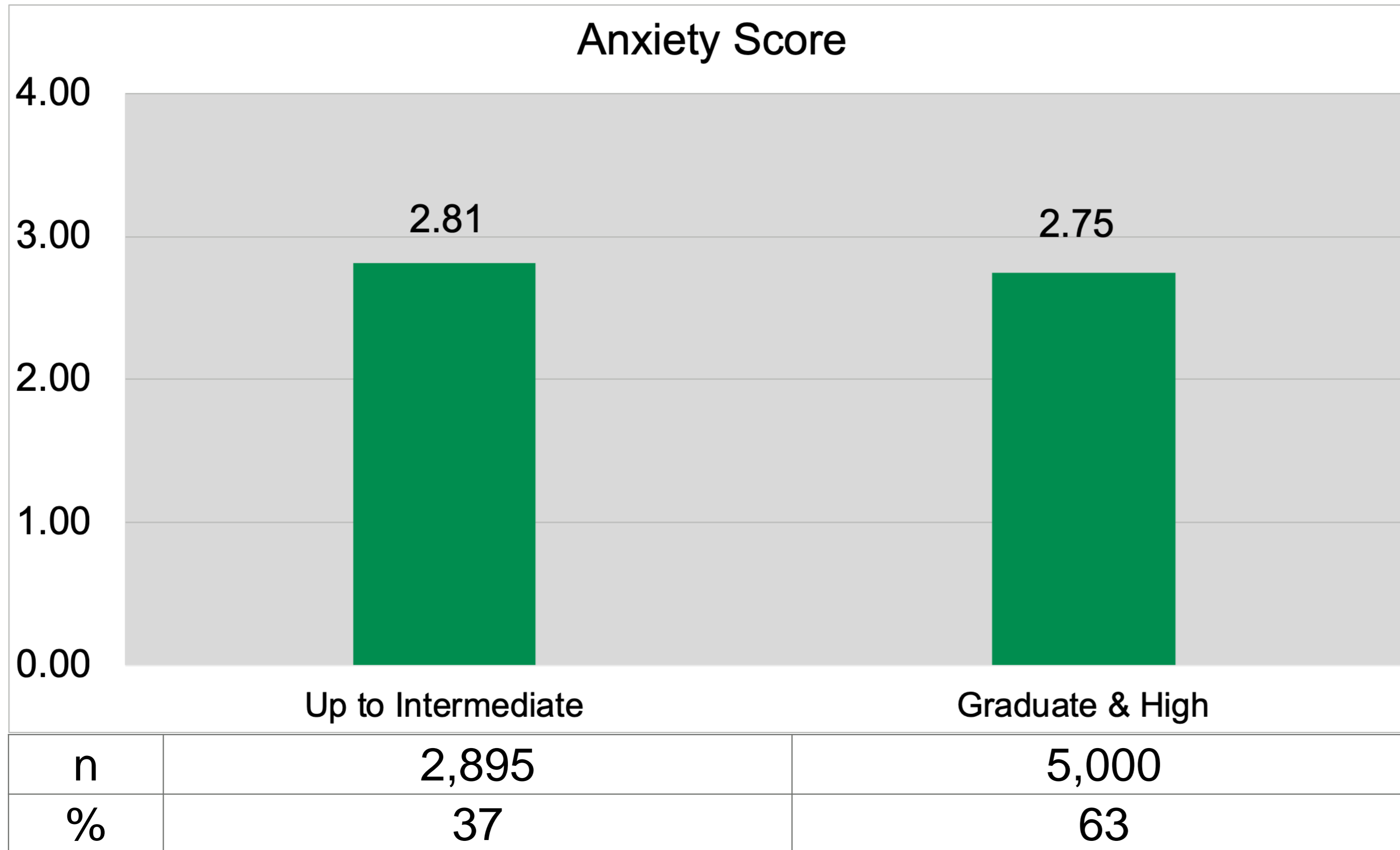| Point Scale	Description
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Mother's Education

Anxiety Score

	Up to Intermediate	Graduate & High
n	2,895	5,000
%	37	63

The mean difference is significant at the 0.05 level.

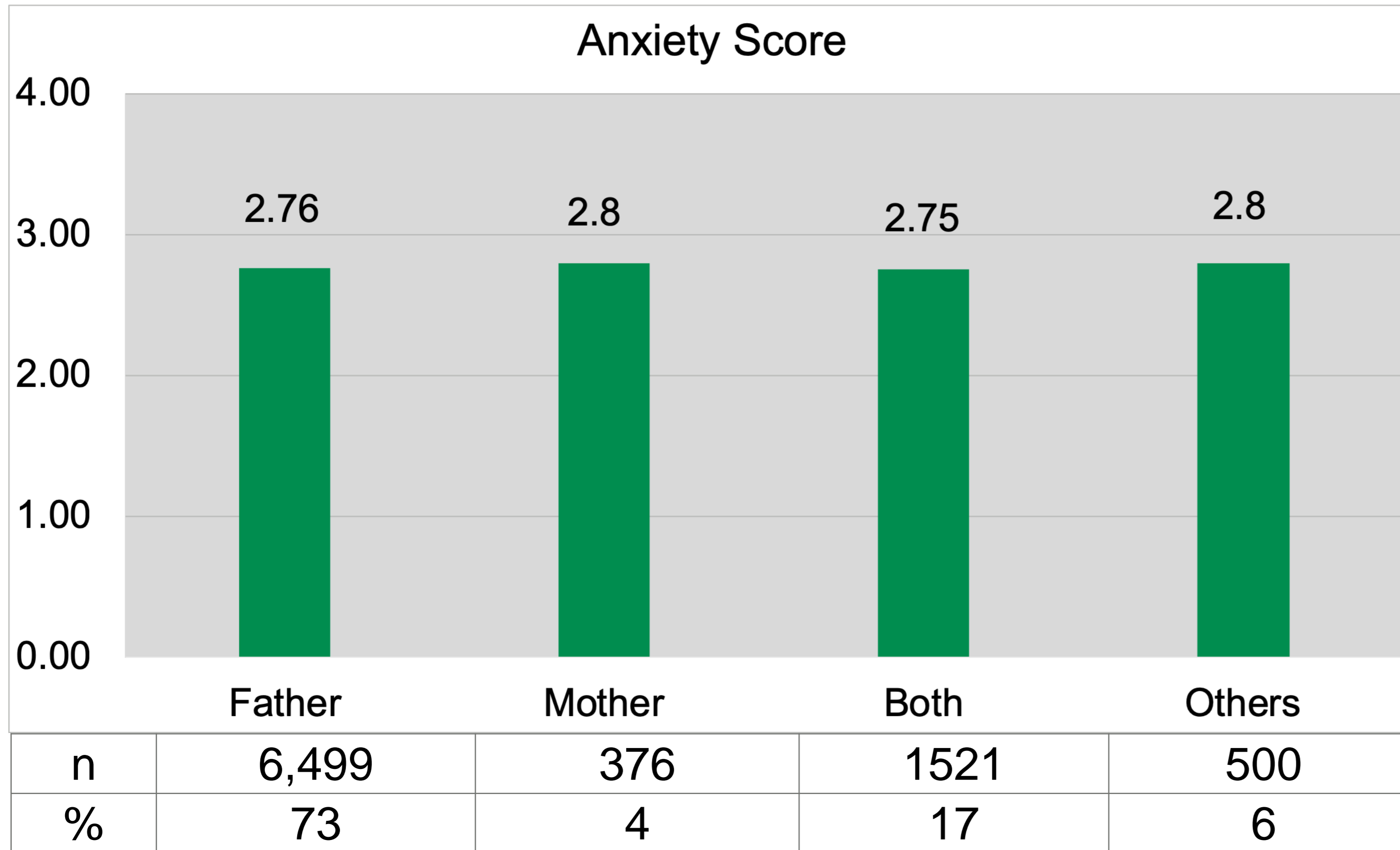| Point Scale	Description
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Earning Member in the Family

Anxiety Score

	Father	Mother	Both	Others
n	6,499	376	1521	500
%	73	4	17	6

Father: 2.76, Mother: 2.8, Both: 2.75, Others: 2.8

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Hours of sleep before the exam

Anxiety Score

	3	4	5	6	7	8	9
	2.9	2.83	2.79	2.67	2.63	2.61	2.62
n	2,284	1,461	1,571	1,575	984	754	368
%	25	16	18	18	11	8	4

The mean difference is statistically significant at the 0.05 level.

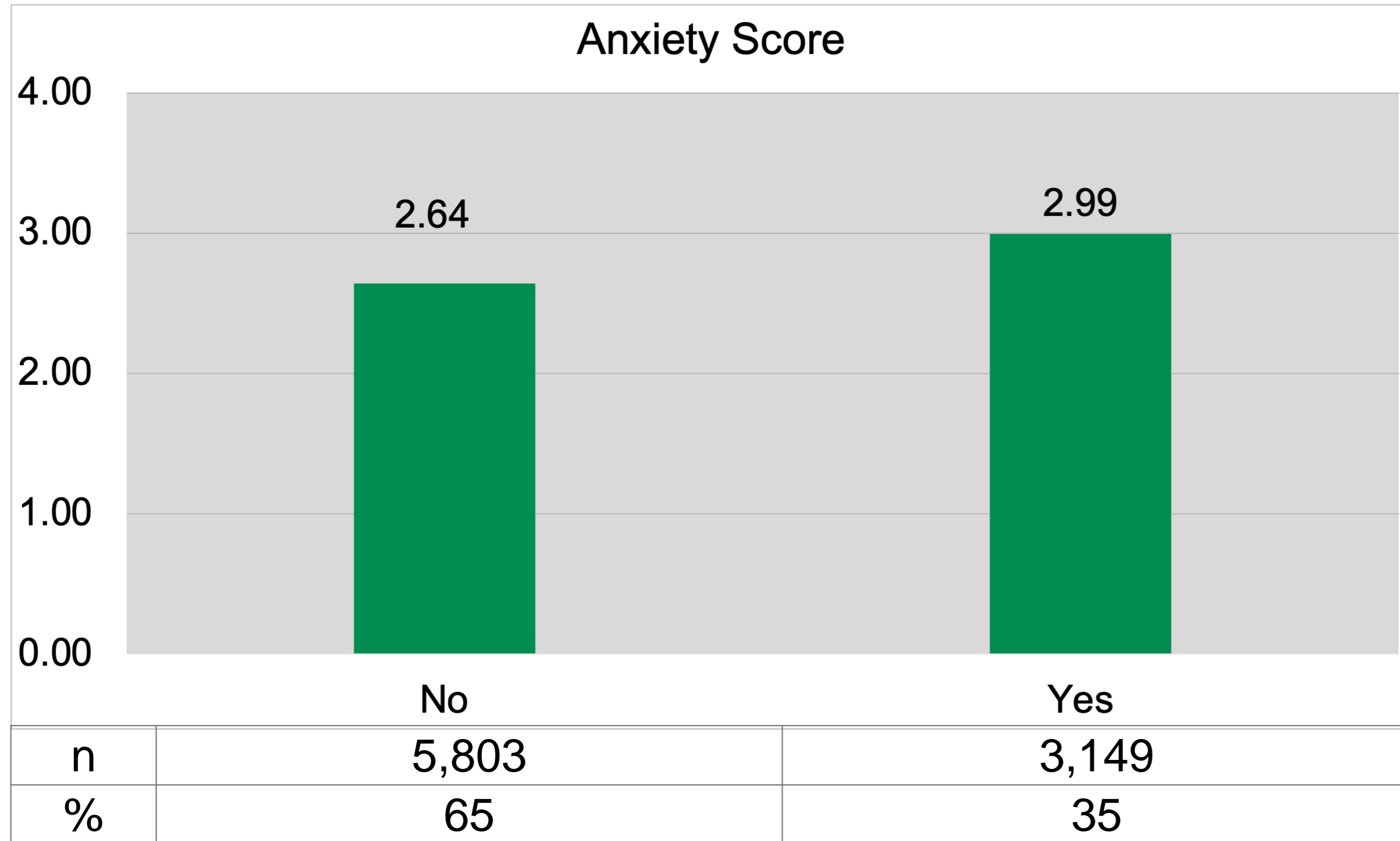| Point Scale	Description
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Examination setting makes you nervous

Anxiety Score

	No	Yes
n	5,803	3,149
%	65	35

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Key Findings

- Out of the total, 40% students have above normal test anxiety level

- Female students have significant higher level of anxiety than male students

- HSSC students have significant higher level of anxiety than SSC students

- There is no difference between anxiety levels of SSC I and SSC II students

- HSSC I students have significantly high level of anxiety than HSSC II students, the former having the highest levels amongst four grades

- Other factors affecting test anxiety are: parents qualification, in-house, pressure to perform well, hours of sleep, examination environment.

Limitations

- One year data

- Survey conducted by the AKU-EB – may have introduced bias

- Conducted after the exams – students feeling tired/ fatigue

Way Forward

- Understanding causes of anxiety: Talk about the problem

  ➢ Qualitative Research

- Anxiety prevention strategies:

  ➢ Home/Parents

  ➢ School systems

  ➢ Policy level intervention

- Longitudinal research on measuring anxiety

- Comparison with other examination boards/ systems

- Broaden the scope to higher education – Aga Khan University - Faculty of Health Sciences