Comparing the Qualitative Effects Between Procrastination and Family Pressure on Exam Anxiety

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Executive Summary

Exam anxiety is a huge factor in the daily life of students. It may affect their possible performance in exams resulting in an undesirable future. The most common causes of exam anxiety are the lack of preparation and family pressure. This report presents the qualitative effects of two in order to form more sophisticated plans for dealing with possible educational issues. The method by which these factors are compared is based on a 3-dimensional 10-point scale whose main input is a questionnaire done by a sample of 43 students. The model concluded that the procrastination has more effect than family pressure on exam anxiety by 43% with a 0.048 p-value. This model, however, does not consider the performance of the students as an important factor hence the need of more development for its structure.

Chapter 1

Introduction

1.1 Problem

It is a notable phenomenon that individuals do experience some kind of anxiety throughout their life — especially their academic one — increasing the probability of mistakes during most critical tasks. It is usually the case that such seemingly useless traits affecting people's day-to-day life has some kind of an advantage to humans' ancestors (Price, 2003).

Anxiety can be described as the tense, unsettling anticipation of a threatening but vague event (Rachman, 2019). There is two distinct types of anxiety: objective and neurotic. Fear is usually considered as a type of objective anxiety, while neurotic anxiety is a product of internal perceptions and emotions (Spielberger, 1966).

According to the Mowrer, 1939, neurotic anxiety is defined as a result of the act which an individual commits to but wishes they had not. This definition does explain the frequency of such a feeling; this can be noticed through most modern subcategories of anxiety (e.g. exam anxiety, marriage anxiety, etc).

Attention should be directed towards the field of education due to its flexible nature compared to other professional fields, also it is the foundation for every single considerable profession. The main type of anxiety concerning this field is exam anxiety (Milgram & Toubiana, 1999), ergo the focus of this study.

Rana and Mahmood, 2010 describes the effect of cognitive factors (i.e worry) on academic performance of the students. The impact of anxiety was indisputable; the worry scale had the greatest correlation with the students' performance compared to all other measured scales. In addition, Trifoni and Shahini, 2011 works on different scales relating to anxiety, a one illustrates the students' opinions on the topic: students who were more anxious had more radical opinions concerning the subject compared to their less anxious peers.

1.2 Hypothesis

The main focus of the study is the effects of procrastination and family pressure on exam anxiety. Accordingly, the proposed hypothesis is that procrastination does have a higher effect than that of family pressure. The importance of such hypothesis may not seem clear at first; however, the result will determine which should be the concern of a family dealing with their children. *"Should I change the way I am supporting my kid or force him to study more and avoid procrastination?"* is the kind of questions that this research try to answer effectively.

Chapter 2

Body

2.1 Methodology

2.1.1 Sample

The sample were mainly consisted of randomized students ranging from high school to university. The students were from different geographic areas, different schools, and different systems of education. The sample was taken from the Egyptian internet population, so the results will be limited to the Egyptian population at best. The age of the students ranged from 15 to 22; although there were some outliers ranging from 30 to 49. The gender was not collected due to its overall insignificant affect on the results (Hashmat et al., 2008).

2.1.2 Questions

1. *How much did procrastination affect your academic performance?* **(10-point scale)**

This question measures the affect of procrastination on performance from the student's perspective essentially measuring the amount of procrastination while avoiding the feel of guilt this question usually results.

2. *How harsh did your family go on you to study last year?* **(10-point scale)**

This question measures the amount of family pressure a student has endured without implicitly mentioning family pressure to avoid bias caused by family relations with mentioning it more as a beneficial parental act.

3. *How satisfied were you with your last year's academic performance?* **(10-point scale)**

This question measures the student's satisfaction with their academic performance in order to correlate it with procrastination and family pressure.

4. *How stressful did you feel about last year's exams?* **(10-point scale)**

This question measures the student's stress factor, which affects exam anxiety the most, in order to correlate it with procrastination and family pressure.

5. *How hard it takes you to recover after bad grades?* **(open-ended)**

This question tries to find the relation between the amount of exam anxiety and the recovering factor.

6. *What are the factors that lead to exam anxiety from your perspective?* **(open-ended)**

This questions collects other factors that may affect or be affected by family pressure, procrastination, or both. This may even help in drawing conclusions beyond the scope of this study.

7. *How do you get ready mentally for your exams?* **(open-ended)**

This question tries to find solutions provided by students and correlated them with the amount of exam anxiety in order to measure their effectiveness.

8. *Which affected your performance the most?* **(multiple choices)**

This question tests student's perspective of their situation to enable comparing what students think with the calculated results of other questions.

2.2 Findings

There is a notable correlation between both family pressure and procrastination seen in Figure 2.1 and Figure 2.2. Despite that, there is a weak correlation in Figure 2.3 that may hint to problems within this model. Thus, a more sophisticated tool should be formulated; accordingly, the exam anxiety factor (EA) is defined in Equation 2.1.

A 3-dimensional plot of the exam anxiety could be helpful in demonstrating the relation between procrastination and family pressure. Figure 2.4 shows a greater correlation between the two factors and exam anxiety, but family pressure is clearly more dominant. The increase of both factors results in a noticeable increase in exam anxiety.

The best fit curve for family pressure (F) and procrastination (P) are Equation 2.2 and Equation 2.3 respectively with determination coefficients of $R^2 = 0.04$ and $R^2 = 0.06$.

$$EAF = \text{stress} - \frac{\text{satisfaction}}{\text{recovery}} \tag{2.1}$$

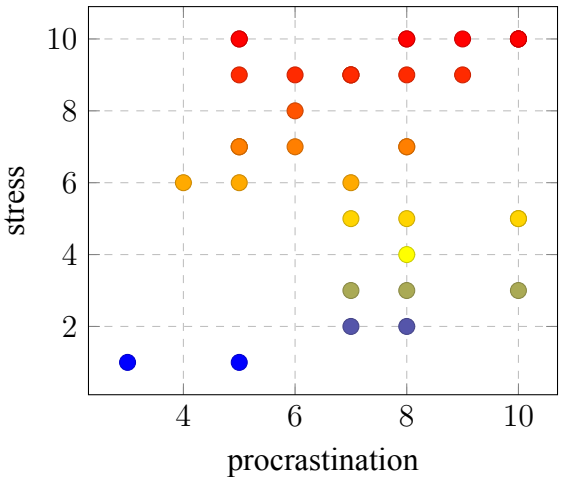

Figure 2.1: Procrastination versus stress plot

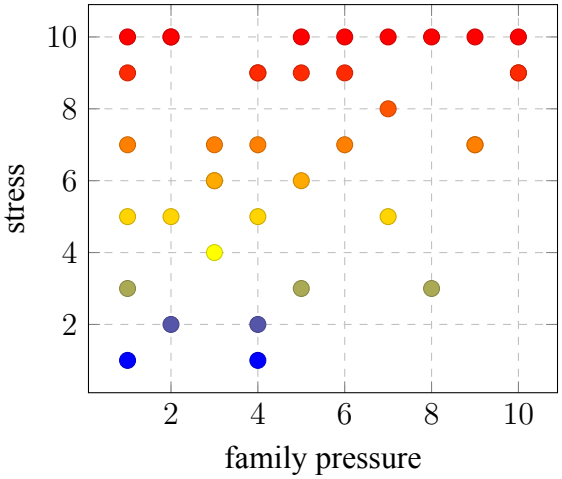

Figure 2.2: Family pressure versus stress plot

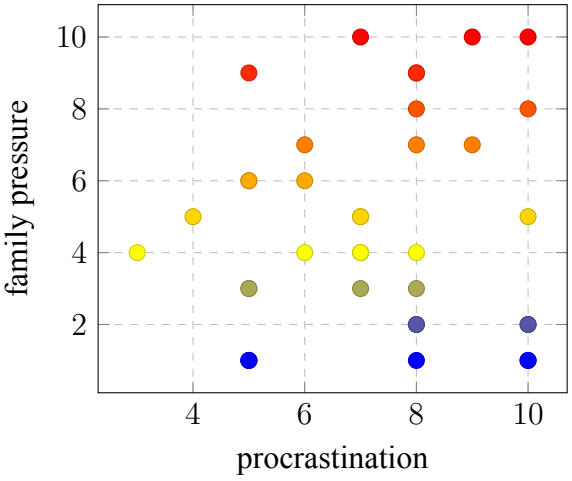

Figure 2.3: Procrastination versus family pressure plot

$$EA = 0.027F^3 - 0.4F^2 + 1.6F + 3 \quad (2.2)$$
$$= -0.20P^2 + 2.7P - 2.7 \quad (2.3)$$
$$= 0.18F - 0.20P + 5.6 \quad (2.4)$$

Despite that, the unmatching Equation 2.4 has a determination coefficient $R^2 = 0.024$, which may indicate that the two factors have a strong mutual impact on exam anxiety. Additionally, these equations indicate that, while procrastination has a larger affect, it does not stay as long as family pressure, and after a specific critical point ($P = 7$) its effect starts declining.

On the other hand, Figure 2.5 shows the total of exam anxiety across age groups. The bar chart shows a clear increase around the age of 17, which is the average age for high school seniors. This reflects the large importance that the Egyptian society puts on this year resulting in an in increase in exam anxiety. At the age of 20 students tend to be more anxious than at the age of 15, although there is less pressure on their academic life as they are in college. This may indicate that other factors take affect on exam anxiety later on in life.

Following with students' awareness of the problem, the pie chart in Figure 2.6 shows the percentage of students idea of the most problematic aspect of their life.

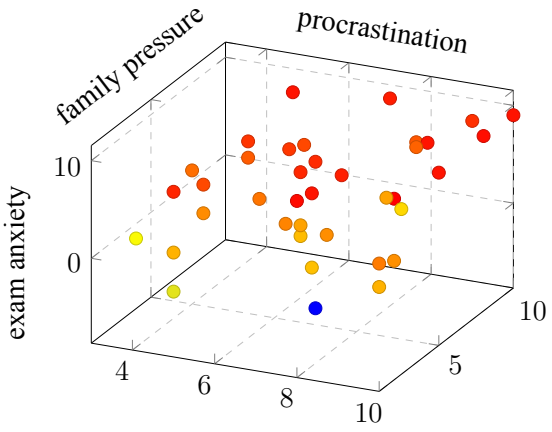

Figure 2.4: Exam anxiety plot

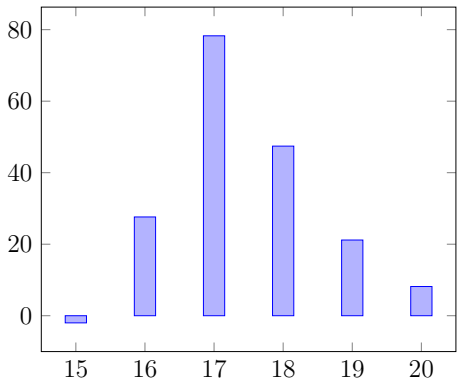

Figure 2.5: Bar chart of exam anxiety by age

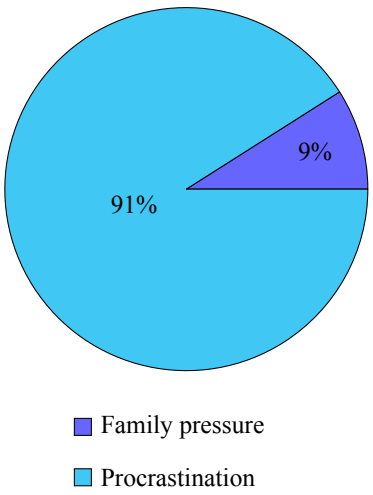

Figure 2.6: Pie chart of students' perspective

Chapter 3

Conclusion

3.1 Summary of Findings

As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

3.2 Recommendations

As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

Chapter 4

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Chapter 5

Appendix

5.1 Questionnaire