

Pattern of anxiety and depression among secondary school students in KSA

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Outline

- > Introduction
- > Rationale Objectives
- > Methodology
- > Results
- > Discussion
- Conclusion
- > References

Introduction

 Anxiety is one of the most common psychological disturbances that people face in life related to physical or psychological symptoms

 Depression another common psychological disorder associated with higher rate of morbidities. It is diagnosed by having loss of interest or low mood with other secondary manifestations include feeling of guilt

Aim & Objectives

Main aim:

The aim of the study is to assess the prevalence of anxiety and depression among secondary school students in Riyadh city, Saudi Arabia.

Primary objectives:

- 1- to identify the overall prevalence of anxiety and depress
- 2- to Identify the prevalence of anxiety and depression among male students
- 3- to Identify the prevalence of anxiety and depression among female students
- 4-to Compare the differences between males and females
- 5- To identify significant predictors of anxiety score among secondary students
- 6- To identify significant predictors of depression score among secondary students

Methodology

Study area:

In two different areas in Riyadh city, KSA

> Inclusion criteria:

All students, males and females between 15 – 19 were included in the chosen schools

Study subjects:

Male and female students in the eastern and central area of Riyadh respectively

Study design:

It is an observational cross sectional study

Sample size:

the estimated sample size was 386. Thus, a total of 400 students were allocated

5% precision, and 95% confidence limits and about 69 subjects were removed due to incomplete data so 331 subjects remain

Sample technique:

The stratified sample include male and female secondary school students in Riyadh city were collected using convenient sampling technique icH&Hpsy

Methodology

➤ Data Collection Methods, Instrument Used, Measurements:

The data was collected directly from the subjects -after taking the informed consent - using a questionnaire which is an Arabic version of the symptom-revised checklist for 90 symptoms (SCL 90-R).

| SCL-90 |
|--|
| Below is a list of problems and complaints that people sometimes have. Please read each one ca fully. After you have done so, select one of the numbered descriptors that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE |
| PAST WEEK, INCLUDING TODAY. Circle the number in the space to the right of the pro- lem and do not skip any items. Use the following key to guide how you respond: |

Date

Circle 0 if your answer is NOT AT ALL Circle 1 if A LITTLE BIT Circle 2 if MODERATELY Circle 3 if QUITE A BIT Circle 4 if EXTREMELY

Please read the following example before beginning:

Name

Example: In the previous week, how much were you bothered by:

Backaches

0 (1) 2 3

ID#

In this case, the respondent experienced backaches a little bit (1). Please proceed with the questionnaire.

| HOW MUCH WERE YOU BOTHERED BY: | | NOT ATALL | A LITTLE BIT | MODERATELY | лалатир | EXTREMELY |
|--------------------------------|---|-----------|--------------|------------|---------|-----------|
| 1. | Headaches | 0 | 1 | 2 | 3 | 4 |
| 2. | Nervousness or shakiness inside | 0 | 1 | 2 | 3 | 4 |
| 3. | Unwanted thoughts, words, or ideas that won't leave your mind | 0 | 1 | 2 | 3 | 4 |
| 4. | Faintness or dizziness | 0 | 1 | 2 | 3 | 4 |
| 5. | Loss of sexual Interest or pleasure | 0 | 1 | 2 | 3 | 4 |
| 6. | Feeling critical of others | 0 | 1 | 2 | 3 | 4 |
| 7. | The idea that someone else can control your thoughts | 0 | 1 | 2 | 3 | 4 |
| 8. | Feeling others are to blame for most of your troubles | 0 | 1 | 2 | 3 | 4 |
| 9. | Trouble remembering things | 0 | 1 | 2 | 3 | 4 |
| 10. | Worried about sloppiness or carelessness | 0 | 1 | 2 | 3 | 4 |
| 11. | Feeling easily annoyed or irritated | 0 | 1 | 2 | 3 | 4 |
| 12. | Pains in heart or chest | 0 | 1 | 2 | 3 | 4 |
| 13. | Feeling afraid in open spaces or on the streets | 0 | 1 | 2 | 3 | 4 |
| 14. | Feeling low in energy or slowed down | 0 | 1 | 2 | 3 | 4 |
| 15. | Thoughts of ending your life | 0 | 1 | 2 | 3 | 4 |
| 16. | Hearing voices that other people do not hear | 0 | 1 | 2 | 3 | 4 |
| 17. | Trembling | 0 | 1 | 2 | 3 | 4 |
| 18. | Feeling that most people cannot be trusted | 0 | 1 | 2 | 3 | 4 |
| 19. | Poor appetite | 0 | 1 | 2 | 3 | 4 |

SCL-90 (continued)

| ном | W MUCH WERE YOU BOTHERED BY: | NOT AT ALL | ALITIEBIT | MODERATELY | оптельит | EXTREMELY |
|-----|---|------------|-----------|------------|----------|-----------|
| 20. | Crying easily | 0 | 1 | 2 | 3 | 4 |
| 21. | Feeling shy or uneasy with the opposite sex | 0 | 1 | 2 | 3 | 4 |
| 22. | Feeling of being trapped or caught | 0 | 1 | 2 | 3 | 4 |
| 23. | Suddenly scared for no reason | 0 | 1 | 2 | 3 | 4 |
| 24. | Temper outbursts that you could not control | 0 | 1 | 2 | 3 | 4 |
| 25. | Feeling afraid to go out of your house alone | 0 | 1 | 2 | 3 | 4 |
| 26. | Blaming yourself for things | 0 | 1 | 2 | 3 | 4 |
| 27. | Pairs in lower back | 0 | 1 | 2 | 3 | 4 |
| 28. | Feeling blocked in getting things done | 0 | 1 | 2 | 3 | 4 |
| 29. | Feeling lonely | 0 | 1 | 2 | 3 | 4 |
| 30. | Feeling blue | 0 | 1 | 2 | 3 | 4 |
| 31. | Worrying too much about things | 0 | 1 | 2 | 3 | 4 |
| 32. | Feeling no Interest in things | 0 | 1 | 2 | 3 | 4 |
| 33. | Feeling fearful | 0 | 1 | 2 | 3 | 4 |
| 34. | Your feelings being easily hurt | 0 | 1 | 2 | 3 | 4 |
| 35. | Other people being aware of your private thoughts | 0 | 1 | 2 | 3 | 4 |
| 36. | Feeling others do not understand you or are unsympathetic | 0 | 1 | 2 | 3 | 4 |
| 37. | Feeling that people are unfriendly or dislike you | 0 | 1 | 2 | 3 | 4 |
| 38. | Having to do things very slowly to insure correctness | 0 | 1 | 2 | 3 | 4 |
| 39. | Heart pounding or racing | 0 | 1 | 2 | 3 | 4 |
| 40. | Nausea or upset stomach | 0 | 1 | 2 | 3 | 4 |
| 41. | Feeling Inferior to others | 0 | 1 | 2 | 3 | 4 |
| 42. | Soreness of your muscles | 0 | 1 | 2 | 3 | 4 |
| 43. | Feeling that you are watched or talked about by others | 0 | 1 | 2 | 3 | 4 |
| 44. | Trouble falling asleep | 0 | 1 | 2 | 3 | 4 |
| 45. | Having to check and double-check what you do | 0 | 1 | 2 | 3 | 4 |
| 46. | Difficulty making decisions | 0 | 1 | 2 | 3 | 4 |
| 47. | Feeling afraid to travel on buses, subways, trains | 0 | 1 | 2 | 3 | 4 |
| 48. | Trouble getting your breath | 0 | 1 | 2 | 3 | 4 |
| 49. | Hot or cold spells | 0 | 1 | 2 | 3 | 4 |
| 50. | Having to avoid certain things, places, or activities because they frighten you | 0 | 1 | 2 | 3 | 4 |
| 51. | Your mind going blank | 0 | 1 | 2 | 3 | 4 |
| 52. | Numbness or tingling in parts of your body | 0 | 1 | 2 | 3 | 4 |
| 53. | A lump In your throat | 0 | 1 | 2 | 3 | 4 |
| 54. | Feeling hopeless about the future | 0 | 1 | 2 | 3 | 4 |
| 55. | Trouble concentrating | 0 | 1 | 2 | 3 | 4 |

SCL-90 (continued)

| ном | V MUCH WERE YOU BOTHERED BY: | NOTATALL | ALTTER | MODERATELY | фител віт | EXTREMELY |
|-----|---|----------|--------|------------|-----------|-----------|
| 56. | Feeling weak in parts of your body | 0 | 1 | 2 | 3 | 4 |
| 57. | Feeling tense or keyed up | 0 | 1 | 2 | 3 | 4 |
| 58. | Heavy feelings in your arms or legs | 0 | 1 | 2 | 3 | 4 |
| 59. | Thoughts of death or dying | 0 | 1 | 2 | 3 | 4 |
| 60. | Overeating | 0 | 1 | 2 | 3 | 4 |
| 61. | Feeling uneasy when people are watching or talking about you | 0 | 1 | 2 | 3 | 4 |
| 62. | Having thoughts that are not your own | 0 | 1 | 2 | 3 | 4 |
| 63. | Having urges to beat, injure, or harm someone | 0 | 1 | 2 | 3 | 4 |
| 64. | Awakening in the early morning | 0 | 1 | 2 | 3 | 4 |
| 65. | Having to repeat the same actions such as touching, counting, washing | 0 | 1 | 2 | 3 | 4 |
| 66. | Sleep that is restless or disturbed | 0 | 1 | 2 | 3 | 4 |
| 67. | Having urges to break or smash things | 0 | 1 | 2 | 3 | 4 |
| 68. | Having ideas or beliefs that others do not share | 0 | 1 | 2 | 3 | 4 |
| 69. | Feeling very self-conscious with others | 0 | 1 | 2 | 3 | 4 |
| 70. | Feeling uneasy in crowds, such as shopping or at a movie | 0 | 1 | 2 | 3 | 4 |
| 71. | Feeling everything is an effort | 0 | 1 | 2 | 3 | 4 |
| 72. | Spells of terror or panic | 0 | 1 | 2 | 3 | 4 |
| 73. | Feeling uncomfortable about eating or drinking in public | 0 | 1 | 2 | 3 | 4 |
| 74. | Getting into frequent arguments | 0 | 1 | 2 | 3 | 4 |
| 75. | Feeling nervous when you are left alone | 0 | 1 | 2 | 3 | 4 |
| 76. | Others not giving you proper credit for your achievements | 0 | 1 | 2 | 3 | 4 |
| 77. | Feeling lonely even when you are with people | 0 | 1 | 2 | 3 | 4 |
| 78. | Feeling so restless you couldn't sit still | 0 | 1 | 2 | 3 | 4 |
| 79. | Feelings of worthlessness | 0 | 1 | 2 | 3 | 4 |
| 80. | Feeling that familiar things are strange or unreal | 0 | 1 | 2 | 3 | 4 |
| 81. | Shouting or throwing things | 0 | 1 | 2 | 3 | 4 |
| 82. | Feeling afraid you will faint in public | 0 | 1 | 2 | 3 | 4 |
| 83. | Feeling that people will take advantage of you if you let them | 0 | 1 | 2 | 3 | 4 |
| 84. | Having thoughts about sex that bother you a lot | 0 | 1 | 2 | 3 | 4 |
| 85. | The idea that you should be punished for your sins | 0 | 1 | 2 | 3 | 4 |
| 86. | Feeling pushed to get things done | 0 | 1 | 2 | 3 | 4 |
| 87. | The idea that something serious is wrong with your body | 0 | 1 | 2 | 3 | 4 |
| 88. | Never feeling close to another person | 0 | 1 | 2 | 3 | 4 |
| 89. | Feelings of guilt | 0 | 1 | 2 | 3 | 4 |
| 90. | The idea that something is wrong with your mind | 0 | 1 | 2 | 3 | 4 |

Reference: Derogatis, L.R., Lipman, R.S., & Covi, L. (1973). SCL-90: An outpatient psychiatric rating scale—Preliminary

Methodology

Data Management and Analysis Plan:

All variables were summarized and reported using descriptive statistics. Interval variables such as (Age) were summarized and reported in terms of mean and standard error. Categorical variables such as (gender and degree) were summarized and reported in terms of frequency distribution.

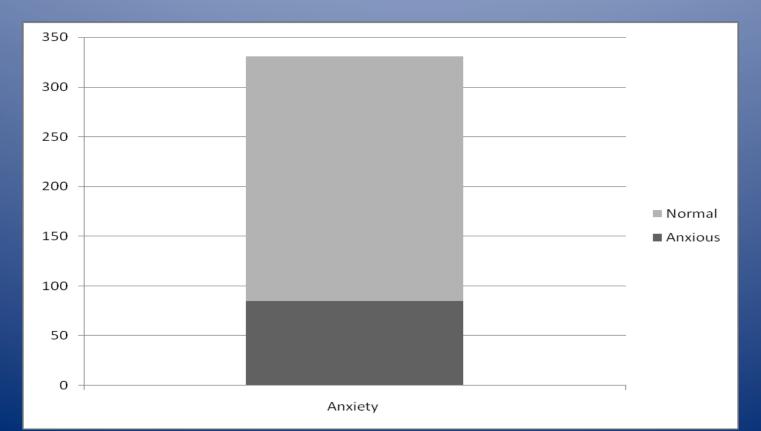
Domain specific psychological disorders and overall psychiatric disorder were summarized and reported in terms of median and interquartile range.

Mann Whitney U-Test will be used to compare anxiety score between male and female secondary school students. Results will be reported in terms of median, interquartile range, and p-value. Significance will be declared at Alfa less than 0.05

• The total results are 331 where 227 (68.6%) of them are male while 104 (31.4%) are females with an average age of the participants is 16.72 (ranges between 15 -19)

• The study shows that 162 (49%) of the participants were from the 1st degree while 103 (31%) from the 2nd degree and 66 (20%) from the 3rd degree

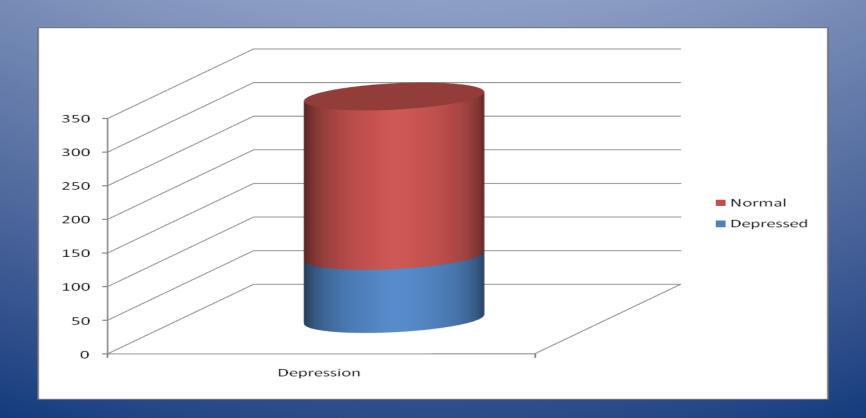
 The study shows that the overall number of subjects with anxiety disorder in both genders is 85 out of 331 which accounts for 25.7% of the group



• In comparison between males and females the study shows that 23 male students out of 227 which accounts for 10.1% of the total number have anxiety while 62 females students have anxiety which accounts for 59.6% with P-value of < 0.0001 showing clear significance

| Anxiety | Frequencies | Percentage |
|---------|-------------|------------|
| Boys | 23 | 10.1% |
| Girls | 62 | 59.6% |
| Both | 85 | 25.7% |

• The results show that the total number of subjects with depression disorder in both genders is 94 out of 331 (28.4%).



• The results show that 34 male students (14.9%), while 60 female students (58%) had depressive symptoms (p < 0.0001), showing clear significance.

| Anxiety | Frequencies | Percentage |
|---------|-------------|------------|
| Boys | 34 | 14.9% |
| Girls | 60 | 58% |
| Both | 94 | 28.4% |

Implications for policy/Practice

 The emphasis on the importance of mental health in school students show the significance of initiating a local screening and evaluation program focuses in the common mental problems

Conclusion

 This study analyzed the importance of mental health assessment and follow-up in secondary school students, especially girls. However, there are some limitations to our study, such as the sample size of the female students, also the number of schools included. In addition, it may be helpful to evaluate the differences between different socioeconomic classes as well as comparing the difference between governmental versus private schools.

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