

Anxiety and Assertiveness in Females: A Comparison of Medical and Non-Medical University Students

Nawal G Alghamdi

Department of Educational Psychology and Guidance, Program of Educational Graduate Studies,
King Abdulaziz University, Jeddah 21551, Saudi Arabia
Email: researchkkw@gmail.com

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Abstract

Background: This paper focuses on an issue of a culture in which there is a growing trend of non-assertive behavior among females and they are anticipated to be nurturing, vulnerable and non-assertive. They are expected to look on to others to set up goals or decide for them rather than setting their own. The difficulties of academic life and inadequacies in the social skills experience by the female students play a significant role in development of psychological problems like anxiety. Assertive skills are required in the social, academic, professional and personal life of individuals. Therefore, when females join the academic institutions they are also prone to face the aforementioned problems. *Method:* A purposive sample of 100 female students enrolled in medical (n=50) and non-medical (n=50) colleges and universities (in Jeddah) were selected for the study. The purpose of the study was to explore the relationship between assertiveness and anxiety in, and group differences in, medical and non-medical students. This study also tends to investigate the levels of anxiety and assertiveness among such students. The data were collected through tow validated instruments, Rathus Assertiveness Schedule (RAS) and Taylor Manifest Anxiety Scale (TMAS). A demographic sheet was utilized for the collection of demographic variables. *Results:* For the analysis of the results; frequencies, correlations, and t-tests were conducted using a statistical software SPSS ver. The results indicated that the severity range of assertiveness varies where some students are very non-assertive or shy and some are aggressive, whereas very few students showed a presence of well developed assertiveness. Similarly, the levels of anxiety levels varied among the students. A significant negative correlation was found between assertiveness and anxiety. The findings revealed that medical students have higher anxiety and lower assertiveness in comparison to non-medical students. *Conclusion:* The present study found varying levels of assertiveness and anxiety among the medical and non-medical students along with a strong negative correlation between assertiveness and anxiety. The problem of students should be addressed by educationists and the policy makers to enhance their social, psychological and professional abilities. The study findings support the need for training of assertive abilities to reduce anxiety among the students.

Keywords: Anxiety, Assertiveness, Reliability, Severity

1. Introduction

Adolescence is an imperative era for the development of the social skills and acquisition of a social status due to the exposure to expansive and extensive variety of social situations. Such social situations may be a new event or experience for the adolescent, like meeting new people, attending parties or concerts, experiencing peer activities. Consequently, they get acquainted with friends of friends and strangers who may compel them to experience and acquire fresh social roles beyond the parental supervision (Inglés et al., 2005). Erick Erickson defines the young adulthood to be with the age range between 20 to 40 and adolescence to be ranging from 13 to 19 (Hewstone, Fincham, Foster, 2005). The young adulthood is characterized as a period of identity formation where an individual has new experiences of social and environmental changes along with academic, emotional, behavioral and economic conflicts. In both stages, the relations with the peer group play a crucial role in the development of social skills that are fundamental for personal growth and adjustment in life (La Greca & Lopez, 1998). Educational institutes are a place where the students spend many hours of their life; learning and interacting with people, ideas and practices; where they face academic, adjustment and psychological problems; they require and develop skills.

Assertiveness is a social skill that has various dimensions like ability of expression of self without anxiety or aggression. Assertiveness entails communicating and behaving with power and at the same time having respect for others. Assertiveness makes it possible to positively influence others rather than passively surrendering or aggressively demanding the power to influence (Wesley, Mark & Mattaini, 2008). It can also be used as a tool for initiating and sustaining social relationships and thus one can enjoy a better emotional well-being (Eskin, 2003). Assertiveness is a

major attribute for medical professionals and without which true autonomy (Keenan 1999), empowerment (Fulton, 1997) and professionalism (Parkin 1995) cannot be attained.

Traditionally the male gender role is presumed to be agentic whereas the female gender role is considered to be communal and submissive. Therefore, assertiveness appears to be more harmonizing with the stereotypical male gender role. The previous researchers also establish that assertiveness is an extremely desirable characteristic of male gender-role globally (Cheng, Bond & Chan, 1995). Similarly majority of researches have indicated that males have higher assertiveness as compared to females. This gender-assertiveness relationship conceivably rationalizes the tendency of females to have more anxiety than males. To explore this conception, the present research tends to explore the association of assertiveness and anxiety among the female students.

Various researches have concentrated on the mental health of the medical students which vary from adolescents to young adults but experience some form of psychological distress in medical schooling (Dyrbye, Thomas, Shanafelt, 2006). Some aspects of medical school may have unintended negative impact on the mental or emotional state of the students. The medical students experience stress and anxiety due to the rigorous academic and psychological pressure, examination, difficulty to cope, mental tension, helplessness, fear of failure and excessive work load (Shaikh, 2004). All this may lead to decreased life satisfaction or psychological problems among students. Literature review reveals a prevalence of psychiatric issues of depression and anxiety among the medical students specifically in comparison to non-medical students (Inam 2003, Kaya 2007, Rosenthal, 2005). Previous studies in Pakistan have shown a higher prevalence of anxiety (khan, 2006, inam, 2003)

A study concluded that there is a strong negative relation between assertiveness and anxiety (Larijani, Aghajani, Baheiraei, & Neiestanak, 2010). In Saudi society assertiveness plays a vital role in development of anxiety. Saudi culture supports non-assertive behavior; specifically females are expected to be polite, nurturing, vulnerable and non-assertive. Conventionally, the females are expected to look on to others to set up goals or decide for them rather than setting their own. Therefore, when they join the academic institution or join workforce they may face problems due to lack of assertiveness and increased anxiety level. In comparison to education in other field of study, medical education is recognized as full of stressful events and it is characterized by numerous psychological transformations as well in the medical students. The medical education is intended to generate knowledgeable, proficient, and specialized physicians trained to be concerned and careful for the health of nation, enhance medical science, and to support public health. Through this it can be speculated that medical school is a vehicle for personal growth; demanding effort and motivation; learning and understanding; health and well-being regardless of its challenging environment. The study was, therefore, carried out to determine the prevalence of anxiety and level of assertive and also their association among the female medical and non-medical students.

2. Objectives

- a. To investigate the relationship between anxiety and assertiveness.
- b. To explore the levels of anxiety between medical and non-medical students.
- c. To explore the levels of assertiveness between medical and non-medical students.

3. Hypotheses

- a. H₁: There is a significant negative relationship between assertiveness and anxiety.
- b. H₂: There is significant difference in assertiveness and anxiety between medical and non-medical students.

4. Methodology

4.1 Sample

The study sample comprised of 100 female students enrolled in medical ($n=50$) and non-medical students ($n=50$) of university at the time of data collection. The selected university is located in Jeddah. The selection of the sample was through purposive sampling. The age range of the sample was from 16-26 years, with the mean age of 20.7 years. The research questionnaires were completed by respondents on a voluntary choice and they were assured of the anonymity of their response.

4.2 Instruments

4.2.1 Demographic Data Sheet

Some defining information was sought through the demographic sheet. The defining information included age, marital status, education and Socio Economic status.

4.2.2 Rathus Assertiveness Schedule

Rathus Assertiveness Schedule (1973) was used to measure assertiveness in the respondents. The scale has been used with varying cultures; it is short, easy to evaluate. It is a 6-point Likert scale. It consists of 30 items pointed between 1 and 6 reflected by choices varying between -3 and +3. Where -3= does not apply to me, -2= does not apply to me a lot, -1= does not apply to me little, +1= applies to me little, +2 = applies to me a lot, +3 = applies to me very most. The scale pointing is based on positive statements and negative statements. The scores vary between -90 and +90. The -90 reflects very non-assertive, -20 to 0 Situationally Non-Assertive, 0 to +20 Somewhat Assertive, +20 to +40 Assertive, and +40 to +90 Probably Aggressive. reversed. The total score of the scale is attained by adding the negative and positive scores separately and then subtracting the subtotal from each other. Rathus Assertiveness Schedule has test retest reliability of 0.78 and split half-reliability of 0.73 to 0.91.

4.2.3 Taylor manifest anxiety scale

It was developed by Janet Taylor Spence in 1953 as a self-report measure in order to assess the level and nature of manifest anxiety. This scale contains 50 items with a dichotomous response category that is true and false, where true=1 and false=2. Higher scores indicate high level of anxiety. The test retest reliability of the scale over the intervals of 3 weeks, 5 months and 9-17 months has been revealed as 0.89, 0.82, and 0.81 respectively.

4.3 Procedure

The participation for the study was voluntarily in nature that is the consent of the students for participation was sought before administration of the questionnaires. The participants were briefed about the purpose of the research. It was informed to the participants that their responses will be kept confidential. The demographic data sheet, Rathus Assertiveness Schedule and Taylor Manifest anxiety scale were distributed among the 100 students in different educational institutions. They were requested to carefully indicate the responses by marking the answer according to the available keys. The queries of the participants were answered.

5. Results

Considering the objectives and hypotheses of the study, statistical analyses of scale reliability, frequencies, Pearson correlations, and t-tests were computed to obtain a number of results. The following study results were analyzed using statistical software "Statistical Package for Social Sciences (SPSS) ver. 20.

Table 1: Frequencies and Percentages of the Demographical Data

Variable	N	(%)
Age	54	54
16-21 years	46	46
22-26 years		
Marital Status	74	74
Unmarried	26	26
Married		
Social Economic Status	18	18
Above Average	74	74
Average	8	8
Below Average		

Table 2: Reliability Analysis for Rathus Assertiveness Schedule and Manifest Anxiety Scale (N=100)

Scale	No. of Items	Coefficient Alpha
Rathus Assertive Schedule	30	.82
Manifest Anxiety Scale	50	.61

Table 2 shows the reliability analysis along with number of items in each scale used in the study. The Cronbach's alpha is 0.82 and 0.61 for Rathus assertiveness schedule and manifest anxiety scale respectively. This reveals that both the scales are reliable for data collection of the present population.

Table 3: Frequency & Percentage of Severity Level of Anxiety in the Respondents. (N=100)

Level of Severity of Anxiety		
	f	%
Mild (13 - 22)	13	13
Moderate (23 - 32)	65	65
Severe (33+)	22	22
Total	100	100

The overall results in the female students reveal presence of anxiety. The cut-off point of Manifest Anxiety Scale is 13 and scores above that reveal presence of anxiety. The lowest score received in the data was 17. Therefore binning was applied to the scores in order to explore the severity levels of anxiety prevailing among the female students. The results reveal that the anxiety severity level ranged from mild to severe anxiety.

Table 4: Frequency & Percentages of Severity Level of Assertiveness in the Respondents. (N=100)

Ranges of Severity of Assertiveness		
	f	%
Very Non-Assertive/shy	4	4
Situationally Non-Assertive	13	13
Somewhat Assertive	29	29
Assertive	33	33
Probably Aggressive	21	21

Table 4 reveals range of severity levels of assertiveness among the female students. The findings reveal that the assertiveness range varies from very non-assertive/shy to probably aggressive but the most of the respondents fall in the categories of somewhat assertive, assertive and probably aggressive. There is minor difference of number of respondents in the category whereas the operational terms of somewhat assertive to probably aggressive show much difference in the levels of assertion, where the assertive females are reflected by the data to be only 33% and rest are away from assertiveness. The overall results in the female students reveal presence of anxiety. The cut of point of Manifest Anxiety Scale is 13 and scores above that reveal presence of anxiety. The lowest score received in the data was to be 17. Therefore binning was applied to the scores in order to explore the severity levels of anxiety prevailing among the female students. The results reveal that the anxiety severity level ranged from mild to severe anxiety.

Table 5: Pearson's Product Moment Correlation for Anxiety and Assertiveness. (N=100)

	Assertiveness	
Anxiety	r	Sig.
	-.015*	.046

* Correlation is significant at the 0.05 level (2-tailed)

The table 5 indicates that Anxiety has a negative correlation with Assertiveness and is significant at $p < 0.05$.

Table 6: Mean Standard Deviation and t-values of Assertiveness and Anxiety among medical and non- medical students. (N=100)

Scale	Students				t	p
	Medical Students (n=50)		Non-Medical Students (n=50)			
	M	SD	M	SD		
Assertiveness	115.07	8.37	117.11	14.2	4.81	.044
Anxiety	96.3	13.33	81.59	13.99	2.40	.001

Table 6 displays the summary of scores of both medical and non-medical female students on assertiveness and anxiety. It is interesting to note that medical students are comparatively high in anxiety than the non-medical students as the mean difference acquired a highly significant level in favour of medical students. It is also interesting to note that medical students not only experience more anxiety but their anxious behavior is also consistent as reflected by their equal standard deviations. The findings also revealed that the non-medical students are comparatively and significantly more assertive than medical students. The t-value reached a significance level of 0.05 in favour of non-medical students and their assertiveness seems to be less consistent as observed in the high standard deviation than those of medical students. The medical students are less assertive but much more consistent in their assertive abilities.

6. Discussion

The progress of any nation is dependent on the academic achievement and professional development of its young students. And for this reason every nation emphasizes on the achievements and development of its students. The literature indicates that academic achievements and professional development of the students get influenced by presence of anxiety (Keoghi, Bond, French, Richards & Davis, 2004; Eysenck, 2001). In present era, anxiety is a common phenomenon of daily life and it not only influences the academic life but also becomes a part of personality which lingers on throughout their life. The researches have established prevalence of high rates of stress and anxiety in students in general and medical students in particular (Bunevicius, Katkute, and Bunevicius). Studies in Medical colleges and universities involve various stressors that can have an effect on the well-being of the medical students. The present study approximately indicates that almost all the students had some level of anxiety. 65% of all students irrespective of educational field had moderate anxiety. The findings are consistent with other studies conducted on medical and non-medical students (Eisenberg, Gollust, Golberstein, Hefner, 2007; Inam, 2003).

Despite the prevalence of anxiety among medical and non-medical students a need was felt to explore the difference in the groups to identify the group with higher rates. The group differences revealed that the students in the medical colleges and universities have more anxiety as compared to non-medical students. The difference may be due to the fact that the medical students have to cope up with daily routine usual stressors as well as medical-institute-specific stressors like academic pressure, work overload, financial issues, lack of leisure time and resources (Firth; Supe; Dahlin, 2005). Some studies suggest that the medical students experience so much psychological stress in academic life that for the sake of management they make use of sedatives (Ahmed al sayed 2014). In order to cope with such anxiety students may turn to a number of mechanisms, including cognitive responses, stress management techniques and assertiveness skills (Hamaideh, 2011).

The findings of the present study supported a significant negative correlation between assertiveness and anxiety as measured by the RAS and TMAS. The findings are consistent with the findings of other researchers (Larijani, Aghajani, Baheiraei, & Neiestanak, 2010).

Another study found that assertiveness can be assessed on a continuum reflecting positive and negative degrees whereby negative assertiveness is being shy or aggressive (Cassel and Blackwell (2002). The results of the present study for the range of assertiveness reflected that assertiveness varies in students where some students are very non-assertive or shy and some are aggressive, whereas very few students showed a presence of well developed assertiveness. Assertiveness is an interpersonal communication skill that can be learned and developed. The assertiveness is a skill that can empower people to proficiently communicate with their seniors, co-workers and subordinates at work.

A useful application of the present study can be that the students who scored high on anxiety can be provided with training and therapy in order to learn and increase the assertiveness skills. As the results revealed a negative relationship between assertiveness and anxiety, therefore teaching assertive skills can reduce the anxiety. Assertive skills training is a

program designed to target the fear and anxiety in people through modeling and reinforcement of assertive behavior. This mode of training can be helpful for the female students to enhance their skills.

Further the result of the present study can also provide information to educationists, program planners, policy makers, teachers and students regarding anxiety and assertiveness. It can help teachers and related personnel to provide guidance and motivation to the students according to their background and requirements.

7. Future Implications

For future researches consideration should be given to the age and experience, as the maturity level of people can have an impact on the levels of assertiveness and anxiety. Therefore, comparisons should be done for the adolescents and older adults working in different professions. Due to the emphasis on the role of females in the society, the current sample was females; considerations should be given to explore the assertiveness and anxiety between the genders.

References

- Keoghi, E., Bond, F.W., French, C.C., Richards, A., & Davis, R.E. (2004). Test-Anxiety, Susceptibility to distraction and examination performance. *Journal of Anxiety, Stress and Coping*, 17(3), 241-252.
- Eysenck, M.W. (2001). Principles of cognitive psychology. Hove, East Sussex: Psychology Press.
- A. Bunevicius, A. Katkute, and R. Bunevicius, "Symptoms of anxiety and depression in medical students and in humanities students: relationship with big-five personality dimensions and vulnerability to stress," *International Journal of Social Psychiatry*, vol. 54, no. 6, pp. 494-501, 2008
- Eisenberg, D., Gollust, S. E., Golberstein, E., Hefner, J. L. (2007). Prevalence and Correlates of Depression, Anxiety, and Suicidality Among University Students. *American Journal of Orthopsychiatry*, 77(4), 534-542
- S. H. Hamaideh, "Stressors and reactions to stressors among university students," *International Journal of Social Psychiatry*, vol. 57, no. 1, pp. 69-80, 2011.
- Ahmed A. Al-Sayed, Abdullatif H. Al-Rashoudi, Abdulrhman A. Al-Eisa, Abdullah M. Addar, Abdullah H. Al-Hargan, Albaraa A. Al-Jerian, Abdullah A. Al-Omair, Ahmed I. Al-Sheddi, Hussam I. Al-Nowaiser, Omar A. Al-Kathiri, and Abdullah H. Al-Hassan Sedative Drug Use among King Saud University Medical Students: A Cross-Sectional Sampling Study
- Inglés, C.J., Hidalgo, M.D., & Méndez, F.X. (2005). Interpersonal difficulties in adolescence: a new self-report measure. *European Journal of Psychological Assessment*, 1, 11-22.
- Kaya M, Genc M, Kaya B, Pehlivan E. [Prevalence of depressive symptoms, ways of coping, and related factors among medical school and health services higher education students]. *Turk Psikiyatri Derg* 2007; 18:137-46. Turkish.
- La Greca, A.M. & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology*, 26, 83-94.
- Hewstone, M. R., Fincham, F. D., & Foster, J. (2005). Adolescence and Adulthood. Psychology. Oxford: Blackwells/ British Psychological Society. Pp. 203-221)
- Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Acad Med* 2006; 81:354-73.
- Inam SNB, Saqib A, Alam E. Prevalence of anxiety and depression among medical students of private university. *J Pak Med Assoc* 2003; 53:44-7.
- Kaya M, Genc M, Kaya B, Pehlivan E. [Prevalence of depressive symptoms, ways of coping, and related factors among medical school and health services higher education students]. *Turk Psikiyatri Derg* 2007; 18:137-46. Turkish
- Rosenthal JM, Okie S. White coat, mood indigo: depression in medical students. *N Engl J Med* 2005; 353:1085-8.
- Cheng, C., Bond, M. H. & Chan, S. C. (1995). The perception of ideal best friends by Chinese adolescents. *International Journal of Psychology*, 30, 91-108
- Shaikh BT, Kahloon A, Kazim M, Khalid H, Nawaz K, Khan N, et al. Students, stress and coping strategies: a case of Pakistani medical school. *Educ Health (Abingdon)* 2004; 17: 346-53.
- Khan MS, Mahmood S, Badshah A, Ali SU, Jamal Y. Prevalence of Depression, Anxiety and their associated factors among medical students in Karachi, Pakistan. *J Pak Med Assoc* 2006; 56: 583-6.
- TT Larijani, M Aghajani, A Baheiraei, NS Neiestanak. (2010). Relation of assertiveness and anxiety among Iranian University students. *Journal of psychiatric and mental health nursing* 17 (10), 893-899
- Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy*, 4, 398-406.
- Taylor, Janet (1953). "A personality scale of manifest anxiety". *The Journal of Abnormal and Social Psychology* 48 (2): 285-290. doi:10.1037/h0056264