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Study of correlation between academic performance and quality of life among occupational therapy students

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ABSTRACT

This study is designed to assess the correlation between the academic performance and quality of life among the Occupational Therapy students. To find out if a relation exists between the academic performance and quality of life of Occupational Therapy students. Method: All the samples were collected from Occupational Therapy students using Questionnaire method. Data were collected using the Student Performance Assessment and The World Health Organization Quality of Life (WHOQOL)-BREF. In our study, 245 Occupational Therapy students were participated, among the age range of 17-23 years and were assigned in four groups (Group A: F.Y.B.O.Th, Group B: S.Y.B.O.Th, Group C: T.Y.B.O.Th, Group D: Fi.Y. B.O.Th). The relation between their Academic Performance and Quality of life were assessed using the statistical analysis tools. The relation between academic performance and quality of life of occupational therapy students were observed and compared between Group A, Group B, Group C and Group D. Results and Conclusion:-The results of our study showed that the academic performance and quality of life of the 4 assigned groups are positively correlated. If the value of one variable increases, then the value of another variable also tends to increase i.e. if the quality of life of Occupational Therapy students improves, then their academic performance also improves in similar proportion. Hence, it can be said that if the student has a good quality of life, then their academic performance will be better.

Keywords— Academic performance, Quality of life, Occupational therapy students, Relationship, Life satisfaction

1. INTRODUCTION

Academic achievement refers to what the students have learned or what skills the student has learned and is usually measured through assessments like standardized tests, performance assessments and portfolio assessments. Academic performance, which is measured by the examination results, is one of the major goals of a school.¹ Medical studies bring many stressful activities to students. Prolonged stress can make adverse effects on mental health and lead to further professional burnout.² As medical students face these impediments throughout their study in the college mainly during the pre-clinical years, acquiring higher academic and personal achievements become more challenging.³

Students who devote more time to their academics tend to score better in physical health than those who merely pass. Previous studies deduced that physical health and the academic performance of students run in parallel.⁴ World Health Organization (WHO) has defined the quality of life as, “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept affected in a complex way by the person’s physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment.”⁵

The connection between academic achievement and the happiness of students exist at higher levels of education around the globe. In a study conducted with university students in Iran, results showed that there was a significant relationship between happiness

and achievement motivation in reliability level of 95 per cent among male and female students and there is no difference between happiness achievement motivation in reliability level of 95 per cent among male and female students.⁶

Several studies have explored the correlation between academic achievement and indicators of the mental or emotional states of students. The results of research conducted by Quinn and Duckworth (2007) suggest that happiness and academic achievement are mutually reinforcing. Children higher in subjective well-being earn higher grades, even when controlling for intelligence and past academic performance. So in examining the causes of students' happiness, one should also consider educational systems where students are achieving high levels of both happiness and academic prowess.⁷

A connection between students' life satisfaction and academic performance based on locus of control and self-esteem using first-grade high school students concluded that the findings of their study "revealed that locus of control and self-esteem play crucial roles in developing students' life satisfaction and academic performance" and emphasized "that teachers, parents, and all those, who are related to teenagers, consider respect and attention to teenagers' personality and promoting their sense of worth as a humane duty".⁸

A wealth of factors contribute to academic performance at medical school, including: prior academic performance⁹⁻¹², study skills¹³⁻¹⁴, aptitude tests (e.g. UKCAT)¹⁵ attitude, behaviour and motivation¹⁶⁻²¹, time management²²⁻²⁷, physical activity²⁸⁻²⁹, and coping strategies³⁰⁻³², how students manage their other commitments, study skills, and how they choose to allocate their time may influence their academic outcome. The balance between study, relaxation, and other commitments impacts upon quality of life and preventing burnout.³³⁻³⁴ There appeared a trend between those achieving better decile and the highest quality of life, consistent with findings elsewhere.³⁵ A high score for "The conditions of my life are close to ideal" had the strongest association with improved academic decile on multivariate analysis. However, this section of the study is most susceptible to responder bias: students who perform better academically may feel better about their life when reporting it in a research questionnaire. Though stress is associated with poorer exam performance³⁶⁻³⁷ and there are high rates of mental illness amongst students³⁷⁻³⁸. We also acknowledge that students who are unhappy may be missing from this study due to lack of participation.³⁵⁻³⁶

Well-established multiple factors have been shown to be consistently associated with the academic performance of students in elementary and high school such as the level of fitness (i.e., cardiorespiratory fitness [VO2 max]),³⁹⁻⁴⁰ body composition (i.e., body mass index [BMI], fat mass),⁴¹⁻⁴² psychosocial factors (i.e., stress, self-esteem [SE]),⁴³⁻⁴⁴ academic motivation factors (i.e., intrinsic and extrinsic motivation toward studies),⁴⁵⁻⁴⁶ lifestyle factors (i.e., sleep duration [SD], physical activity levels),⁴⁷⁻⁴⁸ eating habits (i.e., daily breakfast),⁴⁹⁻⁵⁰ and socio-demographic factors (i.e., household income, parent's level of education).⁵¹⁻⁵² Recently, a novel factor identified as religious status has also been reported to be related to the level of education and intelligence.⁵³⁻⁵⁴

Higher intrinsic academic motivation and lower extrinsic academic motivation were associated with a better academic performance, which is in line with other studies.⁴⁴⁻⁴⁵ In fact, previous studies have noted that consuming a daily breakfast has a positive effect on memory and attention span,⁵⁶⁻⁵⁷ which might, in turn, influence academic performance.⁵⁵ Interestingly, the higher-GPA group had a higher prevalence of atheist individuals.⁵² However, there is also evidence, which suggests that insufficient sleep or poor sleep quality may be associated with a lower academic performance in elementary and high school students.⁴⁶⁻⁴⁷

2. AIMS OF THIS STUDY

- To assess the correlation between the academic performance and quality of life among the Occupational Therapy students.
- To find out if a relation exists between the academic performance and quality of life of Occupational Therapy students.

3. MATERIALS AND METHODOLOGY

3.1 Design

Homogenous survey

3.2 Sample and sampling technique

Our study on 'Correlation between academic performance and quality of life among Occupational Therapy students' was conducted using Questionnaire method of the random sampling technique. The study comprised of 245 occupational therapy students which included both male and female. Their age-range is in between 17-22 years.

3.3 Outcome Measures

(a) Student Performance Assessment: Student Performance Assessment measures the academic performance of the students in college with the help of 25 statements. The assessment includes -learning motivation/attitude, learning characteristics, behavioural performance in class, creativity and leadership. Each statement is given a score from 0-5, with '0' meaning "no comment", '1' meaning "never", '2' meaning "seldom", '3' meaning "sometimes", '4' meaning "often" and '5' meaning "always". Scores of 50 or less show below average academic performance and score of more than 75 shows above-average academic performance.

(b) The World Health Organization Quality of Life (WHOQOL)-BREF: The World Health Organization Quality of Life (WHOQOL)-BREF measures the quality of life of an individual in each of the four domains, namely: physical health, psychological, social relationships, and environment. There are also 2 items scored separately: question 1 asks about an

individual's overall perception of quality of life and question 2 asks about an individual's overall perception of their health. The four domain scores denote an individual's perception of quality of life in each particular domain. Domain scores are scaled in the positive direction (i.e. higher scores denote higher quality of life.) The raw scores are converted into transformed scores. The first transformation method converts the scores to range between 4 and 20, comparable with the WHOQOL-100. The second transformation method converts domain scores to a 0-100 scale using the manual.

3.4 Test procedure

The population study was 245 students who were selected from Occupational Therapy College. 50 students from the First year were included in Group A, 71 students from the Second year were included in Group B, 66 students from the Third year were included in Group C and 58 students from the Final year were included in Group D.

4. DATA ANALYSIS

The relationship between the academic performance and quality of life of occupational therapy students were observed and compared among the four groups. They were assessed using statistical analysis tools.

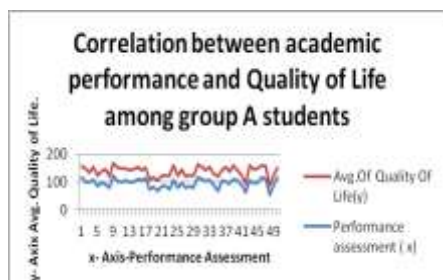


Fig. 1: Comparison between academic performance and quality of life among Group A students

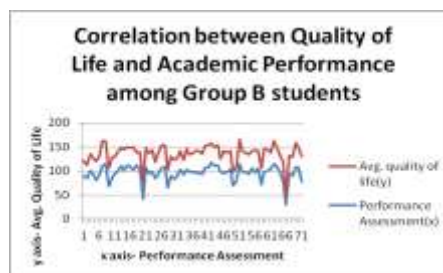


Fig. 2: Comparison between academic performance and quality of life among Group B students

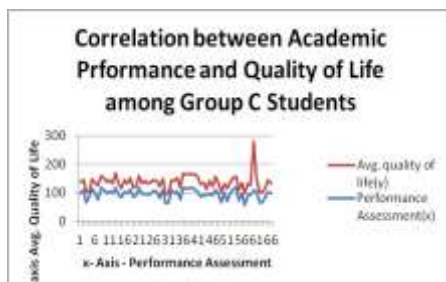


Fig. 3: Comparison between academic performance and quality of life among Group C students

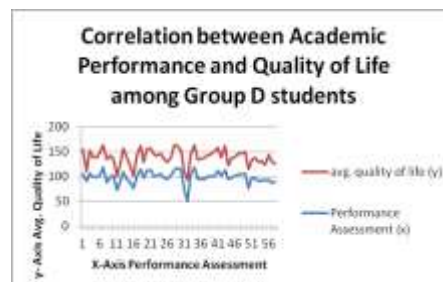


Fig. 4: Comparison between academic performance and quality of life among Group D students

5. RESULTS

Table 1: Comparison between correlation coefficient of all the four groups

Group	Correlation-Coefficient
A	0.34
B	0.49
C	0.21
D	0.48

In the study, a positive correlation was found between academic performance and quality of life among Occupational Therapy students.

6. DISCUSSION

In concordance with the other studies, our study also demonstrated that all domains are positively correlated to each other, which signifies that students' ratings in each domain were very similar to their scores in other domains. This is consistent with the finding of WHO-QOL study from Iran where medical students addressed a similar satisfaction in all the assessed components.⁵⁸ The results from our study showed similarity among another study that compared the Quality of Life of medical students with the general population and found that medical students scored lower in physical health, psychological health and environment but not in social relations⁵⁹ and similarly to the study from Iran which entailed the highest rating in social relations, where the students reported a positive attitude towards their interactions with their friends and the support they provide to each other.⁶⁰ It is a remark of a positive implication for students' future as therapists as this trait is necessary in embracing a friendly rapport in order to build therapist-client relationship.

Our findings also support the statement that physical health had the lowest rank among other domains and the "sleep and rest" component attained the lowest rating than other physical health items. For instance, as medical students comply with their large academic load, many of them do not devote much time to rest or sleep especially when it is close to their exams.⁶¹ The academic performance of medical students has shown to be a positive predictor for their developed professional competence in their long-term career.⁶² Students who devote more time to their academia tend to score better in physical health than those who merely pass.

Previous studies at the University of Georgia deduced that physical health and the academic performance of students run in parallel.⁵ An excellent academic achievement is associated with fulfilling highly demanding components necessary for the career prosperity of future doctors.⁶³

The results of our study support the findings by Thelma (1998) in her research on variables that were associated with academic achievement of African-American that identified non-cognitive factors as one of the main contributors. African-American with high scores on measures of educational aspirations, values (courage, exciting life, cleanliness, imagination, and helpfulness), emotional intelligence, acceptability of mixed dating, self-confidence, satisfaction with academic advising and tutoring, being in control of academic outcomes, preference for long-term goals, academic self-concept, self-esteem, self-concept of ability, specific personality traits (achievement aspirations, affiliation, dominance, endurance, exhibition, harm avoidance, nurturance, order, play, and understanding), favorable opinions of their study habits and relationships with others, and low scores on alienation and reliance on family and institutions to solve social and academic problems, had higher grade-point averages than those with contrasting scores on these variables.¹

The quality of academic life also has an important role in the success of Higher education institutions due to the fact that a large number of different factors that affect the quality of academic life actually affect the success of faculty students. The relationship between quality of academic life and student's success in faculty is greater when the academic life is more directly related to the course, learning, and fulfilment of student's obligations.⁶⁴ Students with a high level of life satisfaction found it easier to face with academic challenges. On the other hand, students who have a low level of satisfaction with their lives easily lose focus, which leads to poor success at the faculty.⁶⁵ Therefore, it becomes necessary for Higher education institutions to invest effort in activities that aim to improve the quality of students' life.⁶⁶ Work on creating better programs for students in higher education, according to Hermon and Hazler,⁶⁷ is evidence of an institutional effort to increase the quality of life, mental health, and the comprehensive students' development. Higher education institutions it is also important to measure the students' success considering the internal and external influences.⁶⁸ The result of our study also showed that when the quality of life of Occupational Therapy students improved, their academic performance also tends to be better.

Our study showed the results similar to another research that reported that the low financial status has an adverse impact on the academic performance of students since the necessary requirements of the students stay exasperated and consequently reduce their performance academically.⁶⁹ The students also frequently reported personal life issues such as inadequate time for rest and recreational activities, lack of time for family and friends, interpersonal conflicts and environmental events as their sources of stress. These findings are similar to those reported by other authors.^{70,71,72,73} Results indicated that students with the highest life satisfaction scored more favourably than the students with the lowest life satisfaction scores on almost every academic outcome investigated. Furthermore, the high life satisfaction students also significantly outscored the students with average life satisfaction on all of the same academic domains, with the exception of beyond-class engagement.⁷⁴

The limitations of the study are subjects may not be 100% truthful with their answers. This can happen for a variety of reasons, including social desirability bias and attempting to protect privacy. Sometimes, answers will be chosen before fully reading the question. Subjects may skip through questions, or split-second choices may be made, affecting the validity of data. There may be trouble with not presenting questions to users face-to-face. Subjects may have trouble grasping the meaning of some questions that may seem clear to the creator. This miscommunication can lead to changes in the results. Some questions are difficult to analyze. As with any sort of research, bias can be an issue. Some participants may have an interest in the survey. Others may be influenced to participate based on the subject of a questionnaire which can lead to inaccuracies in the data. When using questionnaires, there is a chance that some questions will be ignored.

7. CONCLUSION

Results of the study concluded that as the quality of life of the Occupational Therapy student improves, his/her academic performance also tends to improve in similar proportion and as the quality of life of the student worsens, his/her academic performance also worsens in similar proportion. Hence, a better quality of life is needed for one's better academic performance.

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