Relationship between time management and anxiety of Occupation Therapy students

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Abstract

Time management skills are essential for Occupation Therapy students' success, and development of clinical competence. The purpose of this study was to determine the relationship between time management skills and anxiety and academic motivation of nursing students. This study was carried out on 95 Occupation Therapy students. Data were collected using demographic Questionnaire, Time Management Questionnaire (TMQ), Spielberger State-Trait Anxiety Inventory (STAI) and Academic Motivation Scale (AMS), which was completed t by self-report. Data were analyzed using SPSS 20 software with descriptive and analytical statistics such as ANOVA, independent t-test, Regression and Pearson Correlation Coefficient. The results also showed a statistically significant negative correlation between the students' TMQ scores and the state anxiety ($r= -0.282$, $p< 0.005$) and trait anxiety scores ($r= -0.325$, $p<0.005$). Moreover, there was a statistically significant positive correlation between the students' TMQ scores and AMS scores ($r= 0.279$, $p< 0.005$). Regarding the findings, it seems that it is necessary to plan for improving time management skills in order to enhance academic motivation and reduce anxiety rates among Occupation Therapy students.

Keywords: Time management, Anxiety, Academic motivation, Occupation Therapy students

1. INTRODUCTION

Time management means to optimally use the time available and that includes aspects of planning, goal setting, prioritizing goals and activities, communications and delegation [1]. Individuals can carry out several tasks, perceive their responsibilities and adapt with limitations by managing themselves in a single time through such behavior [2]. Effective application of time management skills associates with academic achievement, stress reduction, increased creativity, self-efficiency [3], and satisfaction of students [4]. Time management skill is one of the criteria that are used by students which results in an academically successful performance; the attempt for success is called academic motivation [5]. Academic motivation means internal tendency of the learner that leads them to learning, skill acquirement and academic achievement [6]. Many Occupation Therapy students do not have adequate academic motivation [7], and one of the reasons can be stress and anxiety [8]. This can reduce motivation, causing academic failure thus academic dropout. Time management is one of the ways which can be very effective on anxiety and academic motivation of students [8]. However, the concept of time is outlined as a problem in socio-academic life of students [9]. According to research, students with optimal skills of time management will be able to manage time effectively even after

graduation and in their professional life. This study emphasizes on the necessity of time management skills in students, and its related factors. In this direction, previous studies were conducted either in other countries, or conducted on students [10]. In order to address the issue, the following was set as the specific objectives of the study: 1) to determine the time management skills, anxiety and academic motivation levels of Occupation Therapy students; 2) to determine the correlation between Occupation Therapy students' time management skills and state-trait anxiety; and 3) to determine the correlation between Occupation Therapy students' time management skills and academic motivation.

2. METHODS

2.1 Design

This study was conducted on Occupation Therapy students in G University during the 3-month period from November 2020 through January 2021.

2.2 Subject

120 students majoring in occupational therapy were surveyed at universities located in G city With the exception of 12 missing responses, 108 questionnaires were used for data analysis

2.3 Instrument

The data were collected using Demographic Questionnaire, Time Management Questionnaire (TMQ), Spielberger State-Trait Anxiety Inventory (STAI) and Academic Motivation Scale (AMS) that was completed by self-report.

(1) Time Management Questionnaire (TMQ)

Britton, Teaser (1991) [11] is made up of 18 items in the short-range planning dimension (7 items), time attitudes dimension (6 items), and long-range planning dimension (5 items). Each item answered on a five-point Likert scale consisting of the responses: always (5), frequently (4), sometimes (3), infrequently (2), and never (1). The range of possible scores was18- 90 on the 18-item Time Management Scale; Points below 46 indicated low-level, points between 46 and 58 indicated moderate-level, and points 58 and above indicated high-level of time management skills.

(2) Spielberger State-Trait Anxiety Inventory (STAI)

State-trait anxiety inventory (STAI)[12]developed by Spielberger (1970), consisted of forty statements in two State anxiety subscale (items 1-20), and Trait anxiety subscale (items 20-40). Each STAI item was given a weighted score of 1-4.
The range of possible scores was 0-80; Points between 0 and 20 derived from both subscales indicated no anxiety, points between 20 and 40 indicated low-level of anxiety; points between 40 and 60 indicated mid-level anxiety; and points between 60 and 80 indicated severe anxiety levels.

(3) Academic Motivation Scale (AMS)

The Academic Motivation Scale (AMS) [13] developed by Vallerand et al. (1992), consists of 28 items on

five-point Likert scales from completely disagree (1 score) to completely agree (5 scores). AMS consisted of three subscales: Extrinsic motivation subscale (12 items), intrinsic motivation subscale (12 items) and amotivation subscale (4 items). The range of possible scores was 28- 140 on the 28-items Academic Motivation Scale; points between 28 and 56 indicated amotivation, points between 56 and 84 indicated low-level, points between 84 and 112 indicated moderate-level, and points between 112 and 140 indicated high-level of AMS. In the current study, Cronbach's alpha for TMQ and AMS with good internal consistency were 0.75 and 0.89 respectively. Also, Cronbach's alpha values were 0.91 for the State anxiety subscale and 0.87 for the Trait anxiety subscale.

2.4   Statistical analyses

Data were analyzed using SPSS 20 software with descriptive and analytical statistics such as ANOVA, independent t-test, Regression and Pearson Correlation Coefficient.

3. RESULTS

3.1   TMQ, STAI, AMS Score

In direction of the first research goals, the mean time management skill of students under study was 59 ($\pm$0.79) scores from 90 were at moderate level. Also, the mean score of state anxiety and trait anxiety of nursing students who participated in the study was 49.98 ($\pm$ 0.34) and 48.19 ($\pm$1.02) respectively, from 80scores; such that the majority of students were at mid-level of state and trait anxiety (58% and 60% respectively). Mean score of academic motivation of students was 110 ($\pm$0.99) and most of them were at moderate level of academic motivation. **Table 1**.

Table 1. TMQ, STAI, AMS Score

	M	*SD*
TMQ	59	0.79
STAI	49 (state)	0.34
	48(character)	1.02
AMS	**110**	**0.99**

3.2   Correlation Relation of TMQ and STAI

In direction of the second research goals, there was a negative and significant correlation between time management skill with state (r =0.28, p<0.05), and trait (r = -0.32, p<0.05) anxiety of Occupation Therapy students. **Table 2**.

Table 2. Correlation Relation of TMQ and AMS

	STAI Score	
	State	Character
TMQ Score	0.281*	0.322*

*P<.005

3.3   Correlation Relation of TMQ and AMS

It means that the increasing degree of time management skill reduces state-trait anxiety and vice versa. In direction of the third of the research goals, Pearson test showed positive and significant correlation between time management skill and academic motivation of students. Such that the increasing degree of time management skill increases academic motivation and vice versa (r =-0.27, p<0.005). **Table 3**.

Table 3. Correlation Relation of TMQ and AMS

	AMS Score
TMQ Score	0.27*

*P<.005

4. DISCUSSION

Results showed that about half of the Occupation Therapy students were at a moderate level of time management skill. This finding was consistent with the results of Ocak and Boyraz [14]. In the study conducted by Park, Dong-Hyuck. [15] the lowest score of study skill associated with time management. According to results, it can be said that Occupation Therapy students require more programs for learning time management. According to results of the study, most of the Occupation Therapy students possessed mid-level anxiety score (either state or trait anxiety) generally. This result was consistent with studies of Bayoumi et al. [16], Anxiety is considered as a factor that disturbs mental regulation and stability and it prevents from coping with sensitive conditions and reasonable reactions [17]. Therefore, Occupation Therapy students should learn skills to control anxiety, and should practice hem frequently in order to deal with non-optimal conditions in practice and in their future professions. Evidence of his study emphasizes on necessity of teaching skills of anxiety management to Occupation Therapy students. According to research findings, most of the nursing students were at the moderate level of academic motivation. According to his study, Kelly [18] stated that time management behavior cannot be merely effective on reduction of anxiety, and concern of students rather than perception of goal and time structure were more important. The present research indicated a significant and positive relationship between time management and academic motivation of Occupation Therapy students. It shows that academic motivation of students increases through successful control and planning of activities within time ground. Concerning the role of academic motivation in students' activities and detrimental nature of lack of motivation in Occupation Therapy students, all measures taken for reinforcement of academic motivation in such students, can be important and suitable. One of the partial results of this study is a reverse and significant relationship between different types of anxiety and academic motivation of nursing students, meaning that anxious students have lower motivation for continuing their study [19]. This research showed that if we teach time management skill to students, academic anxiety, as one of the most important factors of lack of motivation for studying, will be removed and we will face calmer and more motivated Occupation Therapy students. The present research emphasized on the reverse relationship between anxiety and academic motivation on one hand and direct relationship between time management skill and academic motivation on the other hand, and it defined two important reinforcing and weakening factors of motivation among Occupation Therapy students. Limitations of this study were the high number of research variables, multi dimensionality of the research, the ability and time limitation of the researcher for all variables and related factors on one hand and collecting data as self-report and high number of questionnaires on the other hand.

5. CONCLUSIONS

In summary, results of the present study show a moderate level of time management skill, anxiety and academic motivation in Occupation Therapy students, and also a positive and significant correlation between

academic motivation and time management skill, and negative correlation between time management skill and overt-covert anxiety of Occupation Therapy students. It is suggested that some researches are conduction components of time management skill, and variables of the present study are investigated more comprehensively by other tests such as factor analysis.

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